ROBUS®



QUALITY ROBUS PRODUCTS BY LED GROUP





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PRODUCT OVERVIEW

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10W in 4000K Available in black or white



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25W or 35W in 4000K Available in black or white



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WELCOME TO ROBUS 2018

ON BEHALF OF THE LED GROUP, LET ME EXTEND A WARM WELCOME TO YOU.

Michael Slein Founder and Director

Welcome to the 2018 LED Group ROBUS Catalogue.

We continue to expand popular ranges and introduce market-led product innovation. Some of the highlights this year are the ROBUS UGR <19 and CCT3 selectable ranges, the ever popular linear fittings, new Low Bay and High Bay fittings and our new range of Street Lighting.

WE EMBRACE EMERGING TECHNOLOGIES
AND THE BENEFITS THEY BRING TO THE
MARKET, CREATING ENDURING PRODUCTS
WITH LOW ENERGY, LOW MAINTENANCE,
OUTSTANDING PERFORMANCE AND
RETURN ON INVESTMENT.

Throughout the ROBUS catalogue you will see evidence of our promise to supply high quality, reliable lighting products. As a Deloitte Best Managed Company, we are ISO certified and a key member of Lighting Associations across the world. We don't compromise on quality and deliver industry leading QC measures, so you get products your customers can rely on.

With 34 years heritage in the lighting industry, the ROBUS brand is available from all leading wholesalers in Ireland and the UK. Whilst our product quality is the foundation to our success, our business is focused on customer relationships, through constant contact and engagement. In every country in which we operate, our people interact on a daily, ongoing basis with stockists and end users.

Our team are charging into 2018 with energy, hard work and thriving upon our customer relationships, building the highest level of trust. Our team is your team!

Working with ROBUS is the one simple thing you can do in 2018 to improve your profitability.

We have been fortunate to welcome many new customers over the past year and to maintain the loyalty of 100% of our key stockists.

If you are a customer already, we thank you sincerely and hope you continue your journey with us. **Our business succeeds** when your business succeeds.

MICHAEL SLEIN

Founder and Director **T:** +353 1 709 9000

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E: mslein@led.ie

INTRODUCING OUR TEAM



THE BOARD OF DIRECTORS ARE: John Humphery (UK & European Managing Director), Christian Dijkstra (Financial Director), Michael Slein (Founder & Director), Derek Slein (Export Director),

Mike G. Slein (Commercial Director).



INTRODUCING OUR TEAM



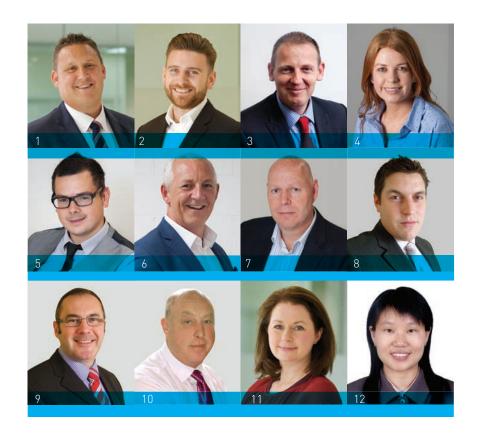
HEADQUARTERS MANAGEMENT TEAM

THE LED GROUP IS RUN BY
A DIVERSE MANAGEMENT
TEAM LED BY THE BOARD OF
DIRECTORS. THEY BRING A
WEALTH OF EXPERIENCE TO
BEAR IN STRATEGIC PLANNING
AND OVER-SEEING THE DAY
TO DAY OPERATIONS OF THE
BUSINESS.

MEMBERS INCLUDE:

Left to right back row: Aisling Byrne (Purchasing Manager), Jason Kennedy (Conversions Technical Manager), Liam Mahady (Operations Manager), Michele Lynch (National Lighting Store Manager), Andrea Daly (Credit Control Manager), Henry Bradley (IT Manager), Mark Walshe (QC Manager), Pat Kelly (RD&I Director), Lisa McDonagh (Financial Accountant), Patrick Dunne (Conversions Manager)

Left to right front row: Claire Mahony (NPD Manager), Laura Lawlor (Business Intelligence and Internal Sales Manager)



GLOBAL MANAGEMENT TEAM

- 1. John Humphery (UK & European Managing Director)
- 2. Mick Slein (Commercial Director) 3. Phil Hunt (UK Sales Director)
- 4. Sharon Sweeney (Irish Sales Manager) 5. Jonathan Andrassy (Sales Director Continental Europe) 6. Leigh Morrin (Regional Director) 7. Roger Harold (Regional Director) 8. Chris Roberts (Regional Sales Manager) 9. Robert Campbell (Key Accounts Manager) 10. Mike Biggs (Product Training Manager) 11. Deirdre Howard

(Head of Marketing) 12. Connie Wu (General Manager, China)

ABOUT US



EUROPE, UAE AND AUSTRALASIA.

The LED Group has developed the globally successful ROBUS brand of products sold through the electrical wholesale market. ROBUS has a reputation for energy efficient commercial and residential solutions, supported by world class

customer service in more than 40 countries

around the world.

Located in Dublin is our 10,000sqm head office and distribution centre. We also have distribution and offices in the UK, Australia and China, servicing over 3,000 stockists and tens of thousands of installers. We employ more than 250 talented people around the world, working with us to grow our business and nurture the ROBUS brand.

Our global presence enables us to meet the current and future needs of our customers and the aspirations of our people.

The LED Group is a member of the EMDA in Ireland, the EDA, The Lighting Association and LIA in the UK and The Lighting Council in Australia – lighting bodies worldwide creating and promoting industry standards.



HQ Dublin, Ireland Bracknell, UK Ma'anshan, China Guangzhou, China Brisbane, Australia

IN A NUT-SHELL

ROBUS

ONE OF THE LEADING IRISH, UK & AUSTRALIAN BRANDS IN OUR SECTOR, WITH INCREASING MARKET SHARE ACROSS THE WORLD.

THE WORD ROBUS COMES FROM THE LATIN FOR STRONGHOLD. WE TAKE THIS TO REPRESENT THE POSITION OF STRENGTH HELD BY OUR BRAND LOCALLY AND GLOBALLY.

1,100 Product Lines

3000+

ROBUS stockists in 40 countries

Sales

With over 60 directly employed sales personnel, our focus is very much on customer service including quick response and fast turnaround of orders.

People

We employ over 250 talented people worldwide

Robus Direct

Is our very successful online ordering system for stockists robusdirect.com

Offices

With offices in Ireland, UK, Australia and China

18 Years

Designing and manufacturing winning LED Product Lines

Values

Accountability Ambition Empowerment Customer focus Fast pace

Over 34 Years

Delivering lighting expertise

LED GROUP HISTORY

1994

10 Years 20 Years

2004

1984 LED Group founded by Michael Slein in Dublin, Ireland

1990 LED Group becomes first Irish/UK lighting company to import from China

UK

1996 1997 **ROBUS** IS₀ Sales Certification

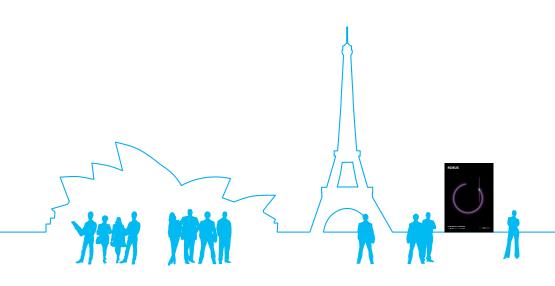
2005 Moved to current HQ in Dublin

2006 Best Companies to Work for in Ireland **Award**

2008 **ROBUS** Sales Benelux 2009 **ROBUS** Sales Middle East

2010 LED Group **ROBUS** Australasia offices opened in Brisbane

2014 30 Years



2011 Stockists online ordering 2012 ROBUS Sales New Zealand 2013 Visitor centre opened at Dublin HQ 2014 ROBUS Sales France, Baltics & Scandinavia 2015
Deloitte
Best
Managed
Companies
Award

2016 Sydney & Perth Distribution Centres opened **2018**Catalogue
Launch

OUR VALUES, VISION & MISSION

Our Vision

Light has no boundaries!

Light stimulates and informs us – it effects how we see our world and the way we feel. Light is integral to architecture, definition and beauty.

Light is life. Just like light, our brand ROBUS and our people know no boundaries. There is a demand for fresh and exciting products and working practices to satisfy the desires of an ambitious team spirit.

Our Values

Our five values are the foundation of our culture and our approach to business.

They are synonymous with the LED Group and are at the heart of everything we do, uniting us across geographies and making us a great company to work with and for.

- > Accountability: We always do what we say we will do.
- > Ambition: We have ambitious growth plans and attract ambitious people.
- **> Empowerment:** We give people autonomy to do their jobs effectively.
- > Customer Focus: Our customers are the reason we exist.
- > Fast Pace: We make decisions quickly, communicating positive energy and drive.

Our Mission

To make our internal and external customers stick to us like glue.

THE ROBUS BRAND

Since its introduction the ROBUS brand of lighting solutions has become synonymous with innovation, quality and value for money. Simple installation, significant energy savings and 'fit and forget' solutions are key hallmarks of the range.

All new product introductions to the ROBUS range are advanced LED solutions to replace traditional light sources for both commercial and residential applications.

Over 1,100 product lines are held at our Central Distribution Centres in Dublin and Australia.

WHY ROBUS?

The ROBUS range of high quality lighting products provides the ultimate 'fit and forget' solution.

- Established in 1984 extensive industry experience
- · Over 18 years manufacturing LED Lighting
- Over 34 years servicing the electrical industry
- · Quick and easily installed products
- In-house reliability testing & quality control codes of practice
- Maintenance saving or in some instances elimination
- ROBUS Retrofit LED solutions use energy more efficiently
- Delivering higher lumens per watt
- Legislation compliance
- · Colour consistency
- Uniform light distribution
- Photometrics genuine performance files for use with lighting design software
- Full solutions emergency, dimmable, dual power and sensor options to suit a range of applications
- · Warranties of 2 to 5 years

ROBUS QUALITY

LED technology has changed the way we measure and present lighting performance information. Currently the lighting industry is full of confusion and inflated claims from some brands with regards to colour stability, efficiency, lumen output and reliability.

ROBUS products are produced to standards, using only high spec LEDS from leading brands, who have precise and reliable performance data on their LED chips.

Furthermore, we are committed to rigorous testing and the provision of honest and accurate product information.

The technical information presented in this catalogue follows the industry guidelines for presentation of LED product data. All ROBUS products come with warranties.

ROBUS – OUR INFORMATION IS BLACK AND WHITE!

See the back section of the catalogue for details on Quality Approvals including the Carbon Trust Green Business Fund, Enhanced Capital Allowances; SEAI Triple E scheme and the LIA verified scheme.



COMMERCIAL

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COMMERCIAL

SPACE UGR <19 LED PANEL





SPACE UGR<19 LED panel, 600x600mm, White

- Suitable for use in offices, shops, reception areas, restaurants, hotels, schools, hospitals
- LED replacement for 4x18W T8 lay-in panels
- Fits into standard sizes of ceiling grid 15mm and 24mm
- · Impact rating of IK06
- High efficacy of 106lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- 50,000 hour rated LED life. Up to 5 times that of a standard fluorescent
- · Flicker free driver available as accessory

- Pre-wired with Swift male and female loop in/loop out connector enabling fast fix installation
- · Suspension and surface mount kits available
- Suitable for switching by PIR, Microwave or Photocell
- 1-10V, DALI and Push dim driver available code: HED2040-D
- Emergency spacing details in back section of catalogue
- Complies with requirements of the Energy Technology Criteria List. Enhanced Capital Allowances may be claimed on the cost of the luminaires, installation and transport to site

Specially designed optics provide:

- UGR≤19 low direct glare for increased eve comfort
- Luminance ≤3000cd/m² at ≥65° for ease of screen viewing
- Complies with the requirements of EN12464 for reading, writing and computer based tasks in offices and other areas

Accessories:

R3EMPK-PSU Plug and play emergency pack
R6060SMKFB-01 Flat packed surface mount box
RAMSUS-3W 3 wire suspension kit 1200x300mm
RAMSUS-4W 4 wire suspension kit 600x600mm
RAMSUS-6W 6 wire suspension kit 600x1200mm
RAMSST Safety bracket and 2m strap 600x600mm

RAMRC Plaster board recessed clips kit



	Neutral White	Cool White
	RSP32406060G-01	RSP32506060G-01
Comparable to:	4x18W Fluorescent	4x18W Fluorescent
Total Power (W):	32W	32W
Total Light Output (lm):	3,390	3,420
Efficacy (lm/cctW):	106	107
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	1,290	1,310
Beam Angle (deg):	100	100
CCT (K):	4000	5000
CRI:	80	80
IP:	20	20
Impact Rating (IK):	06	06
Power Factor:	0.9	0.9
Width (mm):	595	595
Length (mm):	595	595
Depth (mm):	10	10
Box Qty:	4	4
Weight (kg):	3	3













SWIFT* * * * * *
Connector





ECA Eligible

ROBUS LEDGROUPROBUS.COM

COMMERCIAL

SPACE UGR < 19 LED PANEL



SPACE UGR<19 and ATMOS surface mount box, White

- A surface mount box that allows for surface mounting of panel with the driver concealed behind the fitting or located behind the wall / ceiling void
- Frames supplied flat packed and must be assembled on site

600x600mm
R6060SMKFB-01
600
600
50

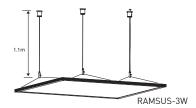
	300x1,200mm
	R1230SMKFB-01
Length (mm):	300
Width (mm):	1,200
Depth (mm):	50

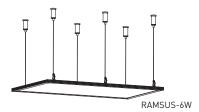
	600x1,200mm
	R60120SMKFB-01
Length (mm):	600
Width (mm):	1,200
Depth (mm):	50

SPACE and ATMOS suspension kits

 Enables panel to be suspended at a length of 1.2/1.5m

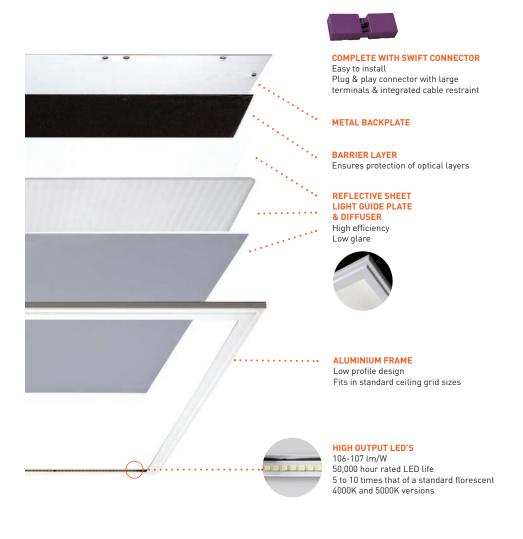
RAMSUS-3W	3 wire for 300x1200mm panels
RAMSUS-4W	4 wire for 600x600mm panels
RAMSUS-6W	6 wire for 600x1200mm panels
RAMRC	Plaster Boards Recessed Clips Kit for ATMOS and SPACE LED Panels
RAMSST	Safety bracket and 2m strap kit for ATMOS and SPACE LED Panels







SPACE UGR<19 LED PANEL





SPACE UGR<19 FLUORESCENT REPLACEMENT

The ROBUS slim profile LED panel light allows you to create a beautiful environment of space and a sense of natural light.

Fast and simple to install, it replaces the standard fluorescent T8 lay-in modules to provide energy efficient, but perhaps more importantly, low maintenance solutions where constant replacement of fluorescent tubes and cleaning of the fitting can be avoided.

Installed where energy savings and low maintenance costs are of paramount importance it will enable the building to achieve a low carbon footprint and complies with today's building regulations producing over 106 lumens per circuit Watt.

Specially designed optics provide:

- UGR<19 low direct glare for increased eye comfort
- Luminance ≤3000cd/m² at ≥65° for ease of screen viewing
- Complies with the requirements of EN12464 for reading, writing and computer based tasks in offices and other areas

600 x 600mm

Comparable to T8 4x18W

ACCESSORIES / VARIATIONS:

Surface Mount System Suspension Kit Emergency Option Dimmable with DALI or 1–10V Drivers





COMMERCIAL ATMOS LED PANEL



ATMOS LED panel, 600x600mm, White

- Suitable for use in offices, shops, reception areas, restaurants, hotels, schools, hospitals
- LED replacement for 4x18W T8 lay-in modular
- Fits into standard sizes of ceiling grid 15mm and 24mm
- High efficacy of 83-91 lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- 50,000 hour rated LED life. Up to 5 times that of a standard fluorescent
- Suspension kit available
- 1-10V, DALI and Push dim driver available code: HED2040-D

Accessories:

R3EMPK-PSU Plug and play emergency pack

 R6060SMKFB-01
 Flat packed surface mount box 600x600mm

 R60120SMKFB-01
 Flat packed surface mount box 600x1200mm

 R1230SMKFB-01
 Flat packed surface mount box 1200x300mm

RAMSUS-3W 3 wire suspension kit 1200x300mm
RAMSUS-4W 4 wire suspension kit 600x600mm
RAMSUS-6W 6 wire suspension kit 600x1200mm
RAMSST Safety bracket and 2m strap 600x600mm
RAMRC Plaster board recessed clips kit





	Warm White	Neutral White	Cool White
Standard	RAM40306060-01	RAM40406060-01	RAM40506060-01
Comparable to:	4x18W Fluorescent	4x18W Fluorescent	4x18W Fluorescent
Total Power (W):	38.7	40.1	39.2
Total Light Output (lm):	3,200	3,600	3,580
Efficacy (lm/cctW):	83	90	91
Lifetime (hrs):	50,000	50,000	50,000
Lux at 1m (lux):	810	1,200	1,250
Beam Angle (deg):	110	110	110
CCT (K):	3000	4000	5000
CRI:	80	80	80
IP:	20	20	20
Power Factor:	0.97	0.97	0.97
Length (mm):	595	595	595
Width (mm):	595	595	595
Depth (mm):	10	10	10
Box Qty:	1/4	1/4	1/4
Weight (kg):	3.3	3.3	3.3



SEAI approved

COMMERCIAL ATMOS LED PANEL



ATMOS LED panel, 300x1200mm and 600x1200mm, White

- Suitable for use in offices, shops, reception areas, restaurants, hotels, schools, hospitals
- LED replacement for 2x36W and 4x36W T8 lay-in modular
- Fits into standard sizes of ceiling grid 15mm and 24mm
- High efficacy of 83-87 lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- 50,000 hour rated LED life. Up to 5 times that of a standard fluorescent
- · Complete with 1m flex
- Suspension kit available
- 1-10V, DALI and Push dim driver available code: HED2040-D

Accessories:

R3EMPK-PSU Plug and play emergency pack

Spacing Distances

Code	Lux Level	Spacing Required	Wattage	Colour Temp	Size
RAM40406060-01	300 Lux 500 Lux	3.25 x 3.25 mm 2.4 x 2.4 mm	40W	4000K	600x600mm
RAM40506060-01	300 Lux 500 Lux	3.1 x 3.1 mm 2.6 x 2.6 mm	40W	5000K	600x600mm
RAM40403012-01	300 Lux 500 Lux	4.2 x 3.75 mm 3.0 x 3.3 mm	40W	4000K	300x1200mm
RAM60406012-01	300 Lux 500 Lux	3.3 x 3.0 mm 2.6 x 2.4 mm	60W	4000K	600x1200mm
RAM40306060-01	300 Lux 500 Lux	3.0 x 3.0 mm 2.25 x 2.25 mm	38W	3000K	600x600mm



	40W	60W
	RAM40403012-01	RAM60406012-01
	300x1200mm	600x1200mm
Comparable to:	2 x 36	4 x 36
Total Power (W):	40.8	59.9
Total Light Output (lm):	3,380	5,220
Efficacy (lm/cctW):	83	87
Lifetime (hrs):	50,000	50,000
Beam Angle (deg):	110	110
Lux at 1m (lux):	1,100	1,800
CCT (K):	4000	4000
CRI:	80	80
IP:	20	20
Power Factor:	0.97	0.97
Width (mm):	295	595
Length (mm):	1,195	1,195
Depth (mm):	10	10
Box Qty:	1/4	1/2
Weight (kg):	3.3	7



SEAI approved

EMERGENCY PACK FOR PANEL & ETERNITY





3 hour Emergency Pack, with Swift Connector for use with Space & Atmos Panels & Eternity downlights

- Suitable for use with SPACE and ATMOS LED panels and ETERNITY LED downlights
- Completely plug & play with SPACE and ETERNITY
- Low power consumption

- Provides 3-hour emergency discharge duration
- Wide operating temperature range of -10°C to +40°C

	R3EMPK-PSU
Total Power (W):	3
IP:	20
Power Factor (PF):	0.9
Length (mm):	160
Width (mm):	38
Depth (mm):	28
Box Qty:	1
Weight (kg):	0.23
Charging Time (hrs):	24
Discharge Time (hrs):	3









STELLAR UGR<19 LED INDIRECT PANEL





STELLAR 28W UGR<19 LED indirect panel light, White

- Suitable for use in offices, shops, reception areas, restaurants, hotels, schools, hospitals
- LED replacement for 4x18W T8 lay-in panels
- Fits into standard sizes of ceiling grid 15mm and 24mm
- · High impact rating of IK06
- UGR <19 complies with the requirements of EN12464 for reading, writing and computer based tasks in offices and other areas
- · Very high efficacy exceeding 112lm/W
- Wide operating ambient temperature range of -20°C to +40°C

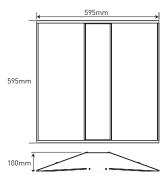
- 50,000 hour rated LED life. Up to 5 times that of a standard fluorescent
- Luminance ≤3000cd/m² at ≥65° for ease of screen viewing
- Pre-wired with SWIFT male and female loop in / loop out connector enabling fast fix installation
- Suitable for switching by PIR, Microwave or Photocell
- 1-10V, DALI and Push dim driver available code: HED2040-D
- · Emergency option is also available

Accessories:

R3EMPK-PSU Plug and play emergency pack

	RSL28406060-01
Comparable to:	4 x 18W fluorescent
Total Power:	28
Total Light Output (lm):	3,200
Efficacy (lm/cctW):	112
Lifetime (hrs):	50,000
Beam Angle (deg):	77.5
Lux at 1m (lux):	1,880
CCT (K):	4000
IP:	20
Power Factor:	>0.9
Width (mm):	595
Length (mm):	595
Depth (mm):	100
Weight (kg):	3







SUN CIRCULAR LED PANEL



SUN LED circular panels, White

- · Suitable for use in offices, shops, reception areas, restaurants, hotels, schools, hospitals
- Energy saving alternative to compact fluorescent fittings
- Low profile downlights ideal for installations in shallow ceiling voids
- · Die cast aluminium construction

- High impact rating of IK10
- Complete with plug and play driver and 1m of flex
- High efficacy of 60-79lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- Emergency, Analogue dimmable and DALI dimmable available through Conversions

	6W	9W	12W	18W	24W
3000K	R120LEDC30-01	R150LEDC30-01	R170LEDC30-01	R225LEDC30-01	
4000K	R120LEDC40-01	R150LEDC40-01	R170LEDC40-01	R225LEDC40-01	R300LEDC40-01
Comparable to:	1x9W CFL	1x13W CFL	1x18W CFL	1x26W CFL	2x18W CFL
Total Power (W):	6.7/6.5	8.5/8.2	11.3/11.6	18.6/18	23
Total Light Output (Im	1): 400/430	530/560	820/850	1,330/1,420	1,740
Efficacy (lm/cctW):	60/66	62/68	73/73	72/79	76
Lifetime (hrs):	30,000	30,000	30,000	30,000	30,000
Lux at 1m (lux):	140/150	180/200	280/320	450/480	590
Beam Angle (deg):	110	110	110	110	110
CCT (K):	3000/4000	3000/4000	3000/4000	3000/4000	3000/4000
CRI:	80	80	80	80	80
IP:	20	20	20	20	20
Impact Rating (IK):	10	10	10	10	10
Power Factor:	0.9	0.9	0.9	0.9	0.9
Diameter (mm):	120	150	170	225	300
Depth (mm):	25	25	25	25	25
Cut-Out (mm):	105	140	150	210	285
Weight (kg):	0.25	0.3	0.35	0.45	0.75



















VULCAN LED CORROSION PROOF

Designed for demanding industrial applications, the ROBUS Vulcan is the ultimate energy saving, corrosion-proof LED solution for car parks, cold stores, corridors and garages. The range provides light output comparable to waterproof linear fluorescent.

The Direct Linear Fluorescent Replacement

Single 6FT	RVUF486FT-01
Double 6FT	RVUF966FT-01
Single 5FT	RVUF405FT-01
Double 5FT	RVUF805FT-01
Single 4FT	RVUF244FT-01
Double 4FT	RVUF484FT-01
Single 2FT	RVUF122FT-01
Double 2FT	RVUF242FT-01



ECA eligible



FEATURES:

CORROSION PROOF

IP65

HIGH STRENGTH POLYCARBONATE BASE & DIFFUSER

Wide beam angle and no glare Evenly diffused light

EASY INSTALLATION

Supplied with LED Driver Plug & Play mains connection system Tool-free removable gear tray Anti-corrosion clips Surface or Chain Suspension

COST EFFECTIVE

35% energy saving 50,000 hour rated LED life Reduced energy, maintenance and disposal costs

WIDE RANGE OF APPLICATIONS

No heat filaments or electrodes Resistant to shock and vibration Withstands temperatures of -25° C to 40°C

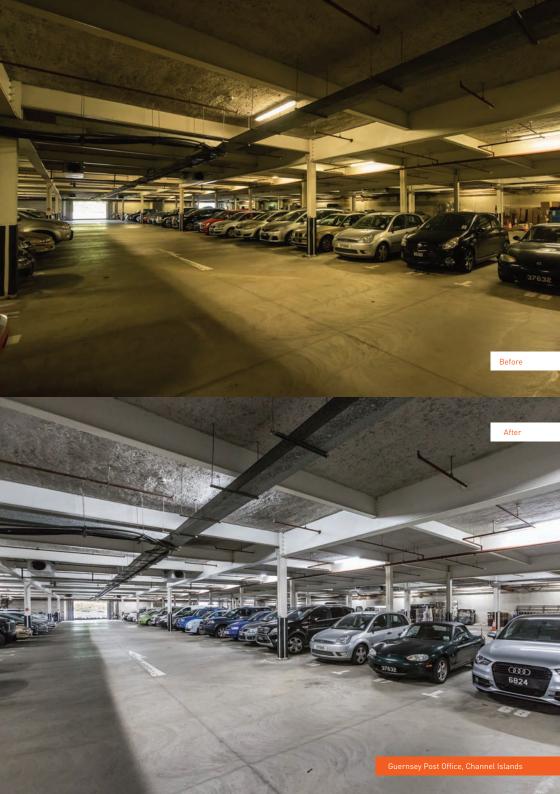
PERFORMANCE DRIVEN

>100 lumens per circuit watt Part L2 compliant 5 year warranty









VULCAN LED CORROSION PROOF - 5FT AND 6FT



VULCAN LED corrosion proof, White

- Suitable for workshops, garages, warehouse, car parks, farm buildings, wet areas
- LED replacement for single and double 58W and 70W fluorescent corrosion proof fitting
- 50,000 hour rated LED life
- IP65, can be used for external applications
- Complete with anti-corrosion clips
- · Impact rating of IK08
- High efficacy of 108-127lm/W
- Wide operating ambient temperature range of -25°C to +40°C

- Emergency version available with 3 hour emergency duration
- 330-380 lumen output in emergency mode
- 1-10V dimmable and integral Microwave Sensor options available through Conversions
- Emergency spacing details in back section of catalogue
- Complies with requirements of the Energy Technology Criteria List. Enhanced Capital Allowances may be claimed on the cost of the luminaires, installation and transport to site





	Single	Double	Single	Double
	1.8M	1.8M	1.5M	1.5M
Cool White	1 x 48W	2 x 48W	1 x 40W	2 x 40W
Standard	RVUF486FT-01	RVUF966FT-01	RVUF405FT-01	RVUF805FT-01
Emergency	RVUF486FTE-01	RVUF966FTE-01	RVUF405FTE-01	RVUF805FTE-01
Comparable to: 1 x 7	'OW T8 Fluorescent	1 x 70W T8 Fluorescent	1 x 58W T8 Fluorescent	2 x 58W T8 Fluorescent
Total Power (W):	46	93.2	39.6	78.7
Total Light Output (Ir	n): 5,850 standard	11,410 standard	4,490 standard	8,480 standard
	380 emergency	360 emergency	330 emergency	330 emergency
Efficacy (lm/cctW):	127	123	113	108
Lifetime (hrs):	50,000	50,000	50,000	50,000
Lux at 1m (lux):	1,890	3,970	1,390	2,760
Beam Angle (deg):	115	115	115	115
CCT (K):	5000	5000	5000	5000
CRI:	80	80	80	80
IP:	65	65	65	65
Impact Rating (IK):	08	08	08	08
Power Factor:	0.97	0.97	0.95	0.95
Length (mm):	1,835	1,835	1,560	1,560
Width (mm):	93	140	93	140
Height (mm):	97	97	97	97
Box Qty:	4	4	1	1
Weight (kg):	2.7	3.8	2.5	3.5



ECA eligible

VULCAN LED CORROSION PROOF - 4FT AND 2FT



VULCAN LED corrosion proof, White

- Suitable for workshops, garages, warehouses, car parks, farm buildings, wet areas
- LED replacement for single and double 18W and 36W fluorescent corrosion proof fittings
- 50,000 hour rated LED life
- IP65, can be used for external applications
- Complete with anti-corrosion clips
- · Impact rating of IK08

- High efficacy of 122-126lm/W
- Wide operating ambient temperature range of -25°C to +40°C
- 1-10V dimmable and integral Microwave Sensor options available through Conversions
- Complies with requirements of the Energy Technology Criteria List. Enhanced Capital Allowances may be claimed on the cost of the luminaires, installation and transport to site





	Single	Double	Single	Double
	1.2M	1.2M	0.6M	0.6M
Cool White	1 x 24W	2 x 24W	1 x 12W	2 x 12W
Standard	RVUF244FT-01	RVUF484FT-01	RVUF122FT-01	RVUF242FT-01
Emergency	RVUF244FTE-01	RVUF484FTE-01	RVUF122FTE-01	RVUF242FTE-01
Comparable to:	1x36W T8 Fluorescent	2x36W T8 Fluorescent	1x18W T8 Fluorescent	2x18W T8 Fluorescent
Total Power (W):	23.1	47.5	12.8	23.6
Total Light Output	t (lm): 2,900 standard	5,780 standard	1,600 standard	2,880 standard
	330 emergency	330 emergency	330 emergency	330 emergency
Efficacy (lm/cctW): 126	122	126	122
Lifetime (hrs):	50,000	50,000	50,000	50,000
Lux at 1m (lux):	970	1,980	520	950
Beam Angle (deg)): 115	115	115	115
CCT (K):	5000	5000	5000	5000
CRI:	80	80	80	80
IP:	65	65	65	65
Impact Rating (IK)) : 08	08	08	08
Power Factor:	0.95	0.95	0.95	0.95
Height (mm):	97	97	97	97
Length (mm):	1,258	1,258	660	660
Width (mm):	93	140	93	140
Box Qty:	1	11	1	1
Weight (kg):	2.5	3.0	1.1	1.4



ECA eligible







Sleek, slim and robust, the new SULTAN LED corrosion proof from ROBUS is a perfect LED retrofit solution where fluorescent corrosion proofs are used. The high strength opal diffuser delivers a superior evenly diffused light output perfect for use in car parks, cold stores, corridors and garages.

The Sleek Linear Fluorescent Replacement

Single 4FT	RSUF244FT-24
Double 4FT	RSUF484FT-24
Single 5FT	RSUF405FT-24
Double 5FT	RSUF805FT-24
Double 2FT Yellow Base	RSUF242FT-09
Single 4FT Yellow Base	RSUF244FT-09



FEATURES:

CORROSION PROOF

IP65

SLIM PROFILE

83mm wide for single fittings 103mm wide for double fittings

HIGH STRENGTH POLYCARBONATE **BASE & DIFFUSER**

Wide beam angle and no glare Evenly diffused light

EASY INSTALLATION

Wire through the back or from either end

COST EFFECTIVE

35% Energy Saving 50.000 hour rated LED life Reduced energy, maintenance and disposal costs

WIDE RANGE OF APPLICATIONS

No heat filaments or electrodes Resistant to shock and vibration Withstands temperatures of -25°C to 40°C

PERFORMANCE DRIVEN

Up to 126 lumens per circuit watt 3 year warranty

DIMMING OPTIONS

Suitable for Analogue, Dali and Switch dimming



SULTAN LED CORROSION PROOF

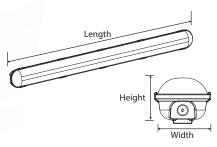


SULTAN LED corrosion proof, Grey

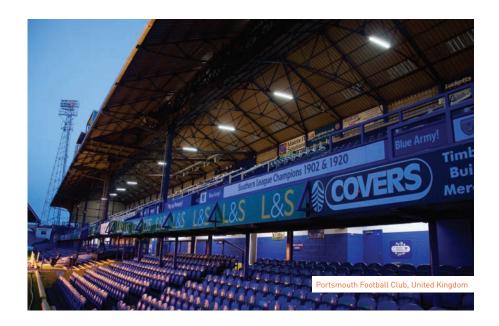
- Suitable for workshops, garages, warehouses, car parks, farm buildings, wet areas
- LED replacement for 1x36W, 2x36W, 1x58W, 2x58W fluorescent corrosion proof fittings
- 50,000 hour rated LED life
- IP65, can be used for external applications
- Complete with stainless steel clips
- · Impact rating of IK08
- High efficacy of 106-126lm/W

- Wide operating ambient temperature range of -25°C to +40°C
- Emergency version operates for 3 hour duration, c/w test switch
- 390-430lm output in emergency mode
- Suitable for Analogue, Dali and Switch Dimming
- 1-10V dimmable and integral Microwave Sensor options available through Conversions
- Emergency spacing details in back section of catalogue





CODE	WIDTH	HEIGHT	LENGTH
RSUF244FT/E-24	85mm	77mm	1,230mm
RSUF484FT/E-24	103mm	77mm	1,230mm
RSUF405FT/E-24	85mm	77mm	1,530mm
RSUF805FT/E-24	103mm	77mm	1,530mm



	Single	Double	Single	Double
	1.2M	1.2M	1.5M	1.5M
Cool White	1 x 24W	2 x 24W	1 x 40W	2 x 40W
Standard	RSUF244FT-24	RSUF484FT-24	RSUF405FT-24	RSUF805FT-24
Emergency	RSUF244FTE-24	RSUF484FTE-24	RSUF405FTE-24	RSUF805FTE-24
Comparable to:	1 x 36W	2 x 36W	1 x 58W	2 x 58W
Total Power (W):	22.9	45.4	40.2	77.9
Total Light Output (lm):	2,860 standard	5,600 standard	4,440 standard	8,260 standard
	430 emergency	410 emergency	390 emergency	390 emergency
Efficacy (lm/cctW):	126	124	111	106
Lifetime (hrs):	50,000	50,000	50,000	50,000
Lux at 1m (lux):	990	1,790	1,410	2,560
Beam Angle (deg):	120	120	120	120
CCT (K):	5000	5000	5000	5000
CRI:	80	80	80	80
IP:	65	65	65	65
Impact Rating (IK):	08	08	08	08
Power Factor:	0.95	0.95	0.95	0.97
Length (mm):	1,230	1,230	1,530	1,530
Width (mm):	85	103	85	103
Height (mm):	77	77	77	77
Weight (kg):	1.3	1.5	1.6	2.0



ECA eligible Triple E registered

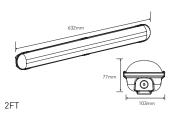
SULTAN 110V LED SITE CORROSION PROOF

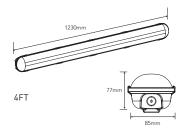


SULTAN LED site corrosion proof, Yellow base, 110V

- Suitable for construction sites, wet areas, workshops
- LED replacement for 2x18W & 1x36W fluorescent corrosion proof fittings
- 5000K cool white light output
- 30,000 hour rated led life
- IP65, can be used for external applications
- · Complete with stainless steel clips
- Impact rating of IK08

- High efficacy of 125-126lm/W
- Wide ambient temperature operation range of -25°C to +40°C
- 3 hour emergency duration
- 430lm output in emergency mode
- 15% of maintained output
- Emergency spacing details in back section of catalogue







Standard	RSUF244FT-09	RSUF242FT-09
Emergency	RSUF244FTE-09	RSUF242FTE-09
Comparable to:	1 x 36W T8 Fluorescent	2 x 18W T8 Fluorescent
Total Power (W):	22.9	23.2
Total Light Output (lm):	2,860 standard	2,900 standard
	430 emergency	430 emergency
Efficacy (lm/cctW):	126	125
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	990	970
Beam Angle (deg):	120	120
CCT (K):	5000	5000
CRI:	80	80
IP:	65	65
Impact Rating (IK):	08	08
Power Factor:	0.95	0.95
Length (mm):	1,230	632
Width (mm):	85	103
Height (mm):	77	77
Weight (kg):	1.3	1.0















ECA eligible

CAESAR LED BATTEN



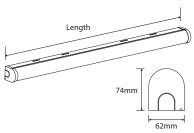
CAESAR LED batten, White

- Suitable for use in offices, corridors, stairways, retail shops, health centres, storage areas, work stations, hotels, schools
- · LED replacement for T8 fluorescent
- 50,000 hour rated LED life
- · Impact rating of IK08
- · High efficacy of 111-127lm/W
- Wide operating ambient temperature range of -25°C to +40°C
- Emergency version operates for 3 hour duration, c/w test switch

- · 400-410lm output in emergency mode
- Large terminals allowing easy loop-in/loop-out
- C/w mounting accessories and suspension kit allowing suspending at max 1m
- Suitable for analogue, DALI, and switch dimming
- Emergency spacing details in back section of catalogue
- Complies with requirements of the Energy Technology Criteria List. Enhanced Capital Allowances may be claimed on the cost of the luminaires, installation and transport to site

	0.6M	1.2M	1.2M	1.5M	1.5M
Neutral White	24W	24W	48W	48W	80W
Standard	RCA244006-01	RCA244012-01	RCA484012-01	RCA484015-01	RCA804015-01
Emergency			RCA484012E-01	RCA484015E-01	RCA804015E-01
Comparable to:	2 x 18W	1 x 36W	2 x 36W	1 x 58W	2 x 58W
Total Power (W):	23.1	23.0	46.0	45.8	78.5
Total Light Output (lm):	2,660 standard	2,850 standard	5,320 standard	5,400 standard	8,720 standard
			410 emergency	410 emergency	400 emergency
Efficacy (lm/cctW):	115	124	116	118	111
Lifetime (hrs):	50,000	50,000	50,000	50,000	50,000
Lux at 1m (lux):	730	770	1,440	1,460	2,320
Beam Angle (deg):	140	140	140	140	140
CCT (K):	4000	4000	4000	4000	4000
CRI:	80	80	80	80	80
IP:	20	20	20	20	20
Impact Rating (IK):	08	08	08	08	08
Power Factor:	0.95	0.95	0.97	0.97	0.97
Length (mm):	560	1,160	1,160	1,460	1,460
Width (mm):	62	62	62	62	62
Height (mm):	74	74	74	74	74
Weight (kg):	0.8	2.1	2.1	2.5	2.5





	LENGTH	WIDTH	HEIGHT
RCA244006-01	560mm	62mm	74mm
RCA244012-01	1,160mm	62mm	74mm
RCA484012/E-01	1,160mm	62mm	74mm
RCA484015/E-01	1,460mm	62mm	74mm
RCA4804015/E-01	1,460mm	62mm	74mm
RCA604018-01	1,723mm	62mm	74mm
RCA964018-01	1.723mm	62mm	74mm

	1.8M	1.8M
Neutral White	60W	96W
Standard	RCA604018-01	RCA964018-01
Emergency		
Comparable to:	1 x 70W	2 x 70W
Total Power (W):	56.4	96.4
Total Light Output (lm):	7,140 standard 400 emergency	11,260 standard 400 emergency
Efficacy (lm/cctW):	127	117
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	1,900	3,150
Beam Angle (deg):	140	140
CCT (K):	4000	4000
CRI:	80	80
IP:	20	20
Impact Rating (IK):	08	08
Power Factor:	0.97	0.97
Length (mm):	1,723	1,723
Width (mm):	62	62
Height (mm):	74	74
Weight (kg):	3.1	3.2



ECA eligible Triple E registered

PIR FOR CAESAR, SULTAN & VULCAN





360° PIR

- Suitable for use with CAESAR LED battens and SULTAN and VULCAN LED corrosion proof fittings
- · Polycarbonate housing
- . Mounting height of 2.8m to 7m
- Adjustable detection range 25%, 50%, 75%, 100% of maximum
- Adjustable step dimming levels of 0%, 10%, 20%, 30%
- Adjustable lux settings of 10-50lx and daylight setting
- Adjustable time delay of 10sec to 60min
- · Maximum loading of 2A
- Wide temperature operating range of -10°C to +40°C
- · Remote control option available
- Step dimming function only available for products with dimmable driver option



ECA eligible

Note: Above available through Conversions

Remote Control

· Maximum remote operation of 7m

360° PIR	R360PIR-01
Remote Control	R360RC-01
Detection Area:	360°
Motion Detection Range:	7m Diameter at 2.8m
Loading:	Max. 300W LED
	Max. 300W Fluorescent
	Max. 300W Incandescent
Time Settings: 10 Second	s to 60 minutes for standby
1 Minute	e to 24 hours dimming time
Lux at 1m (lux):	10-50lx and daylight setting
Impact Rating (IK):	10
IP:	65
Length (mm):	149
Width (mm):	36
Depth (mm):	28
Box Qty:	1
Weight (kg):	0.1









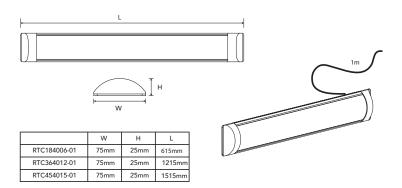
TOUCAN LED BATTEN



TOUCAN LED batten, White

- Suitable for use in flat and apartment blocks, public buildings, care homes, communal areas, reception areas
- LED replacement for 2 x 18W / 2 x 36W/ 1 x 70W T8 fluorescent surface fittings
- Low profile aluminium housing with PBT end caps and polycarbonate diffuser
- · High impact rating of IK08

- · Complete with stainless steel mounting brackets
- · Pre-wired with 1m of flex
- High efficacy of 97-106lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell







	4011		
	18W	36W	45W
	RTC184006-01	RTC364012-01	RTC454015-01
Comparable to:	2 x 18W	2 x 36W	1 x 70W
Total Power (W):	18.7	34.3	43.4
Total Light Output (lm):	1,810	3,640	4,340
Efficacy (lm/cctW):	97	106	100
Lifetime (hrs):	30,000	30,000	30,000
Lux at 1m (lux):	600	1,200	1500
Beam Angle (deg):	120	120	120
CCT (K):	4000	4000	4000
CRI:	80	80	80
IP:	20	20	20
Impact Rating (IK):	08	08	08
Power Factor:	0.95	0.95	0.95
Height (mm):	25	25	25
Length (mm):	615	1,215	1,515
Width (mm):	75	75	75
Box Qty:	1	1	1
Weight (kg):	0.4	0.8	1.1



Triple E registered

BARON LED CCT3 SELECTABLE BATTEN



BARON LED CCT3 selectable batten, IP20, White

- Correlated Colour Temperature (CCT) selectable via 3 way switch under one of end caps enabling switching between 3000K, 4500K and 6500K
- Suitable for use in flat and apartment blocks, public buildings, care homes, communal areas, reception areas
- LED replacement for 2x18W T8, 2x36W T8, 2x58W T8, 1x70W T8 fluorescent surface fittings
- Low profile aluminium housing with polycarbonate end caps and diffuser
- Large screw terminal block allowing max 2.5mm² conductors
- High efficacy of 82-110lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell

	600mm	1,200mm	1,500mm	1,800mm
	RBN2006CCT3-01	RBN4012CCT3-01	RBN6015CCT3-01	RBN6018CCT3-01
Comparable to:	2 x 18W	2 x 36W	2x58W	1x70W
Total Power (W):	20.2/19.9/20.3	40/38.7/40.3	59/56/59	59.5/57.6/59.5
Total light output (lm):	1,960/2,180/2,080	3,460/3,880/3,640	5,402/5,835/5,408	4,997/5,508/4,936
Efficacy (lm/cctW):	97/110/103	87/100/90	91/104/91	83/95/82
Lifetime (hrs):	30,000	30,000	30,000	30,000
Lux at 1m (lux):	600/670/640	1,010/1,140/1,070	1,566/1,692/1,568	1,449/1,597/1,431
Beam Angle (deg):	120	120	120	120
CCT (K)	3000/4500/6500	3000/4500/6500	3000/4500/6500	3000/4500/6500
CRI:	>80	>80	>80	>80
IP:	20	20	20	20
Impact Rating (IK):	07	07	07	07
Power Factor:	0.95	0.95	0.95	0.95
Length (mm):	600	1,200	1,500	1,800
Height (mm):	37.8	37.8	37.8	37.8
Width (mm):	83.4	83.4	83.4	83.4
Box Qty:	1	1	1	1
Weight (kg)	0.32	0.61	0.77	0.9

















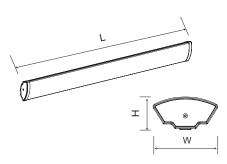
SCHOLAR LED BATTEN



SCHOLAR LED batten, White

- Suitable for use in schools, hotels, offices, retail shops, corridors, stairways, work stations, storage areas, inspection areas
- LED replacement for 2 x 36W and 2 x 58W T8 fluorescent
- Pressed steel housing with polycarbonate diffuser
- · High impact rating of IK08
- 50,000 hour rated LED life
- · Opal diffuser available to improve glare

- · Equipped with flicker free driver
- High efficacy of 95-96lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell
- DALI, 1-10V and integral Microwave Sensor options available through Conversions



	L	W	Н
RSC504012-01	1190mm	144mm	70mm
RSC604015-01	1490mm	144mm	70mm



	50W	60W
Standard	RSC504012-01	RSC604015-01
Comparable to:	2 x 36W	2 x 58W
Total Power (W):	48.6	56.7
Total Light Output (lm):	4,610	5,470
Efficacy (lm/cctW):	95	96
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	1,300	1500
Beam Angle (deg):	120	120
CCT (K):	4000	4000
CRI:	80	80
IP:	44	44
Impact Rating (IK):	08	08
Power Factor:	0.97	0.97
Length (mm):	1,190	1,490
Width (mm):	144	144
Height (mm):	70	70
Weight (kg):	2.4	3.1

OPAL diffusers

	RSC120D	RSC150D
Total Light Output (lm):	3,960	5,000



ECA eligible Triple E registered

COMMERCIAL

CASEY LED LOW BAY



CASEY 120W LED low bay, White

- Suitable for use in manufacturing plants, work stations, warehouses, workshops, shopping arcades
- Opal diffuser as an accessory RCYDIFOP-01
- Complete with M8 Ø25 eyebolts for use with any suspension system
- · Complete with 1m flex and SWIFT connector
- Wide operating ambient temperature range of -20°C to +40°C
- 3 hour emergency duration
- 490lm lumen output in emergency mode
- Suitable for switching by PIR, Microwave or Photocell

Standard	RCY12055-01
Emergency	RCY12055E-01
Comparable to:	4 X 36W T8
Total Power (W):	115.2
Total Light Output (lm):	11,830 standard
	490 emergency
Efficacy (lm/cctW):	103
Lifetime (hrs):	50,000
Lux at 1m (lux):	5500 standard
	160 emergency
Beam Angle (deg):	110
CCT (K):	5500
CRI:	85
IP:	20
Impact Rating (IK):	07
Power Factor:	0.95
Length (mm):	830
Width (mm):	330
Depth (mm):	90
Box Qty:	1
Weight (kg):	6.1 standard
	6.6 emergency



ECA eligible



Accessory

OPAL Diffuser RCYDIFOP-01



COMMERCIAL

PRISMOID LED LINEAR HI-RACK

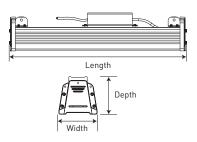


PRISMOID LED linear Hi-Rack, Aluminium

- LED replacement for traditional 250W+ Metal Halide for use in warehouses, manufacturing plants, garages, workshops & aircraft hangars, retail superstores, gymnasium & sports halls
- Extruded aluminium housing provides optimal heat dissipation for long LED life
- PMMA lens for accurate beam angle control and light uniformity
- Optional lenses available for use at alternative mounting heights and illuminance requirements
- Dimmable driver as standard provides step dimming or automatic daylight harvesting (with appropriate
- High impact rating and very wide ambient operating temperature range for hot or cold applications

- Long rated LED life without costly maintenance regimes associated with traditional light sources
- Suitable for switching/dimming by PIR, Microwave or Photocell
- Emergency option available via Conversions
- Suspension kit included for fast and simple mounting to lighting trunking
- Pre-wired with 350mm 3*1.0mm² rubber flex
- Surface mounted rotating bracket available as accessory
- IP20 SWIFT connector (RSW44-P), IP68 connector (RCONIP68-04) or a suitable junction box can be used to connect supply





Note: Standard 30° x 70° beam angle lens is ideal for optimum light coverage in racking aisles

	100W	120W	150W	180W
	RPD10050DA-23	RPD12050DA-23*	RPD15050DA-23*	RPD18050DA-23
Comparable to:	200W MH	250W MH	300W MH	400W MH
Total Power (W):	100	121.8	148.2	180
Total Light Output(lm):	13,000	15,670	19,940	23,400
Efficacy (lm/cctW):	130	128	135	130
Lifetime (hrs):	50,000	50,000	50,000	50,000
Lux (lux):	339 at 8m	893 at 5m	1,252 at 5m	581 at 8m
Beam Angle (deg):	30 x 70	30 x 70	30 x 70	30 x 70
CCT (K):	5000	5000	5000	5000
CRI:	>70	>70	>70	>70
IP:	65	65	65	65
Impact Rating (K):	10	10	10	10
Power Factor:	>0.9	>0.9	>0.9	>0.9
Length (mm):	590	590	880	880
Depth (mm):	125	125	125	125
Width (mm):	130	130	130	130
Weight (kg):	4	4	5	5

^{*}Note: RPD12050DA-23 and RPD15050DA-23 kept in stock, other wattages ordered on demand.

	200W	240W	300W	400W	600W
	RPD20050DA-23	RPD24050DA-23	RPD30050DA-23	RPD40050DA-23	RPD60050DA-23
Comparable to:	400W MH	500W MH	600W MH	800W MH	1000W MH
Total Power (W):	200	240	300	400	600
Total Light Output(lm):	26,000	31,000	39,000	52,000	78,000
Efficacy (lm/cctW):	130	130	130	130	130
Lifetime (hrs):	50,000	50,000	50,000	50,000	50,000
Lux (lux):	688 at 8m	504 at 10m	434 at 12m	574 at 12m	628 at14m
Beam Angle (deg):	30x70	30 x 70	30 x 70	30 x 70	30 x 70
CCT (K):	5000K	5000K	5000K	5000K	5000K
CRI:	>70	>70	>70	>70	>70
IP:	65	65	65	65	65
Impact Rating (K):	10	10	10	10	10
Power Factor:	>0.9	>0.9	>0.9	>0.9	>0.9
Length (mm):	1,180	1,180	890	1,180	1,180
Depth (mm):	125	125	125	125	125
Width (mm):	130	130	135	135	135
Weight (kg):	5	5	5	5	5



ECA eligible

Accessories:

RPDRB Surface mounting, rotating, brackets

 RPDL90
 90° lens accessory

 RSW44-P
 IP20 Swift connector

 RCONIP68-04
 IP68 connector

RDLHRV-HMW32S Daylight harvest sensor, 1-10V dimming RADAR 360° MW sensor with 3 step dimming



COMMERCIAL

SONIC LED HIGHBAY





SONIC LED Highbay, IP65, Black

- Suitable for use in warehouses, manufacturing plants, garages, workshops & aircraft hangars, retail superstores, gymnasium & sports halls
- LED replacement for 200W/300W/400W metal halide highbay fittings
- Die cast aluminium housing with tempered glass front providing high impact rating of IK08
- Pre-wired with 1m flex and Swift connector
- Fitting has 110° beam angle, 85° lens accessory available
- Surface mounting bracket and wire guard available
- · Very high efficacy of 129-132lm/W
- Wide operating temperature range of -25°C to +45°C
- Dimmable with most 1-10V systems
- Suitable for switching by PIR, Microwave or Photocell

	RSN10050DAS-04	RSN15050DAS-04	RSN20050DAS-23
Comparable to:	200W metal halide	300W metal halide	400W metal halide
Total Power (W):	99.1	149.5	199.2
Total Light Output (lm):	13,050	19,320	25,890
Efficacy (lm / cctW):	132	129	130
Lifetime (hrs):	50000	50000	50000
Lux at 1m (lx):	4,610	6,810	9,063
Beam Angle (deg):	110	110	110
CCT (K):	5000	5000	5000
CRI:	80	80	80
IP:	65	65	65
Impact Rating (IK):	08	08	08
Power Factor (PF):	0.98	0.98	0.98
Height (mm):	206	215	219
Diameter (mm):	330	330	379
Box Qty:	1	1	1
Weight (kg):	3.6	4.2	5.3













Accessories:

RSNL85-S 85° lens for 100W & 150W

RSNL85-L 85° lens for 200W

RSNB-S Surface mounting bracket for 100W & 150W
RSNB-L Surface mounting bracket for 200W

RSNB-L Surface mounting bracket for 20 RSNWG-S Wire quard for 100W & 150W

RSNWG-L Wire guard for 200W

RDLHRV-HMW32S Daylight harvest sensor, 1-10V dimming
RRD360MW-01 RADAR 360° MW sensor with 3 step dimming



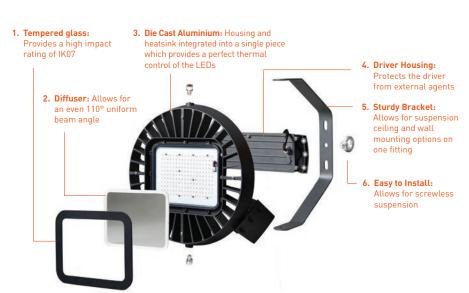
COMMERCIAL

DISK LED HIGHBAY



DISK LED highbay, Black

- Suitable for use in warehouses, manufacturing plants, garages, workshops & aircraft hangars, retail superstores, gymnasium & sports halls
- LED replacement for 200W/300W/400W metal halide highbay fittings
- Die cast aluminium housing with tempered glass front providing high impact rating of IK07
- Pre-wired with 1m flex and SWIFT connector
- 110° beam angle as standard, 60° and 90° aluminium reflectors available
- · High efficacy of 127-134lm/W
- Wide operating temperature range of -25°C to +40°C
- Combined on/off and 0-10V dimmable driver as standard
- · Suitable for switching by PIR, Microwave or Photocell
- DALI version available from Conversions





	100W	160W	200W
Standard	RDS10050DA-04	RDS16050DA-04	RDS20050DA-04
Emergency		RDS16050DA-04E	RDS20050DA-04E
Comparable to:	200W Metal Halide	300W Metal Halide	400W Metal Halide
Total Power (W):	103.8	161.4	197.9
Total Light Output (lm):	13,650	20,500	26,510
Efficacy (lm/cctW):	131	127	134
Lifetime (hrs):	50,000	50,000	50,000
Lux at 1m (lux):	4,471	7,643	10,000
Beam Angle (deg):	110	110	110
CCT (K):	5000	5000	5000
CRI:	75	75	75
IP:	65	65	65
Impact Rating (IK):	07	07	07
Power Factor:	0.98	0.98	0.95
Height (mm):	252	310	310
Diameter (mm):	365	457	457
Box Qty:	1	1	1
Weight (kg):	5.1	9	9













ECA eligible Triple E registered



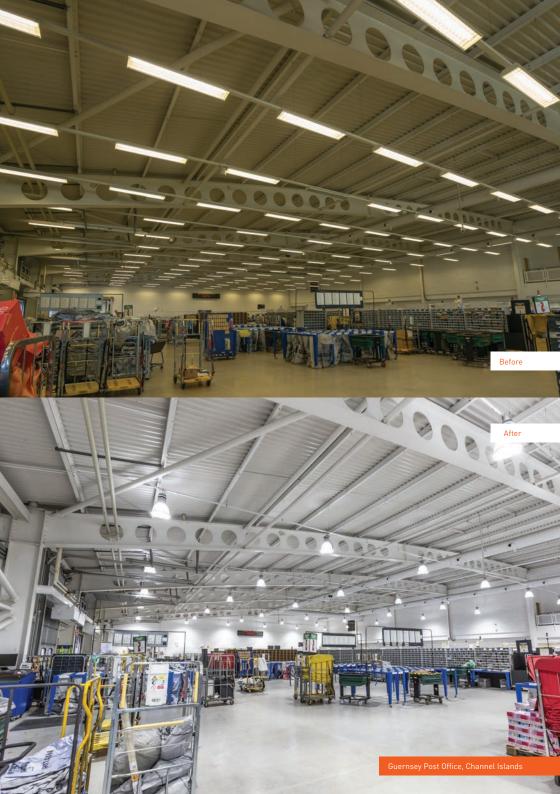
Accessories:

RDSHBRF60-S 60° beam angle reflector for 100W
RDSHBRF90-S 90° beam angle reflector for 100W
RDSHBRF60-L 60° beam angle reflector for 160/200W
RDSHBRF90-L 90° beam angle reflector for 160/200W
RDSHBW90-L 90° wire guard for 160/200W
RDSHBOD-L Opal diffuser for 160/200W

RDLHRV-HMW32S Daylight harvest sensor, 1-10V dimming RADAR 360° MW sensor with 3 step dimming











COMMERCIAL

STREEX LED STREET LIGHTING





STREEX LED Street light, Grey

- Suitable for use in public or private roads, hotel drives and car parks
- · High impact rating of IK08
- Body is made of die cast aluminium with an extra corrosion resistant powder coating
- Standard stock is a wide S class beam which reduces number of columns required and prevents "sky glow" unlike SOX and SON fittings
- · High quality Samsung LEDs fully integrated
- LED system that provides optimal lumen output and thermal management for longer LED rated life
- Comes with Philips Xitanium 1-10V driver that provides high light output and a superior efficacy of 105-123lm/W
- 50,000 hour average lamp life
- Wide operating ambient temperature range of -25°C to +40°C

- · Complete with flicker-free driver
- All wattages can be ordered on demand with choice of: NEMA socket and waterproof cap, NEMA socket and Photocell, or without a NEMA socket or Photocell
- Two side retaining clips preventing the fitting being blown open in windy conditions
- Hinged lid with safety stay that holds lid in open position when being worked on
- Spirit level included to highlight any leaning columns, making substantial installation time savings
- Can be side or column-top mounted
- · 60W 240W versions can be ordered on demand

	35W	60W	90W	120W
	RSE3540S-25	RSE6040S-25	RSE9040S-25	RSE12040S-25
Total Power (W):	34	58.6	91.8	118.6
Total Light Output(lm):	3,710	7,220	9,600	13,590
Efficacy (lm/cctW):	109	123	105	115
Lifetime (hrs):	50,000	50,000	50,000	50,000
Lux at 1m (lux):	820	2,040	2,340	4,120
CCT (K):	3000/4000/5000	3000/4000/5000	3000/4000/5000	3000/4000/5000
CRI:	75	75	75	75
IP:	66	66	66	66
Impact Rating (K):	08	08	08	08
Power Factor:	0.99	0.99	0.99	0.99
Length (mm):	690	690	690	690
Height (mm):	134	134	134	134
Width (mm):	305	305	305	305
Weight (kg):	7.4	7.4	9.0	9.5

1. HOUSING

The canopy & frame are made of anti-corrosion die-cast aluminium. RAL7037 grey as standard. Black and other RAL colours available on request

2. 5 PIN NEMA SOCKET TO ALLOW FOR PHOTOCELL

35W STREEX is kept in stock and comes complete with 5 pin NEMA socket and waterproof cap Photocell can be ordered as an accessory – Code: RSE-PC All other wattages can be ordered on demand with choice of: NEMA socket and waterproof cap, NEMA socket and Photocell, or without

3. HIGH QUALITY SAMSUNG LEDS

Fully integrated LED system that provides optimal lumen output and thermal management for longer LED rated life

4. BEAM ANGLE LENS CONFIGURATIONS

S class lens available as standard. Other options available. See right panel for more information

5. STAINLESS STEEL HINGED HOLDER

Allows for hands & tool free installation

6. BREATHE HOLE

Helps to keep the thermal management of the fitting by balancing the internal and exterior temperature of the fitting preventing condensation build up on glass cover

7. TEMPERED GLASS COVER LENS

Prevents upward light to G5 glare classification and downward light to between G2 and G3 glare classification to BS EN 13201-2 2015

8. PHILLIPS XITANIUM 1-10V

Providing high light output to match traditional lighting sources with energy savings of 50%

9. SURGE PROTECTION DEVICE

Surge protection device that acts as an additional defence to damage from power surges

10. CABLE CONNECTION

M16 cable gland with strain relief. Pre-wired with 10m of 3 core H05RR-F rubber flex

11. SPIRIT LEVEL

Makes head & beam alignment easier and compensates for misaligned columns

12. ADJUSTABLE SPIGOT MOUNT

Allows for side or columntop mounting and head fine adjustment in the horizontal or vertical position



13. 4 X STAINLESS STEEL M10

positioning of the fitting

14. TWO SIDE RETAINING CLIPS Canopy doesn't get blown open

by strong winds or vibration

Creating a durable protective

seal against excessive dust and

Creating a sturdy and secure

MOUNTING BOLTS

15. IP66 SILICONE GASKET

moisture

240W	200W	150W
RSE24040S-25	RSE20040S-25	RSE15040S-25
230.4	197.9	143.3
27,760	22,120	17,090
120	112	119
50,000	50,000	50,000
8,210	6,740	5,120
3000/4000/5000	3000/4000/5000	3000/4000/5000
75	75	75
66	66	66
08	08	08
0.99	0.99	0.99
829	829	829
172	172	172
385	385	385
13	12.5	12



Accessories:

RSE-PC

5-PIN NEMA Photocell



DOWNLIGHTS

	FRD
88	RAMADA LED FIRE RATED
90	TRIUMPH ACTIVATE™ LED FIRE RATED
98	TRIPLEX LED CCT3 SELECTABLE FIRE RATED
101	STARLING PREMIUM FIRE RATED
104	COMPACT FIRE RATED
	No. EDD
	Non-FRD
108	TAYLOR LED CCT3 SELECTABLE
110	CAVAN LED CCT3 SELECTABLE
114	DEXTER LED
116	MORPH LED CCT3 SELECTABLE
118	ETERNITY LED
122	INSPIRE ACTIVATE LED
124	WILSON LED WALL WASHER
125	ROCKSTAR LED WALL WASHER
126	PVC LOW VOLTAGE
127	RIDA MAINS VOLTAGE
128	ZAK MAINS VOLTAGE
129	SALLY MAINS VOLTAGE

RAMADA LED FIRE RATED





RAMADA 8.5W LED fire rated downlight

- Suitable for use in offices, retail shops, reception areas, hotels, restaurants, bars & clubs, showrooms
- Fire rated dimmable LED downlight replacement for 50W LV halogen downlights
- 30, 60 and 90-minute fire tested
- Complete with white and brushed chrome trims
- Complete with 3-way terminal block with large terminals for loop in loop out
- Integrated insulation frame enabling insulation to be laid over
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell
- Dimmable with selected leading & trailing edge dimmers. Compatibility list available on website
- Polished chrome trim accessory available RRATRIM-03
- · 850°C glow wire tested

	RRA083060-01	RRA084060-01
Comparable to:	50W LV Halogen	50W LV Halogen
Total Power (W):	8.5	8.7
Total Light Output (lm):	590	670
Efficacy (lm/cctW):	70	77
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	540	640
Beam Angle (deg):	60	60
CCT (K):	3000	4000
CRI:	80	80
IP:	65	65
Power Factor:	0.9	0.9
Cut out (mm):	70	70
Depth (mm):	94	94
Diameter (mm):	86	86
Box Qty:	1	1
Weight (kg):	0.3	0.3



COB * * * * * * ChipOnBoard

Accessory:

RRATRIM-03 Polished Chrome Trim



Ensures all the light from the lens is guided outwards



3. Silicon seal: To ensure IP65 protection

5. Lens: Provides 60° beam angle



2. Single spring clips: Designed for fast installation whilst avoiding damage to the ceiling

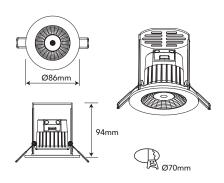
> 7. Heat Sink: Designed for thermal management of LED chip

> > 8. Connector Block: With large terminals, ideal for loop in loop out

9. Integrated insulation guard: Ensures sufficient gap for air

1. Trim Options:

C/w white and brushed chrome trims, Polished chrome trim available as accessory (RRATRIM-03)



TRIUMPH ACTIVATE™ LED FIRE RATED



ACTIVATE DRIVER ON BOARD

ACtivate true Driver-On-Board (DOB) technology eliminates the electrolytic capacitor and provides driver efficiency and reliability to improve LED lifetime.

All power supply, driver components, dimming functionality, power factor, surge & thermal protection are integrated onto the LED PCB powered direct from the mains supply.

The TRIUMPH ACTIVATE™ has state of the art integrated circuitry with no traditional electrolytic capacitors which ensures long life (electrolytic capacitors are often the cause of premature driver failure).

ACTIVATE is a very efficient technology which is significantly more reliable than separate, or driver 'integrated' into the fitting or heat sink.

- · Electrolytic capacitor free eliminates the weakest component
- Light engine with driver-on-board manufactured in a fully automated semiconductor plant with machine vision quality control
- · Driver-on-board consumes less power and is more efficient
- Provides IC control for stable drive current to maximise LED performance and life
- · Smooth dimming functionality is achieved using a range of selected dimmers
- · Natural and soft dimming of the uniform LED COB
- No external driver to locate in the void, nor issues of incorrectly connecting a mains supply to a LV fitting causing failure
- · 5 year warranty

Chip On Board

The TRIUMPH ACTIVATE™ doesn't stop at DOB technology. It also uses the latest Chip-on-board (COB) LED technology, delivering a high lumen output in a single beam, low power consumption and low heat emissions.

Of particular consideration for lighting designs, the single chip light beam is easier to control and brings greater uniformity than multiple SMD or multi-lens LED fittings.

Compared to LV halogen, the TRIUMPH ACTIVATE™ produces:

- Over 70% more light output, so fewer fittings may be used for the same lighting effect, reducing costs
- · Energy savings in excess of 80%, reducing CO, Emissions and electricity costs
- Efficacy of ≥83 luminaire lm/cctW, compliant with Part L1 & L2 UK Building Regulations and eligible for Enhanced Capital Allowances
- LEDs run cooler, resulting in 50,000 hour life compared to halogen lamp changes every 1,000 hours, saving on maintenance costs



What is the difference between 'true' driver on board, partial driver on board and integrated driver?

LEDs are generally powered by a DC supply. A driver circuit is required to rectify and condition AC power from the mains supply. Traditionally these drivers have been large power supply boxes of discrete electronics, (usually including transformers, rectifying bridges, regulators and a large electrolytic capacitor), on a trailing lead from the light fitting.

True Driver On Board

LED drivers can now be fabricated using integrated circuit electronics on the same circuit board (PCB) as the LED chips. This is called 'Driver-On-Board' technology, where all driver components are on the board, which is AC powered directly from the mains supply. This is a more advanced concept than simply enclosing, or bolting on a traditional external driver, with its large, discrete components.

Some manufacturers offer 'integrated' drivers or 'mains-operated' downlights, which simply brings a conventional external driver into the light fitting enclosure or connector block, usually compromising the thermal mass and heat capacity of the heat sink, or its convection cooling. This can impact the driver and LED lifetime.

Partial Driver On Board

Usually has an integrated circuit on the printed circuit board, but often has other circuitry located elsewhere in the fitting, typically in the heat sink region, compromising its performance and the reliability of the fitting.

Integrated Driver

Generally means that the driver circuitry is located elsewhere in the fitting, typically in the heat sink region, reducing the thermal mass of heat sinking and the efficiency of heat transport. Driver circuitry will typically be conventional.







TRIUMPH ACTIVATE™ LED FIRE RATED



TRIUMPH ACTIVATE™ LEDCHROIC downlight

- True ACtivate Driver-On-Board (DOB) mains operated technology – providing dimmability, driver efficiency and reliability (no electrolytic capacitor)
- Chip-On-Board (COB) for superb light output, high efficiency and long life
- Efficiency of ≥83 luminaire lm/cctW to comply with Part L1 & L2 UK Building Regulations and eligible for Enhanced Capital Allowances
- Interchangeable LEDCHROIC lens system achieving unequalled light distribution, uniformity and clarity
- Interchangeable trim bezel system allows fitting of six accessory trim colours – allows fitting of 60° lens accessory to 6W & 8W and 38° lens accessory to 11W
- Fire, acoustic and airflow tested in compliance with Parts B, C & E of UK Building Regulations
- Integrated insulation stand-off enabling insulation to be laid over the fitting

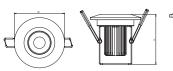
- Available pre-wired with ROBUS SWIFT 4 pin male/ female plug & play connector with large terminals and integrated cable restraint
- High lumen output of 500-1030 lumens
- Operating temperature range of -20°C to +40°C
- Ultra low heat emissions of 4.7-8.5W
- 70mm cut out and wide flange
- Short narrow main body is ideal for shallow ceiling voids and retrofits
- Dimmable with selected dimmers. Compatibility list available on website
- Suitable for emergency conversion using SWIFT connector plug and play emergency pack (RTED/4/TP60/240W)
- Complies with requirements of the Energy Technology Criteria List. Enhanced Capital Allowances may be claimed on the cost of the luminaires, installation and transport to site

Accessories:

RATRTRIM-02 Brass Trim
RATRTRIM-03 Chrome Trim
RATRTRIM-10 Matte Black Trim
RATRTRIM-11 Matte White Trim

RATRTRIM-13 Brushed Chrome Trim
RATRTRIM-14 Antique Brass Trim

RATRLENS38 LEDCHROIC™ lens with 38° beam angle
RATRLENS60 LEDCHROIC™ lens with 60° beam angle





Product Code	Diameter	Depth	Cut-out	Weight
RATR6P03038	92	63	70	270g
RATR8P03038	92	98	70	320g
RATR0113060	92	108	70	370g



Warm White

	6W	8W	11W
Standard	RATR6P03038-01	RATR8P03038-01	RATR0113060-01
No Connector	RATR6P03038NC-01		
Comparable to:	50W LV Halogen	1 x 18W PL	1 x 26W PL
Total Power (W):	6	8	11
Total Light Output (lm):	500	730	950
Efficacy (lm/cctW):	83	88	86
Lifetime (hrs):	50,000	50,000	50,000
Lux at 1m (lux):	890	1,140	920
Beam Angle (deg):	38	38	60
CCT (K):	3000	3000	3000
CRI:	>80	>80	>80
IP:	65	65	65
Power Factor:	>0.98	>0.98	>0.98
Diameter (mm):	92	92	92
Recessed Depth (mm):	63	98	108
Height above ceiling (mn	n): 10	10	10
Cut-out (mm):	70	70	70
Min Order/Carton Qty:	1/18	1/18	1/18
Weight (kg):	0.27	0.32	0.37

Neutral White

	6W	8W	11W
Standard	RATR6P04038-01	RATR8P04038-01	RATR0114060-01
No Connector	RATR6P04038NC-01		
Total Light Output (lm):	530	700	1,030
Lux at 1m (lux):	930	1,190	990
Efficacy (lm/cctW):	88	87	92
CCT (K):	4000	4000	4000

























ECA eligible Triple E registered

DOWNLIGHTS

TRIUMPH ACTIVATE™ LED





Wide flange with short narrow main body

New 6W version is only 63mm in depth, ideal for shallow ceiling voids

LEDCHROIC™

6W & 8W supplied with LEDCHROIC™ 38° optic. Optional LEDCHROIC™ 60° optic available as accessory. 11W supplied with LEDCHROIC™ 60° optic. Optional LEDCHROIC™ 38° optic available as accessory

TWISTNLOCK

Supplied with a high quality white twist and lock detachable bezel. Range of Matte Black, Matte White, Chrome, Brushed Chrome, Brass and Antique Brass bezels available as accessories



Pre-wired with ROBUS SWIFT 4 pin male/female plug & play connector

Large terminals and integrated cable restraint

DIMMABLE

Dimmable as standard



DOB

* * * * * *

DriverOnBoard

ACTIVATE True Driver on Board technology

No electrolytic capacitor

A uniquely combined DOB and COB downlight

Exceeds Part L1 and Part L2







IP65 CRI 80



≥83 luminaire lm/cctW



TRIUMPH ACTIVATE™ TILT LED FIRE RATED



TRIUMPH ACTIVATE™ TILT LEDCHROIC 6W downlight

- · Suitable for use in offices, retail shops, reception areas, hotels, restaurants, bars & clubs, showrooms
- · Adjustable tilt of 24°
- · True ACtivate Driver-On-Board (DOB) mains operated technology – providing dimmability, driver efficiency and reliability (no electrolytic capacitor)
- · Chip-On-Board (COB) for superb light output, high efficacy and long life
- · Efficacy of 75-80 luminaire lm/cctW to comply with Part L1 & L2 UK Building Regulations
- LEDchroic optic & reflector achieving unequalled light distribution, uniformity and clarity, whilst replicating traditional dichroic aesthetics

- · Fire, acoustic and airflow tested in compliance with Parts B, C & E of UK Building Regulations
- Pre-wired with ROBUS SWIFT 4 pin male/female plug & play connector with large terminals and integrated cable restraint. Fast, simple and efficient installability
- Suitable to be loosely covered with solid or lay-over insulation
- Low heat emissions
- Dimmable with selected dimmers. Compatibility list available on website
- Operating temperature range of -20°C to +35°C
- 850°C glow wire tested

RATT6P03038-01	RATT6P04038-01
50W Halogen	50W Halogen
6	6
450	490
75	80
50,000	50,000
850	900
38	38
3000	4000
>80	>80
65	65
N/A	N/A
26	26
>0.98	>0.98
104	104
95	95
8	8
1	1
0.4	0.4
	50W Halogen 6 450 75 50,000 850 38 3000 >80 65 N/A 26 >0.98 104 95 8



Triple E registered

Accesssories:

RATRLENS60

RATTTRIM-13 Brushed chrome trim set LEDCHROIC™ lens with

60° beam angle







LEDCHROIC[™]



TRIPLEX LED CCT3 SELECTABLE, FIRE RATED



TRIPLEX 10W COB LED CCT3 selectable fire rated downlight

- Suitable for domestic dining, living, bathroom and bedroom spaces, hotel & office reception areas
- Colour temperature selectable; switch on the back of the fitting allows selection of 2800, 4200 and 6500 Kelvin
- Complete with 3-way terminal block with large terminals for loop in loop out
- LED replacement for 50W LV halogen downlights
- · Die cast aluminium housing
- Complete with three trims: white, brushed chrome and polished chrome

- LEDchroic lens replicating halogen dichroic with uniform, shadow-free light
- · Pre-wired with 0.6m of flex
- · Shallow profile of only 48mm depth
 - High efficacy of 71-91lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- Compatible with selected trailing and leading edge dimmers. Compatibility list available on website.







2. State of the art designed heatsink: Allows for better LED thermal management

	RTR10X0-01
Comparable to:	50W LV Halogen
Total Power (W):	10.6/10/10.7
Total Light Output (lm):	750/910/840
Efficacy (lm/cctW):	71/91/79
Lifetime (hrs):	50,000
Lux at 1m (lux):	920/1,090/1,010
Beam Angle (deg):	60
CCT (K):	2800/4200/6500
CRI:	>80
IP:	65
Power Factor:	>0.9
Diameter (mm):	87
Depth (mm):	48
Cut out (mm):	65
Box Qty:	1
Weight (kg):	0.38

Note: Multiple CCT data shown in format WW/NW/DW



Triple E registered

DOWNLIGHTS

FIRE RATED



Why choose ROBUS for your fire rated fittings?

ROBUS offers a complete range of fire rated downlights, all of which fulfil building construction regulations and have full independent certification for fire protection of:

- All ceiling construction types
- 30, 60 and 90 minutes

30 mins

A 30 minute fire rated ceiling has the joists spaced at 600mm centres and uses a single layer of 12.5mm gypsum board.

30 minute fire rated ceilings are the most common and are used in 2-storey buildings, flats and maisonettes.

60 mins

A 60 minute fire rated ceiling has the joists spaced at 600mm centres and uses two layers of 15mm gypsum board.

90 mins

A 90 minute fire rated ceiling has the joists spaced at 450mm centres and uses two layers of 15mm gypsum board.

ROBUS fire rated solutions are available in:

DESCRIPTION	W	TYPE	ORIENTATION	DIMMABILITY	IP	PAGE
RAMADA	8.5W	LED	Straight	Dimmable	IP65	Page 88
TRIUMPH ACTIVATE™	6W, 8W, 11W	LED	Straight	Dimmable	IP65	Page 90
TRIUMPH ACTIVATE TILT	6W	LED	Directional	Dimmable	IP65	Page 96
TRIPLEX	10W	LED	Straight	Dimmable	IP65	Page 98
STARLING PREMIUM RAN	GE 50W	Low and Mains voltage	Straight and Directional	Dimmable	IP20	Page 101
STARLING SHOWER	50W	Low and Mains voltage	Straight	LEDC	IP65	Page 103
COMPACT RANGE	50W	Low and Mains voltage	Straight and Directional	Dimmable	IP20	Page 104

STARLING PREMIUM FIRE RATED





STARLING 50W mains voltage die cast fire rated downlight

- Recessed straight downlights with pressed steel body and die cast aluminium front bezel
- Fitting design and intumescent seals retain the integrity of 30, 60, 90 minute fire rated ceiling/floor constructions

Mains Voltage	GU/GZ10	
White	RSF201-01	
Chrome	RSF201-03	
Brushed Chrome	RSF201-13	
Total Power (W):	50	
IP:	20	
Cap Type:	GU10	
Diameter (mm):	85	
Depth (mm):	105	
Cut-out (mm):	73	
Box Qty:	10	
Weight (kg):	0.25	











- Complies with BS476 Part 21. Report and certificate from INTERNATIONAL FIRE CONSULTANTS (IFC)
- · Compatible with dichroic and aluminium lamp types
- Improved terminal block for loop in loop out





STARLING PREMIUM FIRE RATED





STARLING 50W mains voltage die case fire rated downlight, directional

- Recessed directional downlights with pressed steel body and die cast aluminium front bezel
- Fitting design and intumescent seals retain the integrity of 30, 60, 90 minute fire rated ceiling/floor constructions
- Complies with BS476 Part 21. Report and certificate from INTERNATIONAL FIRE CONSULTANTS (IFC)
- · Compatible with dichroic and aluminium lamp types
- Improved terminal block for loop in loop out
- Class I construction

	Mains Voltage GU/GZ10
White	RSF208-01
Chrome	RSF208-03
B Chrome	RSF208-13
Total Power (W):	50
IP:	20
Cap Type:	G5.3/GU10
Diameter (mm):	100
Depth (mm):	115
Cut-out (mm):	86
Box Qty:	10
Weight (kg):	0.34

















STARLING PREMIUM FIRE RATED - SHOWER





STARLING 50W mains voltage fire rated downlight

- Recessed downlights with pressed steel body and die cast aluminium front bezel
- Fitting design and intumescent seals retain the integrity of 30,60,90 minute fire rated ceiling/floor constructions
- Complies with BS476 Part 21. Report and certificate from INTERNATIONAL FIRE CONSULTANTS (IFC)
- · Compatible with dichroic and aluminium lamp types
- Class I construction

	Mains Voltage GU/GZ10
White	RSF20165-01
Chrome	RSF20165-03
B Chrome	RSF20165-13
Total Power (W):	50
IP:	65
Cap Type:	GU10
Diameter (mm):	91
Depth (mm):	125
Cut-out (mm):	76
Box Qty:	10
Weight (kg):	0.3















DOWNLIGHTS

COMPACT FIRE RATED





COMPACT 50W mains voltage pressed steel fire rated downlight

- Recessed straight downlights with pressed steel body & front bezel
- Fitting contains intumescent seals to give 30, 60 and 90 mins protection
- Complies with BS476 Part 21. Report and certificate from INTERNATIONAL FIRE CONSULTANTS (IFC)
- Shallow design depth of 100mm allows for installation into shallow ceiling voids

	Mains Voltage
White	RFP201-01
Chrome	RFP201-03
B Chrome	RFP201-13
Total Power (W):	50
IP:	20
Cap Type:	GU10
Diameter (mm):	85
Depth (mm):	100
Cut-out (mm):	72
Box Qty:	10
Weight (kg):	0.21



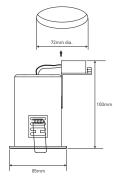












COMPACT FIRE RATED





COMPACT 50W mains voltage pressed steel fire rated downlight, directional

- · Recessed directional downlights with pressed steel body & front bezel
- · Fitting contains intumescent seals to give 30, 60 and 90 mins protection
- Complies with BS476 Part 21. Report and certificate from INTERNATIONAL FIRE CONSULTANTS (IFC)
- Shallow design depth of 100mm allows for installation into shallow ceiling voids

	Mains Voltage
White	RFP208-01
Chrome	RFP208-03
B Chrome	RFP208-13
Total Power (W):	50
IP:	20
Cap Type:	GU10
Diameter (mm):	99
Depth (mm):	100
Cut-out (mm):	80
Box Qty:	10
Weight (kg):	0.29

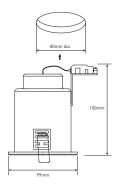












CCT3 COLOUR TEMPERATURE SELECTABLE

ROBUS CCT3 Colour Temperature Selectable Products

Three Colour Temperature Selectable (CCT3):

This has benefits to the wholesaler, installer and end user as it allows the Colour Temperature to be selected on-site at the time of installation or changed retrospectively after installation to a preferred warmer or cooler light colour appropriate for the task and use of the lit space or to compliment decor colour. Having this option in one fitting reduces the need to stock several products.





Warm Neutral Daylight









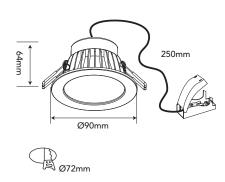
TAYLOR LED CCT3 SELECTABLE



TAYLOR 7W LED CCT3 selectable

- Suitable for use in offices, retail shops, reception areas, hotels, restaurants, bars & clubs, showrooms
- Colour temperature selectable; switch on the back of the fitting allows selection of 3000, 4000 and 6500 Kelvin
- C/w white and brushed chrome trims
- Pre-wired with 0.25m of flex and push-in connector
- · LED replacement for 50W halogen downlights
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable to be loosely covered with solid or lay-over insulation
- · Extension trim available for up to 116mm holes
- · Polycarbonate body & diffuser
- Dimmable with selected leading & trailing edge dimmers. Compatibility list available on website
- · 850°C glow wire tested
- Meets RT2012 regulation for acoustics







	RC7W723-01
Comparable to:	50W Halogen
Total Power (W):	6.7
Total Light Output (lm):	570/620/610
Efficacy (lm/cctW):	85/92/91
Lifetime (hrs):	30,000
Lux at 1m (lux):	250/300/270
Beam Angle (deg):	100
CCT (K):	3000/4000/6500
CRI:	80
IP:	44
Power Factor:	0.9
Height (mm):	64
Diameter (mm):	90
Cut out (mm):	72
Box Qty:	1
Weight (kg):	0.22



Triple E registered

Note: Multiple CCT data shown in format WW/NW/DW



Accessories:

RC7TRIMX-04 Circular trim for 72mm cut out, Black
RC72TRIM-01 Extension trim to 92mm cut out, White
RC72TRIM-13 Extension trim to 92mm cut out, Brushed Chrome

RC7SQTRIM-01 Square trim for 72mm cut out, White

RC7SQTRIM-13 Square trim for 72mm cut out, Brushed Chrome

CAVAN LED CCT3 SELECTABLE

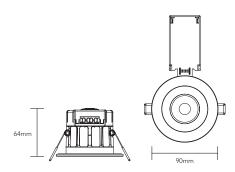


CAVAN 8W COB LED CCT3 selectable

- Suitable for use in offices, retail shops, reception areas, hotels, restaurants, bars & clubs, showrooms
- Tunable version requires use of a remote control (RC8REM) tuning range from 3000-6500K
- · Remote control accessory enables:
 - Four separately controlled groups of fittings with each
 - Independently CCT tunable 3000-6500K
 - Dimmable from 100% to 10%
 - Scenes to be manually set for alternative use of the space
 - Lights to be turned on or off remotely for reading or to watch a film

Note: one remote required per installation

- LED replacement for 50W LV halogen downlights
- Available with white or brushed chrome trim
- Die cast aluminium housing with polycarbonate trim and PC lens
- Suitable to be loosely covered with solid or lay-over insulation
- · Large screw terminals allowing loop-in/loop-out
- Quick connect driver for faster installation
- Wide operating ambient temperature range of -20°C to +40°C
- · High efficacy of 75-107lm/W
- Suitable for switching by PIR, Microwave or Photocell
- Dimmable with selected leading and trailing edge dimmers. Compatibility list available on website
- 850°C glow wire tested





	CCT Selectable	Tunable
White	RC8CCT3-01	RC8TW-01
Brushed Chrome	RC8CCT3-13	RC8TW-13
Comparable to:	50W Halogen	50W Halogen
Total Power (W):	7.9/7.7/7.9	9
Total Light Output (lm):	710/820/810	680-780
Efficacy (lm/cctW):	90/107/103	75-86
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	950/1,100/1,090	1,250-1,350
Beam Angle (deg):	38	38
CCT (K):	3000-6500	3000-6500
CRI:	80	80
IP:	65	65
Power Factor:	0.8	0.8
Diameter (mm):	90	90
Depth (mm):	64	64
Projection (mm):	5	5
Cut-out (mm):	72	72
Box Qty:	1	1
Weight (kg):	0.2	0.2

Note: Multiple CCT data shown in format WW/NW/DW



Triple E registered

Accessory:

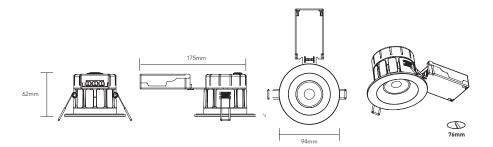
RC8REM Remote control required to operate RC8TW

CAVAN LED CCT3 SELECTABLE, TILT



CAVAN Tilt 6.5W COB LED CCT3 selectable

- Suitable for use in offices, retail shops, reception areas, hotels, restaurants, bars & clubs, showrooms
- LED replacement for 50W LV halogen downlights
- Adjustable tilt of 25°
- · Available with white or brushed chrome trim
- Die cast aluminium housing with polycarbonate trim and high temperature resistance PC lens
- Suitable to be loosely covered with solid or lay-over insulation
- Large screw terminals allowing loop-in/loop-out
- Quick connect driver for faster installation
- Wide operating ambient temperature range of -20°C to + 40°C
- High efficacy of 88-103lm/W
- Suitable for switching by PIR, Microwave or Photocell
- Dimmable with selected leading and trailing edge dimmers. Compatibility list available on website





White	RCT6CCT3-01
Brushed Chrome	RCT6CCT3-13
Comparable to:	50W Halogen
Total Power (W):	6.6
Total Light Output (lm):	590/680/670
Efficacy (lm/cctW):	88/103/101
Lifetime (hrs):	50,000
Lux at 1m (lux):	880/1,000/1,000
Beam Angle (deg):	38
CCT (K):	3000/4000/6500
CRI:	80
IP:	20
Power Factor:	0.8
Diameter (mm):	94
Depth (mm):	59
Projection:	3
Box Qty:	1
Weight (kg):	0.2





Triple E registered

DOWNLIGHTS

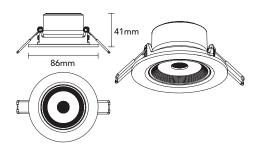
DEXTER





DEXTER 6W LED dimmable and non-dimmable downlight

- Suitable for use in retail shops, libraries, hotels, restaurants, pubs, offices, meeting rooms, hotels, reception areas, museums, galleries, bathrooms and cloakrooms
- Utilises high quality SMD technology for excellent light output and low power consumption
- Choice of three trims: white, brushed chrome and satin silver
- Non-dimmable or dimmable in warm or neutral white CCT for task based or more relaxing environments
- Wide and adjustable tilt angle to highlight wall or floor mounted goods
- Clear light beam with no dark spots and has gentle fade to edges for uniform lighting design
- Wide operating ambient temperature range of -20°C to +40°C
- · Can be switched by microwave, PIR and/or photocell
- Dimmable with selected dimmers (dimmer compatibility list available on website)





	RDE6P030-01	RDE6P030D-01	RDE6P040-01	RDE6P040D-01
	3000K Non-dimmable	3000K Dimmable	4000K Non-dimmable	4000K Dimmable
Comparable to:	50W halogen	50W halogen	50W halogen	50W halogen
Total Power (W):	5.9	5.3	5.9	5.4
Total Light Output (lm):	480	420	510	460
Efficacy (lm / cctW):	81	79	86	85
Lifetime (hrs):	30,000	30,000	30,000	30,000
Lux at 1m (lx):	680	600	710	630
Beam Angle (deg):	38	38	38	38
CCT (K):	3000	3000	4000	4000
CRI:	80	80	80	80
Ingress Protection (IP):	20	20	20	20
Power Factor:	0.54	0.8	0.54	0.8
Diameter (mm):	86	86	86	86
Cut out (mm):	70	70	70	70
Depth (mm):	41	41	41	41
Projection (mm):	3	3	3	3
Box Qty:	1	1	1	1
Weight (kg):	0.11	0.11	0.11	0.11









Accessories:

RDETRIM-13 RDETRIM-15

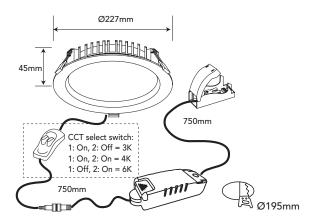
Brushed Chrome Trim Satin Silver

MORPH LED CCT3 SELECTABLE



MORPH LED CCT3 selectable

- Suitable for use in offices, reception areas, hotels, restaurants, shops, schools, hospitals, care homes
- Colour temperature selectable. Complete with inline switch to select 3000K, 4000K or 6500K colour temperature
- LED replacement for a range of PL, CFL fittings
- · Die cast aluminium body with polycarbonate diffuser
- C/w driver and quick fix secondary connector for easy installation
- Suitable for use with extension trim to 265mm (R1825265TRIM-01)
- Wide operating ambient temperature range of -20°C to +40°C
- · Suitable for switching by PIR, Microwave or Photocell
- High efficacy of 84-109lm/W
- Dimmable with selected leading & trailing edge dimmers. Compatibility list available on website
- · 850°C glow wire tested





	20W	30W	50W
	RMP20WCCT3DL-01	RMP30WCCT3DL-01	RMP50WCCT3DL-01
Comparable to CFL:	2x26	2x32	2x42
Total Power (W):	20.2/19.3/20.4	30.6/28.8/31	49/45.7/48.3
Total Light Output (lm):	1,860/2,060/2,100	2,770/3,140/3,140	4,130/4,490/4,240
Efficacy (lm/cctW):	92/107/103	91/109/101	84/98/88
Lifetime (hrs):	30,000	30,000	30,000
Lux at 1m (lux):	600/700/620	900/1,000/930	1,550/1,700/1,600
Beam Angle (deg):	110	110	110
CCT (K):	3000/4000/6500	3000/4000/6500	3000/4000/6500
CRI:	80	80	80
IP:	54	54	54
Impact Rating (IK):	08	08	08
Power Factor:	0.9	0.9	0.9
Diameter (mm):	227	227	227
Cut out (mm):	195	195	195
Depth (mm):	45	45	45
Box Qty:	1	1	1
Weight (kg):	1.1	1.3	1.3

Note: Multiple CCT data shown in format WW/NW/DW













DOWNLIGHTS

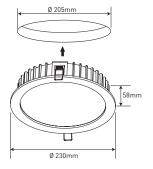
ETERNITY LED



ETERNITY LED downlight

- LED replacement for 2x18W and 2x26W fluorescent downlights
- Die cast aluminium housing with polycarbonate diffuser
- C/w driver and quick fix secondary connector for easy installation
- Pre-wired with 1.5m flex and SWIFT 4 pin male/ female plug & play connector with large terminals and integrated cable restraint. Fast, simple and efficient installability
- 265mm extension trim available, allowing mounting in 250mm cut-out

- Wide ambient operating temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell
- Options available through Conversions: Emergency, Dual Power and DALI Dimmable
- · 850°C glow wire tested
- Complies with requirements of the Energy Technology Criteria List. Enhanced Capital Allowances may be claimed on the cost of the luminaires, installation and transport to site





R1825265TRIM-01 Extension Trim

Accessories:

R3EMPK-PSU 3hr emergency pack with Swift connector
R1825265TRIM-01 265mm Wide Flange Extension for larger holes



	18W Neutral White	25W Neutral White
Standard	R18230DL-01	R25230DL-01
Comparable to:	2 x 18W PL	2 x 26W PL
Total Power (W):	18.4	24.9
Total Light Output (lm):	1,540	2,130
Efficacy (lm/cctW):	84	86
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	600	750
Beam Angle (deg):	110	110
CCT (K):	4000	4000
CRI:	85	85
IP:	54	54
Impact Rating (IK):	0	0
Power Factor:	>0.9	>0.9
Cut-out (mm):	205	205
Depth (mm):	58	58
Diameter (mm):	230	230
Box Qty:	12	12
Weight (kg):	0.9	0.9























ECA eligible LIA verified Triple E registered





DOWNLIGHTS

INSPIRE ACTIVATE LED



INSPIRE ACTIVATE LED downlight

- LED replacement for 2x18W and 2x26W fluorescent downlights
- Using advanced Driver-On-Board (DOB) technology
- Plastic-coated pressed steel housing with polycarbonate diffuser
- · Stainless steel screws and spring clips
- Complete with 1.5m flex and SWIFT 4 pin male/ female plug & play connector with large terminals and integrated cable restraint. Fast, simple and efficient installability
- Wide ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell
- · 850°C glow wire tested

Neutral White

	16W	22W
Standard	RNS01640-01	RNS02240-01
Comparable to:	2 x 18W PL	2 x 26W PL
Total Power (W):	17.2	21
Total Light Output (lm):	1,430	2,000
Efficacy (lm/cctW):	83	95
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	650	900
Beam Angle (deg):	100	100
CCT (K):	4000	4000
CRI:	80	80
IP:	20	20
Power Factor:	0.9	0.9
Diameter (mm):	230	230
Depth (mm):	105	105
Cut-out (mm):	210	210
Box Qty:	1	1
Weight (kg):	0.6	0.6



Triple E registered



DOB * * * * * *



WILSON LED WALL WASHER





WILSON LED circular wall washer

- Suitable for use in bars, clubs, retail, showrooms, exhibition centres, museums
- · Die cast aluminium housing with toughened glass
- · High impact rating of IK08
- Wide operating ambient temperature range of -20°C to +40°C
- 35W version incorporates fast-fix driver feature for ease of installation
- 13W has adjustable tilt of 45°, 35W version adjustable tilt angle of 70° and swivel of 350°
- · Suitable for switching by PIR, Microwave or Photocell

Neutral White

	13W	35W
	RWL01340-01	RWL03540-01
Comparable to:	20W	50W
Total Power (W):	12.7	35 .2
Total Light Output (lm):	1,050	3,220
Efficacy (lm/cctW):	83	91
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	1,070	2,250
Beam Angle (deg):	60	70
CCT (K):	4000	4000
CRI:	82	85
IP:	20	20
Power Factor:	0.95	0.95
Tilt/Swivel (deg):	45/NA	70/350
Cut-out (mm):	85	170
Diameter (mm:	98	195
Depth (mm):	70	175
Box Qty:	1	1
Weight (kg):	0.5	1.5



LIA verified Triple E registered

	RWL01340-01	RWL03540-01
Cut-out (mm)	85	170
Diameter (mm)	98	195
Depth (mm)	70	175





ROCKSTAR LED WALL WASHER



ROCKSTAR LED recessed wall washer

- · Suitable for use in bars, clubs, retail, showrooms, exhibition centres, museums
- LED replacement for 50W and 70W metal halide
- Die cast aluminium housing with toughened glass
- · High impact rating of IK08

- Wide operating ambient temperature range of -20°C to +40°C
- Adjustable tilt angle of 60°
- · Suitable for switching by PIR, Microwave or Photocell

Neutral White

	36W	44W
	RRC03645-01	RRC04445-01
Comparable to:	50W	70W
Total Power (W):	36.5	45.3
Total Light Output (lm):	3,430	4,250
Efficacy (lm/cctW):	94	94
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	1,500	1,950
Beam Angle (deg):	90	90
CCT (K):	4500	4500
CRI:	85	85
IP:	20	20
Power Factor:	0.95	0.95
Cut-out (mm):	130 x 220	130 x 220
Length (mm):	250	250
Width (mm):	150	150
Depth (mm):	130	130
Box Qty:	1	1
Weight (kg):	1.5	1.6













DOWNLIGHTS

LOW VOLTAGE



PVC 50W low voltage downlight, directional

- Directional PVC downlight with tilt of 30 degrees
- · Corrosion resistant, ideal for exposed locations where dampness may cause corrosion of metal fittings
- · Stainless steel lamp retention ring
- Available transformers for use with this fitting: LEB60D and RM105DN $\,$

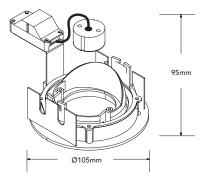
White	R1004-01
Black	R1004-04
Total Power (W):	50
IP:	20
Cap Type:	G5.3
Diameter (mm):	105
Depth (mm):	95
Cut-out (mm):	95
Box Qty:	10
Weight (kg):	0.11











DOWNLIGHTS

RIDA MAINS VOLTAGE





RIDA 50W GU10 pressed steel downlight

- GU10 circular downlight made from pressed steel
- Complete with bracket, terminal block and high quality GU10 lamp holder
- Spring clip
- R208PS has a directional tilt of 20°

	Straight	Directional
White	R201PS-01	R208PS-01
Chrome	R201PS-03	R208PS-03
Brushed Chrome	R201PS-13	R208PS-13
Total Power (W):	50	50
IP:	20	20
Cap Type:	GU10	GU10
Diameter (mm):	80	105
Depth (mm):	90	90
Cut-out (mm):	60	85
Box Qty:	10	10
Weight (kg):	0.10	0.19

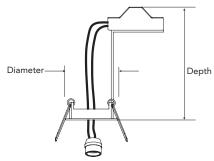












	Diameter	Depth
R201PS	80mm	90mm
R208PS	105mm	90mm

ZAK MAINS VOLTAGE



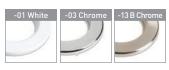


ZAK 50W GU10, mains voltage die cast aluminium downlight

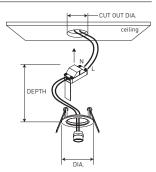
- · Die cast aluminium straight or directional downlight
- C/w bracket, terminal block & double insulated GU10 lamp holder
- Twist & lock front bezel
- Easy lamp replacement
- R208SC has a directional tilt of 20°

	Straight	Directional
White	R201SC-01	R208SC-01
Chrome	R201SC-03	R208SC-03
Brushed Chrome	R201SC-13	R208SC-13
Total Power (W):	50	50
IP:	20	20
Cap Type:	GU10	GU10
Diameter (mm):	78	93
Depth (mm):	100	100
Cut-out (mm):	70	82
Box Qty:	10	10
Weight (kg):	0.16	0.17





)mm
2mm



SALLY MAINS VOLTAGE



SALLY 50W GU10 spring loaded mains voltage pressed steel aluminium downlight, IP20, dimmable

- · Pressed steel straight or directional downlight with electroplated finish
- · Spring loaded lamp holder for ease of lamp change
- C/w bracket, terminal block & GU10 lamp holder
- · Enclosed recessed GZ fitting with integral air cooling slots
- RS208E has a directional tilt of 20°
- Dimmer compatibility list available on website

	Straight	Directional
White	RS201E-01	RS208E-01
Brass	RS201E-02	RS208E-02
Chrome	RS201E-03	RS208E-03
Brushed Chrome	RS201E-13	RS208E-13
Total Power (W):	50	50
IP:	20	20
Cap Type:	GU10	GU10
Diameter (mm):	80	99
Depth (mm):	82	85
Cut-out (mm):	65	75
Box Qty:	10	10
Weight (kg):	0.19	0.19





















SURFACE FITTINGS

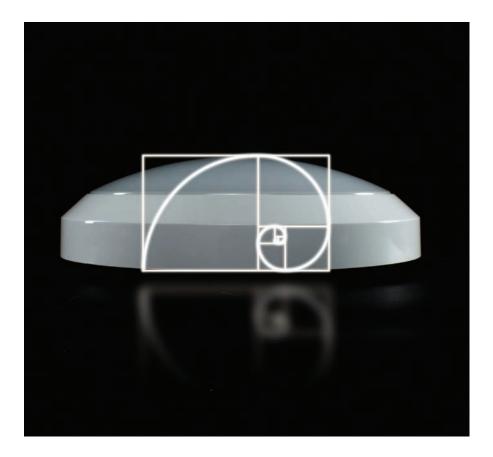
132 EAGLE LED 138 HAWK LED 140 EIFFEL LED 143 GLOW LED 144 GOLF LED 146 GOLF LED CCT3 SELECTABLE 150 GOLF LED RETROFIT TRAY **152** GOLF HF 2D 154 COMPACT LED 156 COMPACT HF 2D 158 LUSTRE LED CCT3 SELECTABLE 160 OYSTER LED

161 VOGUE LED CEILING LIGHT

SURFACE FITTINGS **EAGLE LED**

GOLDEN RATIO

The EAGLE and HAWK family of surface mount light fittings have been designed with diffuser height, trim chamfer and trim wall in the ratio a:b:a, where a:b is the Golden Ratio 1:0.618, known to mankind since ancient times and popularised by Leonardo da Vinci during the Renaissance. Throughout nature the Golden Ratio is the hallmark of natural aesthetic beauty.





SURFACE FITTINGS

EAGLE LED

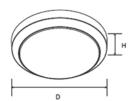


EAGLE LED surface fitting

- Elegant, slim and versatile family of perfectly proportioned LED surface light fittings
- Common aesthetic across the EAGLE range allows mix and match of fittings in the building of different lumen packages and physical size
- Range of shell size and light outputs:
 Eagle: Small 272mm Ø (7W)
 Eagle & Hawk: Medium 330mm Ø (10W & 14W)
 Eagle: Large 420mm Ø (24W)
- Strong and durable IK10 rated diffuser/enclosure
- Efficacy of >82 luminaire lm/cctW complies with the efficacy requirements of the ETCL for Enhanced Capital Allowances
- Suitable for surface or ABB AU19/BESA box mounting for conduit, rear grommet or glanded incoming supplies
- Wide operating ambient temperature range of -20°C to +35°C

- For fast and simple installation, the fitting has:
 - Twist & lock trim for easy gear tray access
 - Clip and detach hinged tray accesses termination area
 - Swift inside 4 pole loop in/out connector for quick disconnection of the tray before installation of base
 - Single gear tray to base locking screw completes the re-assembly process
 - Optional 3-hour emergency conversion available
- To compliment up to 65% energy savings versus CFL, enhanced energy savings can be achieved using:
 - External PIR or integral microwave sensor controls and/or
 - Dual Power, 3 Step, DALI and Analogue dimming
- Emergency spacing details in back section of catalogue

Accessories	7W	10W	14W	24W
Chrome Trim	REESTRIM-03	REEMTRIM-03	REEMTRIM-03	REELTRIM-03
Brushed Chrome Trim	REESTRIM-13	REEMTRIM-13	REEMTRIM-13	REELTRIM-13
3000K Gear Tray	-	-	RETM01530	-



	D	Н
REES7P540-01	272mm	91mm
REES7P540E-01	272mm	91mm
REEM01040-01	330mm	91mm
REEM01040E-01	330mm	91mm
REEM01540-01	330mm	91mm
REEM01540E-01	330mm	91mm
REEL02440-01	420mm	91mm
RFFL02440F-01	420mm	91mm



GOLF vs Eagle Comparison

Neutral White

	7W	10W	14W	24W
Standard	REES7P040-01	REEM01040-01	REEM01540-01	REEL02440-01
Emergency	REES7P040E-01	REEM01040E-01	REEM01540E-01	REEL02440E-01
Microwave Sensor		REEM01040-01SEN	REEM01540-01SEN	REEL02440-01SEN
Emergency Sensor		REEM01040E-01SEN	REEM01540E-01SEN	REEL02440E-01SEN
Comparable to:	16W 2D	28W 2D	38W 2D	55W 2D
Total Power (W):	6.5	9.6	12.7	21.4
Total Light Output (lm):	660 standard	1,050 standard	1,400 standard	2,340 standard
	130 emergency	120 emergency	160 emergency	260 emergency
Efficacy (lm/cctW):	102	109	110	109
Lifetime (hrs):	50,000	50,000	50,000	50,000
Beam Angle (deg):	110	110	110	110
Lux at 1m (lux):	210 standard	340 standard	450 standard	780 standard
	40 emergency	40 emergency	50 emergency	90 emergency
CCT (K):	4000	4000	4000	4000
CRI:	>80	>80	>80	>80
IP:	65	65	65	65
Impact Rating (IK):	10	10	10	10
Power Factor:	>0.9	>0.9	>0.9	>0.9
Diameter (mm):	272	330	330	420
Depth (mm):	91	91	91	91
Weight (kg):	1.05	1.45	1.45	2.10

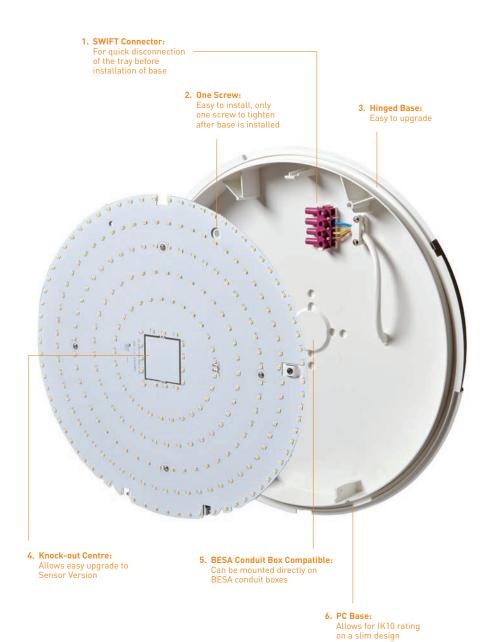


ECA eligible LIA Verified Triple E registered



Clip and detachable hinged EAGLET gear tray





SURFACE FITTINGS **HAWK LED**



HAWK LED surface fitting

- A high security, anti-tamper companion to the EAGLE range
- Common aesthetic across the HAWK range allows mix and match of fittings in the building of different lumen packages and physical size
- Shell size, medium 330mm Ø (10W & 14W)
- Strong and durable IK10 rated diffuser/enclosure
- Efficacy of ≥82 luminaire lm/cctW complies with the efficacy requirements of the ETCL for Enhanced Capital Allowances
- Suitable for surface or ABB AU19/BESA box mounting for conduit, rear grommet or glanded incoming supplies
- Wide operating ambient temperature range of -20°C to +35°C
- For fast and simple installation, the fitting has:
 - Twist & lock trim for easy gear tray access
 - Clip and detach hinged tray accesses termination area
 - Swift inside 4 pole loop in/out connector for quick disconnection of the tray before installation of base
 - Single gear tray to base locking screw completes the re-assembly process

- Screw-on trim fitted with retained anti-tamper TORX T20 security screws and requires matching screwdriver head to release and replace trim
- Optional 3-hour emergency conversion available
 - To compliment up to 65% energy savings versus CFL, enhanced energy savings can be achieved using external PIR or integral microwave sensor controls
- Dual Power, 3 Step, DALI and Analogue dimming available through Conversions
- Complies with requirements of the Energy Technology Criteria List. Enhanced Capital Allowances may be claimed on the cost of the luminaires, installation and transport to site
- Emergency spacing details in back section of catalogue

Accessories:

RHKMTRIM-04 Black Trim
RHKMTRIM-24 Grey Trim
RHKMEY-04 Black Eyelid Trim
RHKMEY-24 Grey Eyelid Trim

RHKMCR-04 Black Cross Grid Trim RHKMCR-24 Grey Cross Grid Trim

RETM01530 3000K Gear Tray





Hawk Base Anti-tamper, screw-on trim

Neutral White

	10W	14W
Standard	RHKM01040-01	RHKM01540-01
Emergency	RHKM01040E-01	RHKM01540E-01
Microwave Sensor	RHKM01040-01SEN	RHKM01540-01SEN
Emergency Sensor	RHKM01040E-01SEN	RHKM01540E-01SEN
Comparable to:	28W 2D	38W 2D
Total Power (W):	9.6	12.7
Total Light Output (lm):	1,050 standard	1,400 standard
	120 emergency	160 emergency
Efficacy (lm/cctW):	109	110
Lifetime (hrs):	50,000	50,000
Beam Angle (deg):	120	120
Lux at 1m (lux):	340 standard	450 standard
	40 emergency	50 emergency
CCT (K):	4000	4000
CRI:	>80	>80
IP:	65	65
Impact Rating (IK):	10	10
Power Factor:	>0.9	>0.9
Diameter (mm):	330	330
Depth (mm):	91	91
Weight (kg):	1.5	1.5















SURFACE FITTINGS

EIFFEL LED



EIFFEL 14W LED blue surface fitting

- Suitable for use in toilets, transport facilities, railway stations, residential corridors, stairwells, and other publicly accessible areas where loitering and anti-social behaviours are to be discouraged; also usable in certain deep blue human centric lighting applications
- Available in either the HAWK high security, anti-tamper 330mm fitting or the EAGLE aesthetic twist-and-lock 330mm fitting
- Aesthetic design unity allows mix and match of EIFFEL (and GLOW) specialist surface fittings with any combination of HAWK and EAGLE light fittings at different sizes and lumen packages
- Utilises proven long-life 460 nm Blue SMD 2835 LEDs for maximum mW value to cost
- Delivers 25% more lighting power (4000mW) than a comparable EAGLE or HAWK 15W 4000K white light, but the lumen value is much lower than a white light because the human eye has lower sensitivity in the blue region of the visible spectrum
- Tough IK10 impact rated diffuser enclosure system

- BESA / ABB AU19 conduit box mounting facility provided on base of fitting
- Unique "clip and detachable hinge" EAGLET gear tray for easy installation and maintenance
- HAWK versions of EIFFEL have 2x conduit side entry points for trunking positioned 180° apart in both trim and base; EAGLE versions have Twist-and-Lock trims without side entry
- · 20mm conduit/cable entry at back of base
- Loop-in, loop-out installation facilitated by 4-way "SWIFT inside" pluggable connector block
- HAWK version has screw-on trim fitted with retained anti-tamper TORX T20 security screws and requires matching screwdriver head to release and replace trim
- Anti-tamper grey and black trim accessories available for HAWK version
- Twist and lock polished chrome and brushed chrome trim accessories available for EAGLE version
- White/Blue Dual Power Sensor version available on request



	RHKM015B460-01 EIFFEL in	REEM015B460-01 EIFFEL in
	HAWK enclosure	EAGLE enclosure
Total Power (W):	14	14
Total Light Output (lm):	300 at 460 nm blue	300 at 460 nm blue
Lifetime (hrs):	50,000	50,000
IP:	65	65
Power Factor:	>0.9	>0.9
Diameter (mm):	330	330
Depth (mm):	91	91
Weight (kg):	1.5	1.45



Accessories:

HAWK enclosure version

RHKMTRIM-04 Black Trim RHKMTRIM-24 Grey Trim RHKMEY-04 Black Eyelid Trim RHKMEY-24 Grey Eyelid Trim
RHKMCR-04 Black Cross Grid Trim

RHKMCR-24 Grey Cross Grid Trim

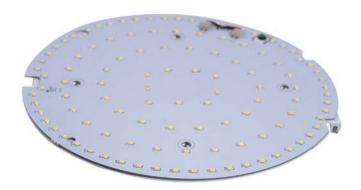
EAGLE enclosure version

REEMTRIM-03 Chrome Trim

REEMTRIM-13 Brushed Chrome Trim



SURFACE FITTINGS GLOW LED



GLOW 14W LED retrofit tray for EAGLE and HAWK surface fittings

- Suitable for use in ladies hair & beauty salons, dressing rooms and toilets, bathrooms, medical facilities, retail outlets and displays, and other places where rendition of red is especially desirable
- Aesthetic design unity allows mix and match of GLOW R9 >70 with CRI >90 enable EAGLE or HAWK surface fittings at different sizes and lumen packages
- High efficiency of 94 luminaire lm/cctW to comply with Part L1 & L2 UK Building Regulations and eligible for Enhanced Capital Allowances
- Mounted on unique "clip and detachable hinge" EAGLET gear tray for easy installation and maintenance
- "SWIFT inside" (4 gang flying lead plug) easy gear tray retrofit
- 65% energy saving when compared to 2D fluorescent fittings
- Complies with requirements of the Energy Technology Criteria List. Enhanced Capital Allowances may be claimed on the cost of the luminaires, installation and transport to site

EAGLET GLOW Retrofit Tray CRI 90	RETM01540C90
Total Power (W):	12.7
Total Light Output (lm):	1,190
Efficacy (lm/cctW):	94
Lifetime (hrs):	50,000
Beam Angle (deg):	110
Lux at 1m (lux):	390
CCT (K):	4000
CRI:	>90
R9:	>70
Power Factor:	0.95
Diameter (mm):	330mm EAGLE/HAWK



ECA eligible

GOLF LED



GOLF LED with Pro-diffuser

- Suitable for use in retail, public buildings, communal areas, sports centres, stairwells, corridors, walkways
- >50% energy savings compared to fluorescent
- · Utilises high quality, long life SMD technology
- High efficiency Pro-diffuser allows maximum light transmission, provides low glare, creates even light distribution – no hot spots
- Wide operating ambient temperature range of -20°C to +35°C

- Suitable for 24/7 use
- · Suitable for switching by PIR, Microwave or Photocell
- Strong and durable IK09 rated diffuser/enclosure
- Dual Power, 3 Step dimming and emergency conversion to warm white available from Conversions
- Emergency spacing details in back section of catalogue

Accessories:

R282TRIM-03 Chrome Trim for 10W & 15W Chrome Trim for 7.5W



R162TRIM-03 Chrome Trim





	7.5W	10W	10W	15W
Standard	R075LED-01	R100LED-01	R100LEDWW-01	R150LED-01
Emergency	R075LEDE-01	R100LEDE-01		R150LEDE-01
Microwave Sensor	R075LEDS-01	R100LEDS-01	R100LEDWW-01SEN	R150LEDS-01
Emergency & Sensor		R100LEDES-01		R150LEDES-01
Comparable to:	16W 2D	28W 2D	28W 2D	38W 2D
Total Power (W):	7	10.6	9.3	14.6
Total Light Output (lm):	640 standard	860 standard	710 standard	1,250 standard
	180 emergency	180 emergency	N/A	180 emergency
Efficacy (lm/cctW):	91	82	76	86
Lifetime (hrs):	50,000	50,000	50,000	50,000
Lux at 1m (lux):	210	270	230	410
Beam Angle (deg):	110	110	110	110
CCT (K):	4000	4000	3000	4000
CRI:	80	80	80	80
IP:	65	65	65	65
Impact Rating (IK):	09	09	09	09
Power Factor:	0.9	0.9	0.9	0.9
Diameter (mm):	272	330	330	330
Depth (mm):	90	118	118	118
Box Qty:	6	6	6	6
Weight (kg):	1.09 standard	1.4 standard	1.4 standard	1.4 standard
	1.2 emergency	1.8 emergency	N/A	1.8 emergency



ECA eligible LIA verified Triple E registered

GOLF LED CCT3 SELECTABLE





GOLF LED CCT3 selectable

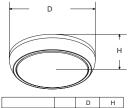
- Suitable for use in commercial offices, retail shops, nursing homes, apartment stairs and corridors, hotel receptions and sports centre changing rooms
- Colour temperature can be selected between 3000K, 4000K & 6500K on completion for best effect in the lit space and can be easily changed
- Available in standard, integral microwave with sensitivity, time-off delay and lux switching point adjustment, emergency versions, dual power and three step corridor function available
- High impact white polycarbonate construction providing protection against accidental or malicious abuse

- High efficiency Pro-diffuser allows maximum light transmission, provides low glare, creates even light distribution – no hot spots
- Wide operating ambient temperature range of -20°C to +35°C
- Utilises high quality SMD LED's which provide low power consumption, high efficacy and long rated LED life
- Can be switched by microwave. PIR and/or photocell
- Emergency with integral microwave sensor, Dual Power, 3 Step, DALI and Analogue dimming available through Conversions

Accessories:

R282TRIM-03 Polished Chrome Trim





		D	Н
R100LEDCCT3	10W	Ø330mm	118mm
R150LEDCCT3	15W	Ø330mm	118mm





	10W	15W
Standard	R100LEDCCT3-01	R150LEDCCT3-01
Emergency	R100LEDCCT3E-01	R150LEDCCT3E-01
Microwave Sensor	R100LEDCCT3S-01	R150LEDCCT3S-01
Emergency & Sensor	R100LEDCCT3E-01S	R150LEDCCT3E-01S
Comparable to 2D Fluorescent (W):	28W 2D	38W 2D
Total Power (W):	11 / 10.8 / 11	15.8 / 15.2 / 16
Total Light Output (lm):	840 / 990 / 950 standard 180 emergency	1,240 / 1,420 / 1,360 standard 180 emergency
Efficacy (lm / cctW):	76 / 92 / 86	78 / 93 / 85
Lifetime (hrs):	50,000	50,000
Illuminance at 1m (lx):	270 / 310 / 300 standard	390 / 450 / 430 standard
	60 emergency	60 emergency
Beam Angle (deg):	110	110
CCT (K):	3000 / 4000 / 6500	3000 / 4000 / 6500
CRI (Ra):	80	80
Ingress Protection (IP):	65	65
Impact Rating (IK):	10	10
Power Factor (PF):	0.9	0.9
Diameter (mm):	330	330
Depth (mm):	118	118
Box Qty:	6	6
Weight (kg):	1.4 standard 1.6 emergency	1.4 standard 1.6 emergency







GOLF LED RETROFIT TRAY



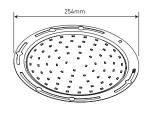
GOLF 10W & 15W SMD LED retrofit tray

- Universal Retrofit LED tray converts standard 2D fittings to low energy LED
- 50,000 hour average rated LED life
- Universal mounting tray fits many existing fittings
- Actual photometric performance dependent on fitting and diffuser into which plate is installed
- R100LEDRETE provides 3 hour emergency duration. 220 lumens in emergency mode, 21% of maintained output

Neutral White

Standard	R100LEDRET	R150LEDRET
Emergency	R100LEDRETE	
Microwave Sensor	R100LEDRETS	
Emergency Sensor	R100LEDRETESEN	
Comparable to:	28W 2D	38W 2D
Total Power (W):	10	15.9
Efficacy (lm/cctW):	105	101
Lifetime (hrs):	50,000	50,000
Total Light Output (lm):	1,050 standard	1,610 standard
	220 emergency	
Lux at 1m (lux):	300	550
Beam Angle (deg):	120	120
CCT (K):	4000	4000
CRI:	80	80
Power Factor:	0.9	0.9
Diameter (mm):	254	254
Depth (mm):	55	55
Box Qty:	1	1
Weight (kg):	0.7 standard	0.7 standard
	0.85 emergency	







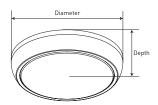
GOLF HF 2D





GOLF 2D high frequency

- · Polycarbonate diffuser
- IP65 suitable for indoor/outdoor use, fully resistant to the penetration of dust and water jets
- 3500K
- \bullet R162D+L complete with 16W 3500K 4 pin lamp
- R282D+L complete with 28W 3500K 4 pin lamp
- R282D+LE complete with 28W 4 pin lamp; has a 3 hour maintained emergency duration
- Note: Brass trim (R282TRIM-02) and Satin Silver trim (R282TRIM-15) must be ordered separately
- Ballast 50% more efficient than switch start.
 Improved starting and running of the lamp increases lamp life by up to 50%



CODE	DIAMETER	DEPTH
R162D+L	272mm	90mm
R282D+L	330mm	118mm
R282D+LE	330mm	118mm





R282TRIM-02

R282TRIM-15



	16W	28W	28W Emergency
White	R162D+L-01HF	R282D+L-01HF	R282D+LE-01
Chrome	R162D+L-03HF	R282D+L-03HF	
Total Power (W):	16	28	28
IP:	65	65	65
Cap Type:	GR10q	GR10q	GR10q
Diameter (mm):	272	330	330
Depth (mm):	90	118	118
Box Qty:	6	6	4
Weight (kg):	1.18	2.25	3.5



Also Available:

GOLF 16W and 28W 2D switch start, IP65

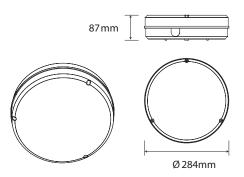
16W R162D+L-01 White 28W R282D+L-01 White

COMPACT LED



COMPACT LED fitting

- Suitable for use in retail, public buildings, communal areas, sports centres, stairwells, corridors, walkways
- High efficiency Pro-diffuser allows maximum light transmission, provides low glare, creates even light distribution – no hot spots
- High efficacy of 89lm/W exceeding any foreseeable building regulations
- Impact resistant IK08
- Wide operating ambient temperature range of -20°C to +35°C
- Suitable for 24/7 use
- Suitable for switching by PIR, Microwave or Photocell







	10W
Standard	RC100LEDN-01
Emergency	RC100LEDNE-01
Microwave Sensor	RC100LEDS-01
Comparable to:	28W 2D
Total Power (W):	11.4
Total Light Output (lm):	1,020 standard
	140 emergency
Efficacy (lm/cctW):	89
Lifetime (hrs):	50,000
Beam Angle (deg):	110
Lux at 1m (lux):	250
CCT (K):	4000
CRI:	80
IP:	65
Power Factor:	0.75
Diameter (mm):	284
Depth (mm):	87
Box Qty:	6
Weight (kg):	1.0 standard
	1.3 emergency



COMPACT HF 2D

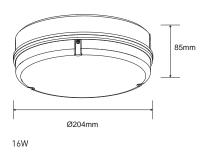


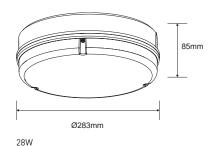
COMPACT 2D surface fitting

- Robust and vandal resistant choice of polycarbonate opal or prismatic diffusers
- IP65, suitable for internal and external applications
- Impact resistant IK08

Opal

- C/w 4 Pin 3500K 16W or 28W lamp
 - Integral high frequency ballast, flicker free start. Extends lamp life by approximately 50% compared to switch start







Prismatic

	16W	28W
Opal White	RC162D0-01	RC282D0-01
Prismatic White	RC162DP-01	RC282DP-01
Emergency		RC282DEP0-01
Total Power (W):	16	28
IP:	65	65
Cap Type:	GR10q	GR10q
Diameter (mm):	204	283
Depth (mm):	85	85
Box Qty:	10	8
Weight (kg):	0.7	1.2



Emergency version

- C/w both Opal and Prismatic diffusers
- Maintained 3hr emergency operation
- Can be wired as non-maintained

DOGGODEDO O4	14/1 'L D
RC282DEPO-01	White Base

LUSTRE LED CCT3 SELECTABLE

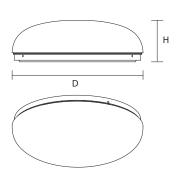


LUSTRE LED CCT3 selectable

- Suitable for use in toilets, rest rooms, bathrooms or cloak rooms in domestic, commercial, entertainment or retail premises
- Colour temperature selectable: switch on the back of the fitting allows selection of 3000/4500/6500 Kelvin
- LED replacement for 28W / 38W 2D fluorescent fittings
- · Pressed steel base with twist and lock type

PMMA diffuser

- · High efficacy of 75-99lm/W
- Wide ambient operating temperature range of -20°C to +40°C
- Suitable for use 24/7
- Available in standard and with microwave sensor
- Suitable for switching by external PIR, Microwave or Photocell



	18W	24W
D	322mm	372mm
Н	97mm	107mm



	18W	24W
Standard	RLU18X0-01	RLU24X0-01
Microwave sensor	RLU18X0S-01	RLU24X0S-01
Comparable to:	28W 2D	38W 2D
Total Power (W):	19.4/18.1/19.3	25.7/24.1/25.9
Total Light Output (lm):	1,450/1,730/1,510	2,010/2,380/2,080
Efficacy (lm/cctW):	75/96/78	78/99/80
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	360/430/380	530/630/550
Beam Angle (deg):	120	120
CCT (K):	3000/4500/6500	3000/4500/6500
CRI:	80	80
IP:	20	20
Impact Rating (IK):	07	07
Power Factor:	0.9	0.9
Diameter (mm):	322	372
Depth (mm):	97	107
Box Qty:	1	1
Weight (kg):	0.7	0.9















OYSTER LED



OYSTER LED fitting

- Suitable for use in retail shops, public buildings, communal areas, sports centres, stairwells, corridors, walkways, toilets, restrooms and bathrooms
- LED replacement for 28W & 38W 2D fluorescent fittings providing over 40% energy savings
- Pressed steel base with twist and lock PMMA diffuser
- 24W version providing 65lm/W meeting Part L2 requirements
- Wide ambient operating temperature range of -20°C to +40°C
- Suitable for use 24/7
- · Suitable for wall and ceiling mounting
- Suitable for PIR, microwave or photocell switching

Neutral White

18W	24W
R18WLED40EU-01	R24WLED40EU-01
28W 2D	38W 2D
19.9	26.2
1,060	1,710
53	65
30,000	30,000
300	400
120	120
4,000	4,000
80	80
44	44
0.9	0.9
327	395
90	105
0.6	0.94
	R18WLED40EU-01 28W 2D 19.9 1,060 53 30,000 300 120 4,000 80 44 0.9 327



LIA verified

VOGUE LED CEILING LIGHT



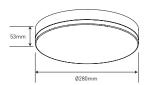
VOGUE 20W LED ceiling light

- Suitable for use in toilets, rest rooms, bathrooms or cloak rooms in domestic, commercial, entertainment or retail premises
- LED replacement for 28W 2D fluorescent fittings
- · Polycarbonate base with acrylic diffuser
- · Complete with detachable mounting plate
- · Slim profile
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell

Neutral White

	RVG02040-01
Total Power (W):	16.6
Total Light Output (lm):	1,570
Efficacy (lm/cctW):	95
Lifetime (hrs):	30,000
Lux at 1m (lux):	470
Beam Angle (deg):	120
CCT (K):	4000
CRI:	80
IP:	44
Power Factor:	0.9
Diameter (mm):	280
Height (mm):	53
Box Qty:	1
Weight (kg):	0.75







164	VEGA LED BULKHEAD
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VEGA LED BULKHEAD







VEGA 14W LED bulkhead

- · Suitable for use in apartment stairs & corridors, covered walkways, patios & decking areas, path & driveways, public toilets, changing rooms
- Fully polycarbonate construction providing resistance to corrosion and high impact rating of IK07
- C/w stainless steel tamper proof screws
- · Suitable for wall and ceiling mounting
- · Wide operating ambient temperature range of -20°C to +35°C
- · Suitable for switching by PIR, Microwave or Photocell
- Microwave sensor version has adjustable time settings (10 seconds to 12 mins) and daylight to night lux level switching
- Emergency version provides 130lm output in emergency mode, 12% of maintained output

Neutral White

	Standard	Emergency	Microwave Sensor	Emergency Sensor
White	RVE01440-01	RVE01440E-01	RVE01440DM-01	RVE01440DME-01
Black	RVE01440-04	RVE01440E-04	RVE01440DM-04	RVE01440DME-04
Grey	RVE01440-24	RVE01440E-24	RVE01440DM-24	RVE01440DME-24
Comparable to:	28W 2D	28W 2D	28W 2D	28W 2D
Total Power (W):	14.3	15.7	14.3	15.7
Total Light Output (lm):	1,050	130	1,050	130
Efficacy (lm/cctW):	73	66	73	66
Lifetime (hrs):	30,000	30,000	30,000	30,000
Beam Angle (deg):	110	110	110	110
Lux at 1m (lux):	370	45	370	45
CCT (K):	4000	4000	4000	4000
CRI:	85	85	85	85
IP:	65	65	65	65
Impact Rating (IK):	07	07	07	07
Power Factor:	0.7	0.7	0.7	0.7
Depth (mm):	91	91	91	91
Diameter (mm):	300	300	300	300
Weight (kg):	1.35	1.35	1.35	1.35













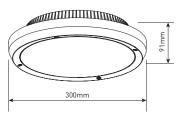
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VEGA cross trimRVECR-01 White
RVECR-04 Black
RVECR-24 Grey

VEGA eyelid trimRVEEY-01 White
RVEEY-04 Black
RVEEY-24 Grey





OHIO LED BULKHEAD





OHIO 8W LED bulkhead

- · Complete with white and black trims
- · LED replacement for 60W incandescent fittings
- 73 lumens per circuit watt
- 3000K warm white light output
- · 30.000 hour rated LED life
- · Polycarbonate construction
- Impact resistant (IK08)
- UV stabilized
- Wide operating ambient temperature range -20°C to $+40^{\circ}\text{C}$

Circular	8W
	RHC0830-01
Comparable to:	60W Incandescent
Total Power (W):	8.8
Total Light Output (lm):	640
Efficacy (lm/cctW):	73
Lifetime (hrs):	30,000
Lux at 1m (lux):	180
Beam Angle (deg):	120
CCT (K):	3000
CRI:	80
IP:	54
Power Factor:	0.5
Diameter (mm):	176
Depth (mm):	55
Weight (kg):	0.3
weight (kg):	U.,







Triple E registered

OHIO 8W LED bulkhead

- · Complete with white and black trims
- · LED replacement for 60W incandescent fittings
- 75 lumens per circuit watt
- 3000K warm white light output
- · 30.000 hour rated LED life
- · Polycarbonate construction
- Impact resistant (IK08)
- UV stabilized
- Wide operating ambient temperature range -20°C to +40°C

Oval	W8
	RHV0830-01
Comparable to:	60W Incandescent
Total Power (W):	8.8
Total Light Output (lm):	660
Efficacy (lm/cctW):	75
Lifetime (hrs):	30,000
Lux at 1m (lux):	180
Beam Angle (deg):	120
CCT (K):	3000
CRI:	80
IP:	54
Power Factor:	0.5
Length (mm):	200
Width (mm):	100
Depth (mm):	55
Weight (kg):	0.3













OHIO LED BULKHEAD





OHIO 12W LED bulkhead

- · Complete with white and black trims
- · LED replacement for 100W incandescent fittings
- 78-79 lumens per circuit watt
- · 3000K warm white and 4000K neutral white light output
- 30,000 hour rated LED life
- · Polycarbonate construction
- Impact resistance (IK08)
- UV stabilized
- Wide operating ambient temperature range -20°C to +40°C

Circular	12W
Warm White	RHC1230-01
Neutral White	RHC1240-01
Comparable to:	100W Incandescent
Total Power (W):	11.7/12.1
Total Light Output (lm):	Warm 910 / Neutral 950
Efficacy (lm/cctW):	Warm 78 / Neutral 79
Lifetime (hrs):	30,000
Lux at 1m (lux):	Warm 250 / Neutral 280
Beam Angle (deg):	120
CCT (K):	Warm 3000 / Neutral 4000
CRI:	80
IP:	54
Power Factor:	0.5
Diameter (mm):	211
Depth (mm):	55
Weight (kg):	0.4











Triple E registered

OHIO 12W LED bulkhead

- · Complete with white and black trims
- LED replacement for 100W incandescent fittings
- 71-77 lumens per circuit watt
- 3000K warm white and 4000K neutral white light output
- 30,000 hour rated LED life
- · Polycarbonate construction
- Impact resistance (IK08)
- UV stabilized
- · Wide operating ambient temperature range -20°C to +40°C

Oval	12W
Warm White	RHV1230-01
Neutral White	RHV1240-01
Comparable to:	100W Incandescent
Total Power (W):	12.1
Total Light Output (lm):	Warm 860 / Neutral 930
Efficacy (lm/cctW):	Warm 71 / Neutral 77
Lifetime (hrs):	30,000
Lux at 1m (lux):	Warm 250 / Neutral 280
Beam Angle (deg):	120
CCT (K):	Warm 3000 / Neutral 4000
CRI:	80
IP:	54
Power Factor:	0.5
Length (mm):	230
Width (mm):	105
Depth (mm):	55
Weight (kg):	0.3







Triple E registered

WHITESTAR BULKHEAD





R60BHPIR

WHITESTAR 60W bulkhead

- Suitable for use in sheltered outdoor common areas, gardens, hotel, pub and restaurant walkways
- Complete with ceramic E27 lamp holder
- Can be used with energy saving LED & CFL lamps and max 60W incandescent
- · ABS UV-stabilised housing with polycarbonate diffuser
- · Stainless steel screws

- Wide operating ambient temperature range of -20°C to +40°C
- PIR version: Has an all-round detection of 120°.
 Has an adjustable time delay [10secs 4mins] and sensitivity 12m
- Photocell version: Switches light on automatically at dusk and remains on until daybreak. Comes on at 20 lux, goes off at 50 lux

PIR	Photocell
R60BHPIR-01	R60BHPC-01
R60BHPIR-04	R60BHPC-04
60	60
44	44
E27	E27
115	115
115	115
275	265
4	4
0.62	0.53
	R60BHPIR-01 R60BHPIR-04 60 44 E27 115 115 275

R60BHPC







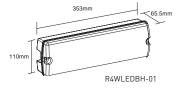
TOGA BULKHEAD

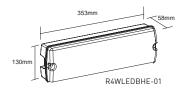


TOGA 4.5W LED bulkhead, 4000K, White

- Suitable for storage areas, corridors, stairways, wet rooms, garage lighting, covered walkways and paths around buildings
- Standard and emergency versions
- Strong and durable polycarbonate housing and prismatic outer diffuser with IK09 rating
- Polycarbonate Opal LED diffuser is low glare and provide even, diffused, shadow free light
- · Sprung and hinged gear tray
- 200mm gland entry points on back and all 4 sides
- Rear screw mounting points moulded into base

	R4WLEDBH-01	R4WLEDBHE-01
Comparable to:	8W fluorescent	8W fluorescent
Total Power (W):	4.5	6.9
Total Light Output (lm):	440	460/120 emergency
Efficacy (lm/cctW):	98	67
Lifetime (hrs):	30,000	30,000
Beam Angle (deg):	150	150
Lux at 1m (lux):	120	160
CCT (K):	4000	4000
CRI:	80	80
IP:	65	65
Impact Rating (IK):	09	09
Power Factor:	0.5	0.5
Length (mm):	353	353
Width (mm):	110	130
Depth (mm):	66	58
Box Qty:	1	1
Weight (kg):	0.43	0.65













CHAMPION LED FLOOD LIGHT





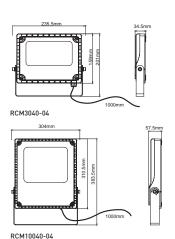


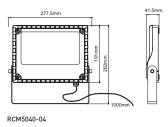


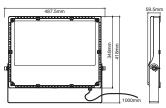
CHAMPION LED flood light

- Suitable for use in decking areas, drives, pathways, sign illumination, wall washing, atriums, patios, car parks, garages, and industrial units
- LED replacement for 50W 300W Metal Halide/ 200W-1500W Halogen flood lights
- Die cast aluminium housing providing optimal heat dissipation and high resistance to weather conditions
- · Pre-wired with 1m of rubber flex
- · Tempered glass providing high impact rating of IK07

- Complete with stainless steel screws
- · No warm up or cool down period required by LED
- · High efficacy of 110-127 Lm/W
- Wide operating ambient temperature range of -20°C to 40°C
- 50,000 hour average lamp life
- Pre-drilled mounting bracket with 180° adjustable angle
- Suitable for switching by PIR, Microwave or Photocell







RCM15040-04 RCM20040-04





	30W	50W	100W	150W	200W
	RCM3040-04	RCM5040-04	RCM10040-04	RCM15040-04	RCM20040-04
Comparable to:	50W metal halide 200W halogen	80W metal halide 350W halogen			300W metal halide 1500W halogen
Total Power (W):	28.8	47.8	94.6	146.7	196
Total Light Output (lm)	3,220	5,260	11,490	17,810	24,860
Efficacy (lm/cctW):	112	110	121	121	127
Lifetime (hrs):	50,000	50,000	50,000	50,000	50,000
Lux at 1m (lux):	1,200	1,900	4,200	6,300	9,080
Beam Angle (deg):	110	110	110	110	110
CCT (K):	4000	4000	4000	4000	4000
CRI:	80	80	80	80	80
IP:	65	65	65	65	65
Power Factor:	0.97	0.97	0.97	0.97	0.97
Height (mm):	201	262	383.5	418	418
Width (mm):	235.5	277.5	304	487.5	487.5
Depth (mm):	34.5	41.5	57.5	59.5	59.5
Box Qty:	1	1	1	1	1
Weight (kg):	1.1	1.6	3.5	5.9	5.9

















MICRO ACTIVATE LED FLOOD LIGHT

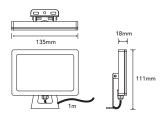


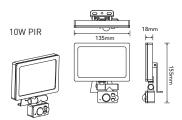
MICRO ACTIVATE LED flood light

- Suitable for use in decking areas, drives, pathways, sign illumination, wall washing, atriums, patios, car parks, garages, industrial units
- 10W & 20W True Driver-On-Board (DOB) mains operated ACTIVATE technology - no electrolytic capacitor
- Pre-wired with 1m of rubber flex
- C/w 180° adjustable bracket
- High impact resistant (IK09)

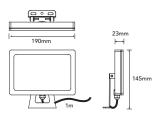
- Die-cast aluminium housing with durable high quality paint finish
- Suitable for use with PIRs. LED flood lights have no re-striking time associated with metal halide and SON fittings and can be switched on and off in quick succession
- PIR version has sensor with adjustable time 10 sec to 20 min and detection range of 1m to 8m
- IP65 rating for both standard and PIR versions

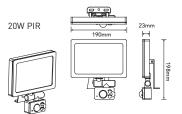
10W Standard





20W Standard









Neutral White

	10W	20W
Standard White	RMA01040-01	RMA02040-01
Standard Grey	RMA01040-25	RMA02040-25
PIR White	RMA01040DG-01	RMA02040DG-01
PIR Grey	RMA01040DG-25	RMA02040DG-25
Comparable to:	20W metal halide	35W metal halide
	75W halogen	150W halogen
Total Power (W):	9.5	18.8
Total Light Output (lm):	670	1,370
Efficacy (lm/cctW):	71	73
Lifetime (hrs):	35,000	35,000
Beam Angle (deg):	120	120
Lux at 1m (lux):	250	500
CCT (K):	4000	4000
CRI:	80	80
IP:	65	65
Power Factor:	0.9	0.9
Width (mm):	135	190
Height (mm):	111/115	145/198
Depth (mm):	18.5	23
Box Qty:	1	1
Weight (kg):	0.52	0.91





















MICRO ACTIVATE LED FLOOD LIGHT





MICRO ACTIVATE flood light

- Suitable for use in decking areas, drives, pathways, sign illumination, wall washing, atriums, patios, car parks, garages, industrial units
- Energy efficient replacement for linear halogen and metal halide fittings
- · Pre-wired with 1m of rubber flex
- C/w 180° adjustable bracket
- High impact resistant (IK09)

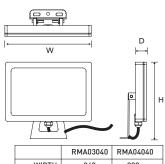
- Die-cast aluminium housing with durable high quality paint finish
- Suitable for use with PIRs. LED flood lights have no re-striking time associated with metal halide and SON fittings and can be switched on and off in quick succession
- PIR version has sensor with adjustable time 10sec to 20min and detection range of 1m to 8m
- · IP65 rating for both standard and PIR versions



LED flood light signage arm, for use with OLYMPIC & MICRO ACTIVATE floods

- 600mm arm allows projected illumination for signage and other display purposes
- For use with 10W, 20W and 30W MICRO ACTIVATE flood lights

R10FSA-01	White
R10FSA-04	Black
R10FSA-24	Grey
Proj (mm):	600







Neutral White

	30W	50W
Standard White	RMA03040-01	RMA05040-01
Standard Grey	RMA03040-25	RMA05040-25
PIR White	RMA03040DG-01	
PIR Grey	RMA03040DG-25	
Comparable to:	50W metal halide	80W Metal Halide
	200W halogen	350W Halogen
Total Power (W):	29.4	48.6
Total Light Output (lm):	2,470	4,070
Efficacy (lm/cctW):	84	84
Lifetime (hrs):	35,000	35,000
Lux at 1m (lux):	750	1,250
Beam Angle (deg):	120	120
CCT (K):	4000	4000
CRI:	80	80
IP:	65	65
Power Factor:	0.95	0.95
Width (mm):	240	299
Height (mm):	165/269	210
Depth (mm):	29.5	36
Box Qty:	1	1
Weight (kg):	1.40	2.36



Triple E registered

REMY LED FLOOD LIGHT





REMY LED flood light

- Suitable for use in decking areas, drives, pathways, sign illumination, wall washing, atriums, patios, car parks, garages, industrial units
- Polycarbonate trim with tempered glass providing high impact rating of IK07
- Easy installation through 20mm PG gland and large connector block
- Pre-drilled, angled mounting bracket for fast and simple installation
- No warm up or cool down period required by LED
- Wide operating ambient temperature range of -20°C to 40°C

- Suitable for switching by PIR, Microwave or Photocell
- · Manual override function on PIR

Time off delay:	10s - 10min
Lux settings:	10 - 2,000 lx
Mounting height range:	2.5 - 4m Max
Detection range:	7 - 10m Max
Detection angle:	120°
Ingress Protection (IP):	65

Accessory:

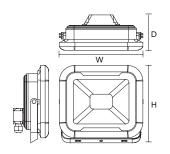
RMCSPIKE-04 Spike



LED flood light signage arm , for use with 10W, 20W and 30W REMY LED floods

• 600mm arm allows projected illumination for signage and other display purposes

R10FSA-01	White
R10FSA-04	Black
R10FSA-24	Grey
Proj (mm):	600



	RRE1030	RRE2030	RRE3030	RRE5030
W	148mm	148mm	173mm	225mm
Н	150mm	150mm	170mm	220mm
D	73mm	73mm	85mm	85mm



Standard	RRE1030-04	RRE2030-04	RRE3030-04	RRE5030-04
	RRE1040-04	RRE2040-04	RRE3040-04	RRE5040-04
PIR	RRE1030P-04	RRE2040P-04	RRE3040P-04	N/A
	RRE1040P-04			
Comparable to MH (W):	20	35	50	80
Total Power (W):	9.7/9.6	19.7/19.6	28.9/28.7	46.6/46.7
Total Light Output (lm):	800/880	1,550/1,730	2,530/2,750	4,020/4,670
Efficacy (lm/cctW):	82/92	79/90	87/96	86/100
Lifetime (hrs):	30,000	30,000	30,000	30,000
Beam Angle (deg):	100	100	100	100
Lux at 1m (lux):	340/370	710/780	1,110/1,200	1,660/1,900
CCT (K):	3000/4000	3000/4000	3000/4000	3000/4000
CRI:	80	80	80	80
IP:	65	65	65	65
Impact Rating (IK):	07	07	07	07
Power Factor:	0.95/0.5	0.95/0.5	0.95	0.95
Width (mm):	148/148	148/148	173/173	225/NA
Height (mm):	150/200	150/200	170/233	220/NA
Depth (mm):	73/90	73/90	85/96	85/NA
Box Qty:	1	1	1	1
Weight (Kg):	0.49/0.6	0.63/0.7	0.83/0.9	1.1/NA



DINGLE LED LANTERN





DINGLE 7W LED coach lantern

- Suitable for use in sheltered outdoor common areas, gardens, hotels, pubs and restaurants
- LED replacement for 60W incandescent bulkheads
- Fully polycarbonate UV-stabilised construction
- Stainless steel screws

- High efficacy of 61lm/W meeting Building Part L requirements
- Wide operating ambient temperature range of -20°C to +40°C
- PIR version: adjustable time settings from 5 seconds to 5 minutes and lux settings from day to night time

	With PIR	Without PIR
Neutral White	RDN00740PIR-01	RDN00740-01
	RDN00740PIR-04	RDN00740-04
Total Power (W):	6.7	6.7
Total Light Output (lm):	410	410
Lifetime (hrs):	30,000	30,000
CCT (K):	4000	4000
CRI:	85	85
IP:	44	44
Width (mm):	175	175
Height (mm):	380	380
Depth (mm):	240	240
Box Qty:	1	1
Weight (kg):	0.8	0.5















KERRY LED LANTERN







With PIR

Without PIR

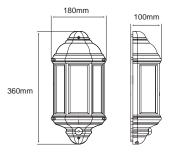
KERRY 7W LED half lantern

- Suitable for use in sheltered outdoor common areas, gardens, hotels, pubs and restaurants
- LED replacement for 60W incandescent bulkheads
- Fully polycarbonate UV-stabilised construction
- Stainless steel screws

- Wide operating ambient temperature range of -20°C to +40°C
- PIR version: adjustable time settings from 5 seconds to 5 minutes and lux settings from day to night time

	With PIR	Without PIR
Neutral White	RKE00740PIR-01	RKE00740-01
	RKE00740PIR-04	RKE00740-04
Total Power (W):	6.8	6.8
Total Light Output (lm):	320	320
Lifetime (hrs):	30,000	30,000
CCT (K):	4000	4000
CRI:	85	85
IP:	44	44
Width (mm):	180	180
Height (mm):	360	360
Depth (mm):	100	100
Box Qty:	1	1
Weight (kg):	0.8	0.5



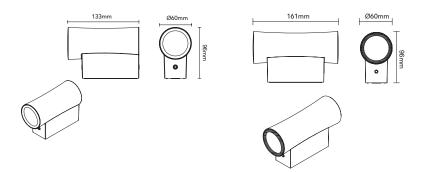


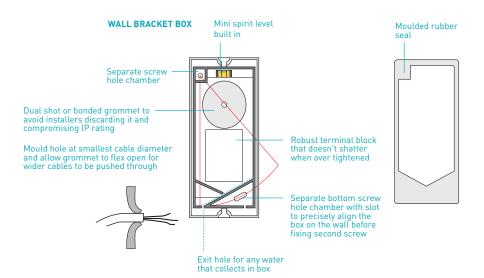
MONOLUME & BILUME ACTIVATE LED WALL LIGHTS



MONOLUME & BILUME ACTIVATE COB LED wall lights

- Suitable for use in domestic and commercial outdoor applications as wall mounted decorative lighting
- Die cast aluminium integrated fitting with glass front and dark grey painted finish to street lighting quality
- Metal mounting box features separate screw hole champers, IP65 seal, IP67 grommets, escape path for condensation water droplets and a spirit level for precision mounting
- · High resistance to all weather conditions
- Salt spray tested to ISO9227
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell





	6W Single	12W Double
	RAML7P53038-25	RABL0153038-25
Comparable to:	50W halogen	50W halogen
Total Power (W):	5.8	11.6
Total Light Output (lm):	510	1,070
Efficacy (lm/cctW):	89	93
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	1,090	1,120
Beam Angle (deg):	38	38
CCT (K):	3000	3000
CRI:	>80	>80
IP:	65	65
Power Factor:	0.9	0.9
Height (mm):	133	161
Diameter (mm):	60	60
Projection (mm):	96	96
Box Qty:	1	1
Weight (kg):	0.6	0.6





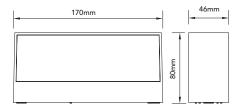
ZEBO LED WALL LIGHT





ZEBO LED wall light

- Wall mounted decorative lighting for domestic pathways, hotel walkways, pub and restaurant outside table areas and commercial buildings
- Light output comparable to 60W incandescent
- Strong and durable grey finish ABS housing and trim with an impact rating of IK08
- Polycarbonate diffuser providing a low glare uniform lighting solution
- Two horizontally opposed aluminium PCB's providing good heat dissipation for long LED life with no lamp changes
- Easily accessible cover and diffuser screws and pre-formed drillable fixing points for fast and simple installation
- Suitable for switching by PIR, Microwave or Photocelll





Standard	RZE940-24
Comparable to:	60W
Total Power (W):	9.3
Total Light Output (lm):	510
Efficacy (lm/cctW):	55
Lifetime (hrs):	30,000
Beam Angle (deg):	90
Lux at 1m (lux):	90
CCT (K):	4000
CRI:	85
IP:	65
Impact Rating (IK):	08
Power Factor:	0.5
Height (mm):	46
Width (mm):	170
Depth (mm):	80
Box Qty:	1
Weight (kg):	0.34













TRALEE WALL LIGHT







R235-13

TRALEE 35W GU10 up/down wall light

- Suitable for use with halogen and selected LED and CFL lamps
- 304 stainless steel
- · Corrosion resistant

- Complete with ceramic GU10 lamp holders
- IP44 sealing, for indoor & outdoor use
- Power consumption based on 35W halogen lamps

	Single	Double
B Chrome	R135-13	R235-13
Total Power (W):	35	2 x 35
IP:	44	44
Cap Type:	GU10	GU10
Diameter (mm):	62	65
Height (mm):	104	165
Proj (mm):	120	120
Box Qty:	4	4
Weight (kg):	0.45	0.75











ECLIPSE LED WALL LIGHT



ECLIPSE 6W and 12W LED wall light, IP54, Dark grey, 3000K

- Suitable for use in sheltered outdoor common areas, gardens, hotels, pubs and restaurants
- LED replacement for 11W CFL wall lights
- Die cast aluminium housing with polycarbonate diffuser
- · High impact rating of IK08

- Powder coated using electrophoresis process for high corrosion resistance
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell

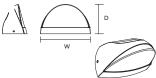
Warm White

Dark Grey	REL0630-25	REL1230-25
Total Power (W):	6	12
Total Light Output (lm):	370	720
Efficacy (lm/cctW):	60	60
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	35	60
Beam Angle (deg):	120	120
CCT (K):	3000	3000
CRI:	80	80
IP:	54	54
Power Factor:	0.8	0.8
Width (mm):	160	249
Height (mm):	100	149
Depth (mm):	86	129
Box Qty:	1	1
Weight (kg):	0.58	1.10









TWILIGHT LED WALL LIGHT





TWILIGHT 1W square

- LED replacement for 10W halogen
- Low energy consumption, high lumen output
- · Weatherproof ABS housing
- Slim design surface mounted wall light, no cut holes required in the wall
- IP65 ideal for outdoor, lighting pathways
- Impact resistant (IK07)

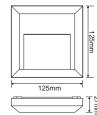
	1W Square
	RTW0130SQ-24
Comparable to:	10W Halogen
Total Power (W):	1
Total Light Output (lm):	40
Efficacy (lm/cctW):	40
Lifetime (hrs):	30,000
CCT (K):	3000
IP:	65
Diameter (mm):	N/A
Width (mm):	125
Height (mm):	125
Depth (mm):	27
Box Qty:	1
Weight (kg):	0.18



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TWILIGHT 1W rectangle

- LED replacement for 10W halogen
- · Low energy consumption, high lumen output
- · Weatherproof ABS housing
- Slim design surface mounted wall light, no cut holes required in the wall
- IP65 ideal for outdoor, lighting pathways
- Impact resistant (IK07)

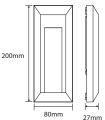
1W Rectangle
RTW0130RG-24
10W Halogen
0.8
20
25
30,000
3000
65
N/A
80
200
27
1
0.17















- LED replacement for 15W halogen
- Low energy consumption, high lumen output
- · Weatherproof ABS housing
- Slim design surface mounted wall light, no cut holes required in the wall
- IP65 ideal for outdoor, lighting pathways
- Impact resistant (IK07)

	2W Rectangle
	RTW0230RGL-24
Comparable to:	15W Halogen
Total Power (W):	1.8
Total Light Output (lm):	72
Efficacy (lm/cctW):	40
Lifetime (hrs):	30,000
CCT (K):	3000
IP:	65
Diameter (mm):	N/A
Width (mm):	230
Height (mm):	80
Depth (mm):	27
Box Qty:	1
Weight (kg):	0.22



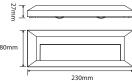














TWILIGHT 1W circle

- LED replacement for 15W halogen
- · Low energy consumption, high lumen output
- · Weatherproof ABS housing
- Slim design surface mounted wall light, no cut holes required in the wall
- IP65 ideal for outdoor, lighting pathways
- Impact resistant (IK07)

	2W Circular
	RTW0230C-24
Comparable to:	15W Halogen
Total Power (W):	1.4
Total Light Output (lm):	54
Efficacy (lm/cctW):	39
Lifetime (hrs):	30,000
CCT (K):	3000
IP:	65
Diameter (mm):	150
Width (mm):	N/A
Height (mm):	N/A
Depth (mm):	27
Box Qty:	1
Weight (kg):	0.19

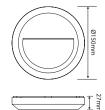












TWILIGHT LED WALL LIGHT





TWILIGHT 3W circle

- LED replacement for 30W halogen
- · Low energy consumption, high lumen output
- · Weatherproof ABS housing
- Slim design surface mounted wall light, no cut holes required in the wall
- · IP65 ideal for outdoor, lighting pathways
- Impact resistant (IK07)

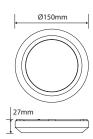
3W Circular
RTW0330C-24
30W Halogen
2.9
180
62
30,000
3000
65
150
N/A
N/A
27
1
0.21











TWILIGHT 3W square

- LED replacement for 30W halogen
- · Low energy consumption, high lumen output
- Weatherproof ABS housing
- Slim design surface mounted wall light, no cut holes required in the wall
- IP65 ideal for outdoor, lighting pathways
- Impact resistant (IK07)

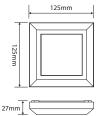
	3W Square
	RTW033SQ-24
Comparable to:	30W Halogen
Total Power (W):	3.1
Total Light Output (lm):	190
Efficacy (lm/cctW):	61
Lifetime (hrs):	30,000
CCT (K):	3000
IP:	65
Diameter (mm):	N/A
Width (mm):	125
Height (mm):	125
Depth (mm):	27
Box Qty:	1
Weight (kg):	0.20













TWILIGHT 3W rectangle

- LED replacement for 30W halogen
- Low energy consumption, high lumen output
- Weatherproof ABS housing
- Slim design surface mounted wall light, no cut holes required in the wall
- IP65 ideal for outdoor, lighting pathways
- Impact resistant (IK07)

	3W Rectangle
	RTW0330RG-24
Comparable to:	30W Halogen
Total Power (W):	3.1
Total Light Output (lm):	170
Efficacy (lm/cctW):	55
Lifetime (hrs):	30,000
CCT (K):	3000
IP:	65
Diameter (mm):	N/A
Width (mm):	230
Height (mm):	80
Depth (mm):	27
Weight (kg):	0.23



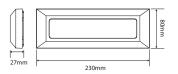
















LUNAR LED WALL LIGHT





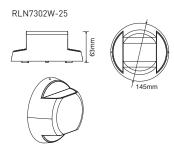


RLN7302W-25

LUNAR 7W LED wall light

- Suitable for use on patio and decking areas, either side of building entrances, apartment stairways and landings, paths and walkways around domestic houses, hotels, restaurants and offices
- Die-cast aluminium housing providing optimal heat dissipation and high resistance to weather conditions
- LED replacement for traditional Halogen providing high efficacy for energy savings
- · Impact rating of IK08
- · Includes integrated driver

- No infra-red or ultra-violet in light beam, cool to touch and does not attract most flying insects
- Wide operating ambient temperature range of -20°C to +40°C
- Mounting stand-offs integrated into base to allow fitting onto uneven, pebble dash or rendered walls









RLN7303W-25

Standard	RLN7302W-25	RLN7303W-25
Comparable to:	20W LV halogen	20W LV halogen
Total Power (W):	7.2	7.1
Total Light Output (lm):	310	310
Efficacy (lm/cctW):	43	44
Lifetime (hrs):	30,000	30,000
Beam Angle (deg):	110	360
CCT (K):	3000	3000
CRI:	80	80
IP:	54	54
Impact Rating (IK):	08	08
Power Factor:	0.9	0.9
Height (mm):	63	44
Width (mm):	NA	143
Diameter (mm):	145	NA
Depth (mm):	NA	138
Box Qty:	1	1
Weight (kg):	0.54	0.55













FALCON LED WALL LIGHT



FALCON LED wall light

- Suitable for use in indoor and outdoor parking areas, tunnels, walkways, building entrances, loading bays, fire assembly points
- LED replacement for 50-80W Metal Halide/ 200-350W Halogen
- Die cast aluminium housing providing optimal heat dissipation and high resistance to weather conditions
- · Polycarbonate opal diffuser
- High impact rating of IK06

- · Stainless steel screws
- · Pre-wired with 1.5m of rubber flex
- Wide operating ambient temperature range of -25°C to 40°C
- · Suitable for switching by PIR, Microwave or Photocell
- Microwave sensor version has adjustable time delay 10sec to 12 min and lux level settings 3-2000lx
- 3 hour emergency version available through Conversions

Daylight White

	30W	50W
Standard	RFA03555-04	RFA05055-04
Photocell	RFA03555DH-04	RFA05055DH-04
Total Power (W):	33.2	49.6
Total Light Output (lm):	2,380	3,380
Efficacy (lm/cctW):	72	68
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	300	650
Beam Angle (deg):	120	120
CCT (K):	5500	5500
CRI:	75	75
IP:	65	65
Power Factor:	0.95	0.95
Width (mm):	265	265
Height (mm):	300	300
Depth (mm):	180	180
Weight (kg):	3.0	3.0



Note: 50W available with back wire entry

RFA05055X-04 50W Standard with back wire entry

RFA05055DMX-04 50W Microwave Sensor with back wire entry

RFA05055DHX-04 50W Photocell with back wire entry





APEX LED WALL LIGHT





APEX 4.5W LED wall or spike light

- Die cast aluminium housing with polycarbonate diffuser
- · Powder coated using electrophoresis process for high corrosion resistance
- Head adjustable angle of 90°

- Complete with stainless steel screws
- Pre-wired with 1m rubber flex
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell

	Neutral White	Warm White
Dark Grey	RAX4540-25	RAX4530-25
Comparable to:	30W Halogen	30W Halogen
Total Power (W):	4.5	4.5
Total Light Output (lm):	180	160
Efficacy (lm/cctW):	40	35
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	150	120
Beam Angle (deg):	25	25
CCT (K):	4000	3000
CRI:	80	80
IP:	65	65
Power Factor:	0.5	0.5
Length (mm):	100	100
Width (mm):	73	73
Height (mm):	70	70
Weight (kg):	0.5	0.5

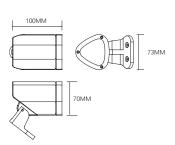
















JUPITER LED WALL LIGHT





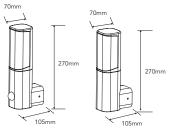
JUPITER 7W LED wall light

- Die cast aluminium housing with polycarbonate diffuser
- Powder coated using electrophoresis process for high corrosion resistance
- · High impact rating of IK08

- Complete with stainless steel screws
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell

	Standard	PIR Version
	RJU0730-25	RJU0730DG-25
Comparable to:	40W Incandescent	40W Incandescent
Total Power (W):	7.1	7.1
Total Light Output (lm):	290	290
Efficacy (lm/cctW):	41	41
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	30	30
Beam Angle (deg):	120	120
CCT (K):	3000	3000
CRI:	80	80
IP:	54	54
Power Factor:	0.9	0.9
Width (mm):	70	70
Height (mm):	270	270
Depth (mm):	105	105
Weight (kg):	0.8	0.8





RJU0730DG-25

RJU0730-25

ORION LED WALL LIGHT



ORION 7W LED wall light

- Die cast aluminium housing with polycarbonate diffuser
- · Powder coated using electrophoresis process for high corrosion resistance
- · High impact rating of IK08

- · Complete with stainless steel screws
- \bullet Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell

	R0N0730-25
Comparable to:	40W Incandescent
Total Power (W):	7
Total Light Output (lm):	180
Efficacy (lm/cctW):	25
Lifetime (hrs):	30,000
Lux at 1m (lux):	12
Beam Angle (deg):	120
CCT (K):	3000
CRI:	80
IP:	54
Power Factor:	0.8
Width (mm):	70
Height (mm):	226
Depth (mm):	105
Weight (kg):	0.8











JUPITER LED BOLLARD





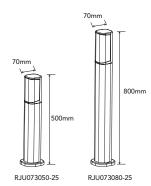
JUPITER 7W LED bollard

- Die cast aluminium housing with polycarbonate diffuser
- Powder coated using electrophoresis process for high corrosion resistance
- High impact rating of IK08

- Complete with stainless steel screws
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell

Warm White

	500mm	800mm
Dark Grey	RJU073050-25	RJU073080-25
Comparable to:	40W Incandescent	40W Incandescent
Total Power (W):	7.1	7.1
Total Light Output (lm):	290	290
Efficacy (lm/cctW):	41	41
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	30	30
Beam Angle (deg):	120	120
CCT (K):	3000	3000
CRI:	80	80
IP:	54	54
Power Factor:	0.9	0.9
Width (mm):	70	70
Height (mm):	500	800
Depth (mm):	70	70
Weight (kg):	1.2	2.0







ORION LED BOLLARD



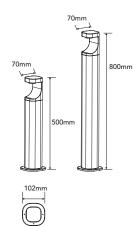
ORION 7W LED bollard

- Die cast aluminium housing with polycarbonate diffuser
- Powder coated using electrophoresis process for high corrosion resistance
- · High impact rating of IK08

- · Complete with stainless steel screws
- Wide operating ambient temperature range of -20°C
- Suitable for switching by PIR, Microwave or Photocell

Warm White

500mm	800mm
RON073050-25	R0N073080-25
40W Incandescent	40W Incandescent
7	7
180	180
25	25
30,000	30,000
12	12
120	120
3000	3000
80	80
54	54
0.8	0.8
70	70
500	800
70	70
1.1	1.6
	RON073050-25 40W Incandescent 7 180 25 30,000 12 120 3000 80 54 0.8 70 500













BEACON BOLLARD





BEACON 60W aluminium bollard

- Suitable for use with 60W Incandescent or selected LED and CFL lamps
- Complete with ceramic E27 lamp holder
- Extruded aluminium base/main body with die cast dome
- Complete with stainless steel screws
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell

	65cm	110cm
	L20065	L200110
Total Power (W):	60	60
IP:	44	44
Cap Type:	E27	E27
Diameter (mm):		
Base	170	170
Dome	150	150
Height (mm):	650	1,100
Box Qty:	2	2
Weight (kg):	1.3	3





VITA CIRCULAR LED KIT



VITA LED circular kit

- Suitable for use in indoor and outdoor applications: bars, stair risers & strings, ceilings, restaurants, kitchen unit plinths, decking areas, patios, paths & walkways
- · LED replacement for halogen decking lights
- Plug & Play kit containing 5 miniature fittings, each with 3 LEDs, 6W IP44 driver, cables and junction box
- · Stainless steel cowl and spring clips
- Each fitting pre-wired with 5m cable
- · Wide operating ambient temperature range of -20°C to +40°C

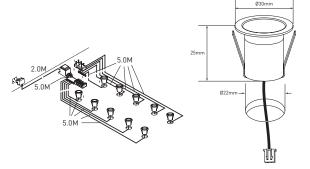
	5 fittings	10 fittings
White LEDs	R3LED5S-01	R3LED10S-01
Blue LEDs	R3LED5S-07	R3LED10S-07
Total Power (W):	1.8	3.6
IP:	68	68
Diameter (mm):	30	30
Depth (mm):	25	25
Cut-out (mm):	24	24
Box Qty:	6	8
Weight (kg):	1.4	1.8







Note: Warm white also available, R3LED10SWW-01



LED STEP LIGHTS





TIBO LED brick light

- Suitable for internal and external use. Use in showers, kitchen plinths and stairs or garden walls, steps and walkways
- Dark grey powder coated high quality die-cast aluminium finish with minimal cleaning or maintenance
- Polycarbonate diffuser providing low glare and wide beam angle
- Complete with polycarbonate mounting sleeve
- Wide operating temperature of -20°C to +40°C
- · High efficiency integral driver
- Double entry breakouts at both ends of sleeve to provide easy loop in/loop out cable function

Standard	RTI1330-25
Comparable to:	50W halogen
Total Power (W):	12.9
Total Light Output (lm):	540
Efficacy (lm/cctW):	42
Lifetime (hrs):	30,000
Beam Angle (deg):	100
Lux at 1m (lux):	220
CCT (K):	3000
CRI:	80
IP:	65
Impact Rating (IK):	08
Power Factor:	0.9
Cut Out (mm):	235/82/80
Length (mm):	250
Width (mm):	98
Depth (mm):	90
Box Qty:	1
Weight (kg):	0.85



LED STEP LIGHTS





BASE LED mains voltage step light

- Suitable for indoor and outdoor applications: bars, stair risers & strings, ceilings, restaurants, kitchen unit plinths, decking areas, patios, paths & walkways
- LED replacement for halogen step lights
- Stainless steel front plate with very high resistance to corrosion
- Complete with plastic sleeve for sitting into concrete and clips for mounting in wood or plaster boards
- · Pre-wired with 0.45m rubber flex
- Wide operating ambient temperature range of -20°C to +40°C

	Grid	Plain
	RS4LEDS-01	RS4LEDPS-01
Total Power (W):	0.9	0.9
Total Light Output (lm):	25	25
Efficacy (lm/cctW):	28	28
IP:	65	65
Diameter (mm):	40	40
Width (mm):	83	83
Height (mm):	83	83
Cut-out (mm):	72 x 72	72 x 72
Box Qty:	1	1
Weight (kg):	0.3	0.3













ZERO LED GROUND LIGHT





ZERO LED circular drive-over ground light

- Suitable for use in walk ways, drive ways, paths and patios
- LED replacement for halogen drive-over lights
- Suitable for loads up to 3.5 tonnes
- 316 marine grade stainless steel front plate with very high resistance to corrosion
- 8mm hardened glass

- · Die cast aluminium housing
- Complete with plastic sleeve for sitting into brickwork/concrete
- Sleeve depth 130mm
- 2 cable entry points for loop in/loop out wiring
- Wide operating ambient temperature range of -20°C to +40°C

	R21LEDS-01
Total Power (W):	4.2
IP:	67
Diameter (mm):	163
Depth (mm):	130
Cut-out (mm):	115
	Mounting sleeve 160
Box Qty:	4
Weight (kg):	2.2





ASYMMETRIC LED GROUND LIGHT



ASYMMETRIC LED drive-over ground light

- Suitable for use in walk ways, drive ways, paths and patios
- LED replacement for halogen drive-over lights
- 45° angle elevation, 25° beam width
- Suitable for loads up to 3 tonnes load at 15km/h
- Stainless steel front plate with very high resistance to corrosion
- 5mm hardened glass

- · Die cast aluminium housing
- Complete with plastic sleeve for sitting into brickwork/concrete with depth of 110mm
- Complete with IP67 loop-in loop-out T connector and mounting sleeve
- 0.5m flex between fitting and junction box
- Wide operating ambient temperature range of -20°C to +40°C

6 x 3W LEDS	R18ASGL
Total Power (W):	14
Total Light Output (lm):	910
Efficacy (lm/cctW):	65
CCT (K):	3000
CRI:	65
IP:	67
Diameter (mm):	165
Depth (mm):	Fitting 90
	Sleeve 110
Cut-out (mm):	Fitting 120, 150 x 10
	Sleeve 196
Box Qty:	4
Weight (kg):	1.6

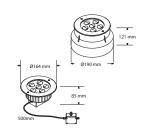












EWOK LED GROUND LIGHTS





EWOK LED mains ground light

- Suitable for indoor and outdoor applications: bars, stair risers & strings, ceilings, restaurants, kitchen unit plinths, decking areas, patios, paths & walkways
- · LED replacement for halogen decking lights
- 316 marine grade stainless steel front plate with very high resistance to corrosion
- · Die cast aluminium housing
- R6LED240S requires a 50mm PVC sleeve when installed in concrete
- R10LED240S requires a 100mm cut out, however it comes with mounting sleeve and when this is used, the cut out is 105mm. This product is Class 1 and requires an earth
- Suitable for walk-over application
- · Pre-wired with 3m rubber flex
- Wide operating ambient temperature range of -20°C to +40°C

Daylight White

	6 LEDs	10 LEDs
	R6LED240S-01	R10LED240S-01
	R6LED240S-07	R10LED240S-07
Total Power (W):	0.7	1.5
Total Light Output (lm):	21	50
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	10	15
CCT (K):	6000	6000
CRI:	75	75
IP:	65	65
Diameter (mm):	60	118
Depth (mm):	88	122
Cut-out (mm):	50	100
Box Qty:	4	4
Weight (kg):	0.4	0.7



LED GARDEN SPIKES / SPOTLIGHTS





DUET 2IN1 LED spike and wall mount fitting

- LED replacement for 20W halogen
- Aluminium housing with polycarbonate lens
- Head adjustable angle of 180°
- Complete with stainless steel screws
- Pre-wired with 1.5m rubber flex
- Wide operating ambient temperature range of -20°C to +40°C

	R2IN13W
Total Power (W):	3.4
Total Light Output (lm):	140
Efficacy (lm/cctW):	42
CCT (K):	4000
CRI:	70
IP:	65
Diameter (mm):	42
Length (mm):	75
Box Qty:	1
Weight (kg):	1.3



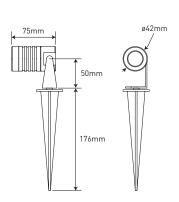












LED GARDEN SPIKES / SPOTLIGHTS







TRINITY 3IN1 LED spike and wall mount fitting

- LED replacement for 30W Halogen
- 316 marine grade stainless steel front plate with very high resistance to corrosion
- · Die cast aluminium housing with hardened glass
- Complete with stainless steel screws
- Complete with plastic sleeve for sitting into brickwork/concrete
- · Suitable for walk over applications
- Pre-wired with 1.5m rubber flex
- · Wide operating ambient temperature range of -20°C to +40°C

	R3IN13W
Total Power (W):	4
Total Light Output (lm):	195
Efficacy (lm/cctW):	49
CCT (K):	3000
CRI:	70
IP:	65
Diameter (mm):	116
Length (mm):	110
Cut-out (mm):	Fitting 95
	Sleeve 105
Box Qty:	6
Weight (kg):	1.3















GARDEN SPIKES AND SPOTLIGHTS

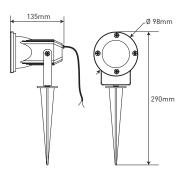


LEE garden spike

- Suitable for use with 50W Halogen or selected LED or CFL lamps
- Complete with ceramic GU10 lamp holder
- Die cast aluminium housing with glass front
- Complete with stainless steel screws
- Wide operating ambient temperature range of -20°C to +40°C
- Pre-wired with 1m rubber flex

Mains Voltage
LS50GU-04
50
65
GU10
98
135
280
10
0.5





GARDEN SPIKES AND SPOTLIGHTS





- Suitable for use with 50W Halogen or selected LED or CFL lamps
- · Complete with ceramic GU10 lamp holder
- Die cast aluminium housing with glass front
- Complete with stainless steel screws
- Large terminal block and double cable entry allows loop-in/loop-out
- Wide operating ambient temperature range of -20°C to +40°C

Black	R5088S-04
Satin Silver	R5088S-15
Total Power (W):	50
IP:	65
Cap Type:	GU10
Diameter (mm):	70
Length (mm):	330
Width (mm):	65
Weight (kg):	0.6





INIS GU10 spike/wall light with adjustable tapered head

- Suitable for use with 50W Halogen or selected LED or CFL lamps
- Complete with ceramic GU10 lamp holder
- Die cast aluminium housing with glass front
- · Complete with stainless steel screws
- Large terminal block and double cable entry allows loop-in/loop-out
- Wide operating ambient temperature range of -20°C to +40°C

	Spike	Wall
Black	R5082T-04	R5082TW-04
Satin Silver	R5082T-15	R5082TW-15
Total Power (W):	50	50
IP:	65	65
Cap Type:	GU10	GU10
Diameter (mm):	75	75
Width (mm):	78	75
Box Qty:	1	1
Weight (kg):	0.6	0.5



OUTDOOR ACCESSORIES



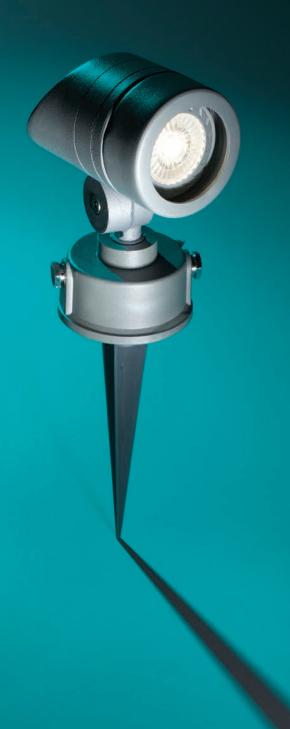
LED supply transformer 12W, IP44

- 2m cable
- Range 0-12W, 12V SELV output
- Thermal protection

	R12WLEDT
Total Power (W):	12
Box Qty:	4
Weight (kg):	0.75









- 218 VIBE 24VDC COMMERCIAL LED FLEXI-STRIP
- 230 PULSE 12VDC LED FLEXI-STRIP
- 232 EXTRUSIONS FOR LED FLEXI-STRIP
- 234 SPACEMAN 12VDC LED STRIPLIGHT KIT
- 236 ROCKSTAR LED WALL WASHER
- 237 WILSON LED WALL WASHER

VIBE 24VDC COMMERCIAL LED FLEXI-STRIP



VIBE 24VDC 7.2W/m LED commercial flexi-strip

- 10m roll of IP65 7.2W/m flexi striplight
- Strip can be cut every 5 LED's and reconnected as required (Please refer to instruction guide on our website)
- Each roll c/w connector starter pack which includes: 1 x 250mm DC cable, 1 x double end connector 170mm, 1 x double end connector 100mm, 1 x single end connector 160mm, 2 x end caps, 6 x brackets, 2 x heat shrinks and 1x tube of glue
- Pack of extra connectors available to order (Single Colour: RVB5030-CONN, RGB: RVBRGB-CONN)

- Single colour strip can be used with controller (RVB3050-CRTL) to enable dimming
- RGB strip can be used with controller (RVBRGB-CRTL) to enable colour changing and dimming
- Single colour strip can be used with amplifier (RVB3050-AMP) to extend to lengths greater than 10m
- RGB strip can be used with amplifier (RVBRGB-AMP) to extend to lengths greater than 10m
- Choose from 60W, 100W or 200W power supply depending on length required (RVB060-PSU, RVB100-PSU, RVB200-PSU).

	10M	10M	10M
	Warm White	Cool White	RGB
	RVB0073010I65	RVB0075010I65	RVB007RGB10I65
Total Power (W):	7.2 p/m	7.2 p/m	7.2 p/m
Total Light Output (lm):	350p/m	400p/m	N/A
Lifetime (hrs):	30,000	30,000	30,000
Beam Angle (deg):	120	120	120
CCT (K):	3000	5000	N/A
CRI:	70	70	N/A
IP:	65	65	65
Length (mm):	10,000	10,000	10,000
Width (mm):	12	12	12
Height (mm):	4	4	4
Box Qty:	1	1	1
Weight (kg):	1.0	1.0	1.0



VIBE 24VDC COMMERCIAL LED FLEXI-STRIP



VIBE 24VDC 14.4W/m LED commercial flexi-strip

- 10m roll of IP65 14.4W/m flexi striplight
- Strip can be cut every 6 LED's and reconnected as required
- Each roll c/w connector starter pack which includes: 1 x 250mm DC cable, 1 x double end connector 170mm, 1 x double end connector 100mm, 1 x single end connector 160mm, 2 x end caps, 6 x brackets, 2 x heat shrinks and 1x tube of glue
- Pack of extra connectors available to order (Single Colour: RVB5030-CONN)

- Single colour strip can be used with controller (RVB3050-CRTL) to enable dimming
- Single colour strip can be used with amplifier (RVB3050-AMP) to extend to lengths greater than 10m
- Choose from 60W, 100W or 200W power supply depending on length required (RVB060-PSU, RVB100-PSU, RVB200-PSU)

	10M	10M
	Warm White	Cool White
	RVB0143010I65	RVB0145010I65
Total Power (W):	14.4 p/m	14.4 p/m
Total Light Output (lm):	700p/m	800p/m
Lifetime (hrs):	30,000	30,000
Beam Angle (deg):	120	120
IP:	65	65
CCT (K):	3000	5000
CRI:	70	70
Length (mm):	10,000	10,000
Width (mm):	12	12
Box Qty:	1	1
Weight (kg):	1.1	1.1



VIBE 24VDC COMMERCIAL LED FLEXI-STRIP



VIBE 24VDC 14.4W/m LED commercial flexi-strip

- 5m roll of IP65 14.4W/m flexi striplight
- Strip can be cut every 6 LED's and reconnected as required
- Each roll c/w connector starter pack which includes: 1 x 250mm DC cable, 1 x double end connector 170mm, 1 x double end connector 100mm, 1 x single end connector 160mm, 2 x end caps, 6 x brackets, 2 x heat shrinks and 1x tube of glue
- Pack of extra connectors available to order (RGB: RVBRGB-CONN)

- RGB strip can be used with controller (RVBRGB-CRTL) to enable colour changing and dimming
- RGB strip can be used with amplifier (RVBRGB-AMP) to extend to lengths greater than 5m
- Choose from 60W, 100W or 200W power supply depending on length required (RVB060-PSU, RVB100-PSU, RVB200-PSU)

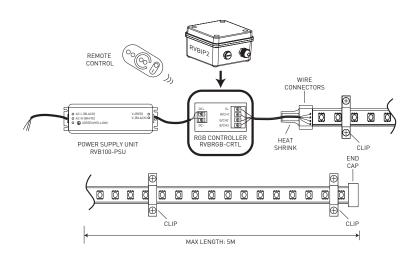
	5M
RGB	RVB014RGB05I65
Total Power (W):	14.4 p/m
Total Light Output (lm):	N/A
Lifetime (hrs):	30,000
Beam Angle (deg):	120
CCT (K):	N/A
CRI:	N/A
IP:	65
Length (mm):	5,000
Width (mm):	12
Height (mm):	4
Box Qty:	1
Weight (kg):	1.1



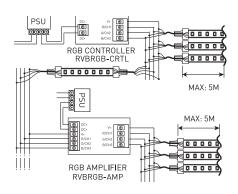


VIBE 24VDC COMMERCIAL LED FLEXI-STRIP

VIBE 24VDC 14.4W/m LED commercial flexi-strip, 5m, RGB



VIBE 24VDC 14.4W/m LED commercial flexi-strip, 5m



Max Distance between Amplifiers is 5M

Separate Power Unit required for each Amplifier

DRIVERS	1-5M	5-10 M	10-20M
RVB060-PSU	N/A	N/A	N/A
RVB100-PSU	YES	N/A	N/A
RVB200-PSU	N/A	N/A	N/A

EXAMPLE INSTALLATION

CODE 1-20M 21-40M 41-60M 61-80M

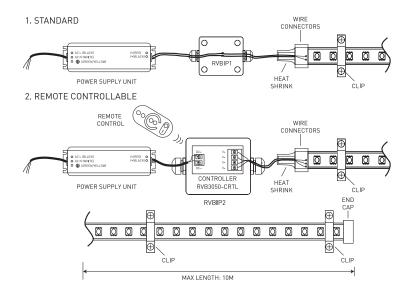
RVB014RGB05I65	4x5M	8x5M	12x5M	16x5M
RVBRGB-CTRL	1	1	1	1
RVB100-PSU	4	8	12	16
RVBRGB-AMP	3	7	11	15
RVBIP1	1	1	1	1
RVBIP2	1	1	1	1



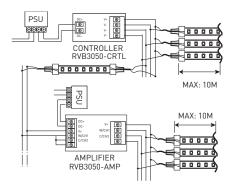


VIBE 24VDC COMMERCIAL LED FLEXI-STRIP

VIBE 24VDC 14.4W/m LED commercial flexi-strip, IP65, 10m, single colour



VIBE 24VDC 14.4W/m LED commercial flexi-strip, IP65, 10m



EXAMPLE INSTALLATION FOR 10M VIBE IP65				
CODE	1-20M	21-40M	41-60M	61-80M
	0.4014			0.4014
RVB014X010I65*	2x10M	4 x10M	6 x10M	8x10M
RVB3550-CTRL	1	1	1	11
RVB200-PSU	2	4	6	8
RVB3050-AMP	3	7	11	15
RVBIP1	1	1	1	1
RVBIP2	1	1	1	1

DRIVERS	1-5 M	5-10M	10-20M
RVB060-PSU	YES	N/A	N/A
RVB100-PSU	N/A	YES	N/A
RVB200-PSU	N/A	N/A	YES

Separate Power Unit required for each Amplifier

VIBE 24VDC COMMERCIAL LED FLEXI-STRIP





VIBE power supply units

- 60W takes 8m of the 7.2W/m strip & 4m of the 14.4W/m strip
- 100W takes 14m of the 7.2W/m strip & 7m of the 14.4W/m strip
- 200W takes 28m of the 7.2W/m strip & 14m of the 14.4W/m strip

	60W	100W
	RVB060-PSU	RVB100-PSU
Total Power (W):	60	100
Voltage:	24VDC	24VDC
IP:	67	67
Length (mm):	216	195
Width (mm):	42	68
Height (mm):	30	40
Weight (kg):	0.7	0.9

	200W
	RVB200-PSU
Total Power (W):	200
Voltage:	24VDC
IP:	67
Length (mm):	216
Width (mm):	68
Height (mm):	40
Weight (kg):	1.1

VIBE 432W controller - single colour

- · Single colour dimming controller
- · C/w hand held remote
- · Hand held remote can operate from a distance of 8m
- Use with VIBE range of drivers (RVB060-PSU, RVB100-PSU & RVB200-PSU)
- IP rated enclosure available: RVBIP2
- Working voltage: 12-24VDC
- Current: 6A x 3Channel
- Connection mode: Common Anode

RVB3050-CRTL
432
12-24VDC
20
82
83
33
0.3





VIBE 24VDC COMMERCIAL LED FLEXI-STRIP





VIBE 432W controller - RGB

- · Colour changing and dimming RGB controller
- · C/w hand held remote
- Hand held remote can operate from a distance of 8m
- Use with VIBE range of drivers (RVB060-PSU, RVB100-PSU, AND RVB200-PSU)
- IP rated enclosure available: RVBIP2
- Working voltage: 12-24VDC
- Current: 6A x 3Channel
- · Connection mode: Common Anode

	RVBRGB-CRTL
Total Power (W):	432
Voltage:	12-24VDC
IP:	20
Length (mm):	82
Width (mm):	83
Height (mm):	33
Weight (kg):	0.3



VIBE amplifier - single colour

- Signal amplifier for synchronous operation over long distances
- Use with VIBE range of drivers (RVB060-PSU, RVB100-PSU, AND RVB200-PSU)
- IP rated enclosure available: RVBIP2
- Required for lengths longer than 10m Single Colour, if dimming required
- Working voltage: 12-24VDC
 Working current: 6A x 2CH 12A max
 Channels: 2CH
 Output power: 144 / 288W
- · Connection: Common Anode
- Output Control: Constant Voltage

	RVB3050-AMP
IP:	20
Length (mm):	80
Width (mm):	73
Height (mm):	34
Weight (kg):	0.1



VIBE 24VDC COMMERCIAL LED FLEXI-STRIP





VIBE amplifier- RGB

- Signal amplifier for synchronous operation over long distances
- Use with VIBE range of drivers (RVB060-PSU, RVB100-PSU, & RVB200-PSU)
- IP rated enclosure available: RVBIP2
- Required for lengths of longer than 5m RGB (14.4W p/m) or 10m RGB (7.2W p/m)
- Working voltage: 12-24VDC
 Working current: 6A x 2CH 12A max
 Channels: 2CH
 Output power: 144 / 288W
- · Connection: Common Anode
- Output Control: Constant Voltage

RVBRGB-AMP
20
80
73
34
0.1



VIBE IP rated box, large

	RVBIP2
IP:	65
Length (mm):	152
Width (mm):	153
Height (mm):	78
Weight (kg):	0.1



VIBE 24VDC COMMERCIAL LED FLEXI-STRIP





VIBE IP rated box, small

	RVBIP1
IP:	65
Length (mm):	94
Width (mm):	65
Height (mm):	55
Weight (kg):	0.1



VIBE connector sets

Pack includes:

- 250mm UV protected heat shrink x 5
- Wire connector for Single Colour or RGB (10mm wide) 150mm wired between connector x 5
- Wire connector for Single Colour or RGB (10mm wide) 75mm wired between connector x 5
- Wire connector for Single colour or RGB (10mm wide) single side 150mm wire from connector x 5
- End caps x 5
- Clips x 5
- Silicone glue

Cool White / Warm White	RVB5030-CONN
RGB	RVBRGB-CONN

PULSE 12VDC LED FLEXI-STRIP



RGB - Infra Red Receiver

PULSE 12VDC 24W LED flexi-strip

- Suitable for use in bars & clubs, restaurants, under counter displays, hotel/office receptions, showrooms, exhibition stands, step lighting, window dressing
- 5m roll of flexi striplight

- Strip can be cut every 3 LEDs
- Each kit c/w driver, flex & 3M double sided tape for easy installation
- RGB kit with receiver and hand held remote controller

	Warm White	Cool White	RGB
	R5MSIK-WW	R5MSIK-CW	R5MSIK-RGB
Total Power (W):	24	24	24
Total Light Output (lm):	1,250	1,500	N/A
Lifetime (hrs):	30,000	30,000	30,000
CCT (K):	3,500	5000	N/A
CRI:	70	70	N/A
IP:	20	20	20
Power Factor:	0.7	0.7	0.7
Length (mm):	5,000	5,000	5,000
Depth (mm):	10	10	10
Weight (kg):	0.5	0.5	0.5



Note: It is not recommended to join Pulse flexi-strip. Off-cuts cannot be re-used as power supply units are not available separately. VIBE flexi-strip should be used if joining or use of off-cuts with power supply units are required.

PULSE 12VDC LED FLEXI-STRIP



PULSE 12VDC 72W LED PIR

- Suitable for use with Pulse LED strip light kits
- Operating voltage of 12-24VDC
- Complete with mounting screws and 3M double sided adhesive

• Wide operating temperature range of -20°C to +40°C

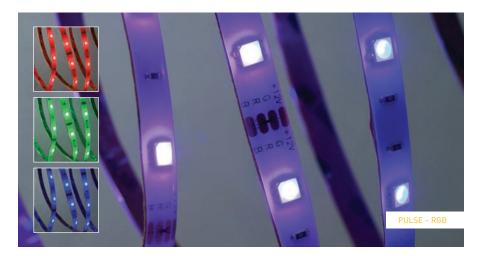
	RPUPIR-01
Loading (W):	72
Time Settings:	10mins
Lux Settings:	15lx
Detection area:	100°
Motion Detection Range:	3m Diameter at 5m
Width (mm):	50
Depth (mm):	26
Length (mm):	50
Weight (kg):	0.1











EXTRUSIONS FOR LED FLEXI-STRIP





EXTRUSION, low profile, 8mm

- · Surface mounted
- Low profile recessed extrusion with push on PC diffuser
- Anodised aluminium
- Supplied in 1m lengths complete with end caps and mounting clips

	REXS081-23
Height (mm):	8
Width (mm):	17.5
Length (m):	1
Box Qty:	1
Weight (kg):	0.12



EXTRUSION, recessed, 15mm

- · Recessed extrusion with push on PC diffuser
- · Anodised aluminium
- Supplied in 1m lengths complete with end caps

	REXR151-23
Height (mm):	15
Width (mm):	25
Length (m):	1
Box Qty:	1
Weight (kg):	0.23



EXTRUSIONS FOR LED FLEXI-STRIP





EXTRUSION, recessed / suspended, 52mm

- · Recessed extrusion with push on PC diffuser
- Anodised aluminium
- Supplied in 1m lengths complete with end caps
- C/w suspension kit

	REXR521-23
Height (mm):	52
Width (mm):	35
Length (m):	1
Box Qty:	1
Weight (kg):	1.32



EXTRUSION, circular, 24mm

- Circular extrusion with push on PC diffuser.
 Suitable for suspension or surface mounting
- · Anodised aluminium
- Supplied in 1m lengths complete with end caps, suspension wires and mounting clips
- C/w suspension kit

	REXC241-23
Diameter (mm):	24
Length (m):	1
Box Qty:	1
Weight (kg):	0.38



SPACEMAN 12VDC LED STRIPLIGHT KIT



SPACEMAN 14W LED strip pack

- Suitable for use in bars & clubs, restaurants, under counter display, hotel/office receptions, showrooms, exhibition stands, step lighting, window dressing
- 4pcs of 0.5m LED strips

- · Complete kit with total plug and play connectivity
- Complete with driver, extension cables and 4 port distribution hub

Warm White		R405MK-WW
Neutral White		R405MK-CW
Total Power (W):		12.5/12.2
Total Light Output (lm):		540/700
Lifetime (hrs):		30,000
Beam Angle (deg):		120
CCT (K):	Warm White	3000
	Neutral White	4000
IP:		20
Power Factor:		0.5
Length (mm):		500
Width (mm):		10
Box Qty:		1
Weight (kg):		0.5





ROCKSTAR LED WALL WASHER



ROCKSTAR LED recessed wall washer

- Suitable for use in bars, clubs, retail, showrooms, exhibition centres, museums
- LED replacement for 50W and 70W metal halide
- · Die cast aluminium housing with toughened glass
- High impact rating of IK08

- \bullet Wide operating ambient temperature range of -20°C to +40°C
- Adjustable tilt angle of 60°
- · Suitable for switching by PIR, Microwave or Photocell

Neutral White

	36W	44W
	RRC03645-01	RRC04445-01
Comparable to:	50W	70W
Total Power (W):	36.5	45.3
Total Light Output (lm):	3,430	4,250
Efficacy (lm/cctW):	94	94
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	1,500	1,950
Beam Angle (deg):	90	90
CCT (K):	4500	4500
CRI:	85	85
IP:	20	20
Power Factor:	0.95	0.95
Cut-out (mm):	130 x 220	130 x 220
Length (mm):	250	250
Width (mm):	150	150
Depth (mm):	130	130
Box Qty:	1	1
Weight (kg):	1.5	1.6



WILSON LED WALL WASHER



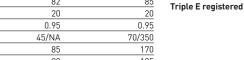


WILSON LED circular wall washer

- · Suitable for use in bars, clubs, retail, showrooms, exhibition centres, museums
- · Die cast aluminium housing with toughened glass
- · High impact rating of IK08
- Wide operating ambient temperature range of -20°C to +40°C
- 35W version incorporates fast-fix driver feature for ease of installation
- 13W has adjustable tilt of 45°, 35W version adjustable tilt angle of 70° and swivel of 350°
- · Suitable for switching by PIR, Microwave or Photocell

Neutral White

	13W	35W
	RWL01340-01	RWL03540-01
Comparable to:	20W	50W
Total Power (W):	12.7	35 .2
Total Light Output (lm):	1,050	3,220
Efficacy (lm/cctW):	83	91
Lifetime (hrs):	50,000	50,000
Lux at 1m (lux):	1,070	2,250
Beam Angle (deg):	60	70
CCT (K):	4000	4000
CRI:	82	85
IP:	20	20
Power Factor:	0.95	0.95
Tilt/Swivel (deg):	45/NA	70/350
Cut-out (mm):	85	170
Diameter (mm:	98	195
Depth (mm):	70	175
Box Qty:	1	1
Weight (kg):	0.5	1.5



LIA verified

	RWL01340-01	RWL03540-01
Cut-out (mm)	85	170
Diameter (mm)	98	195
Depth (mm)	70	175







- TROY LED TRACK PROJECTOR 242 TREK LED TRACK PROJECTOR 244 TRAM LED TRACK PROJECTOR 246 PETITE SINGLE CIRCUIT SPOT & KIT
- 247 ACORN SINGLE CIRCUIT SPOT & KIT
- 248 MAINS VOLTAGE TRACK
- 248 ACCESSORIES

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TROY LED TRACK PROJECTOR

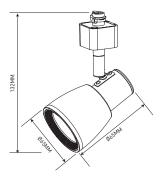




TROY 10W LED track spot, IP20, 4000K

- Suitable for use in shops, hotels, pubs, restaurants, entertainment venues, showrooms, museum displays and many rooms in the home
- · Comparable to 20W metal halide fittings
- Suitable for use with ROBUS single circuit tracks
- Die cast aluminium housing with polycarbonate reflector
- 30,000 hour rated LED life
- High efficacy of 99lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- · Adjustable rotation angle of 350° and tilt of 90°

White	RTY1040-01
Black	RTY1040-04
Comparable to:	20W metal halide
Total Power (W):	9.4
Total Light Output (lm):	930
Efficacy (lm / cctW):	99
Lifetime (hrs):	30,000
Illuminance at 1m (lx):	1,420
Beam Angle (deg):	40
CCT (K):	4000
CRI:	80
IP:	20
Power Factor:	0.9
Length (mm):	97
Width (mm):	65
Height (mm):	132
Weight (kg):	0.27







TREK LED TRACK PROJECTOR



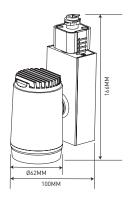




TREK 12W LED track spot, IP20, 4000K

- Suitable for use in shops, hotels, pubs, restaurants, entertainment venues, showrooms, museum displays and many rooms in the home
- · Comparable to 25W metal halide fittings
- Suitable for use with ROBUS single circuit tracks
- Die cast aluminium and polycarbonate housing with polycarbonate reflector
- 30,000 hour rated LED life
- High efficacy of 106lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- · Adjustable rotation angle of 350° and tilt of 180°

White	RTK1240-01
Black	RTK1240-04
Comparable to:	25W metal halide
Total Power (W):	10.9
Total Light Output (lm):	1,150
Efficacy (lm / cctW):	106
Lifetime (hrs):	30,000
Illuminance at 1m (lx):	2,630
Beam Angle (deg):	38
CCT (K):	4000
CRI (Ra):	80
IP:	20
Power Factor:	0.95
Length (mm):	100
Width (mm):	62
Height (mm):	166
Weight (kg):	0.42







TRAM LED TRACK PROJECTOR







TRAM 25/35W LED track spot, dimmable, IP20, 4000K

- Suitable for use in shops, hotels, pubs, restaurants, entertainment venues, showrooms, museum displays and many rooms in the home
- Comparable to 35W/50W metal halide fittings
- · Suitable for use with ROBUS single circuit tracks
- Die cast aluminium and polycarbonate housing with polycarbonate reflector
- 30,000 hour rated LED life

- High efficacy of 89-90lm/W
- Wide operating ambient temperature range of -20°C to +40°C
- · Adjustable rotation angle of 350° and tilt of 210°
- Dimmable range of 10-100%, adjustable via knob on driver's housing. Compatibility list available on the website

White	RTM2540-01	RTM3540-01
Black	RTM2540-04	RTM3540-04
Comparable to:	35W metal halide	50W metal halide
Total Power (W):	25	34.1
Total Light Output (lm):	2,220	3,060
Efficacy (lm / cctW):	89	90
Lifetime (hrs):	30,000	30,000
Illuminance at 1m (lx):	5,490	7,580
Beam Angle (deg):	38	38
CCT (K):	4000	4000
CRI (Ra):	80	80
IP:	20	20
Power Factor:	0.95	0.95
Length (mm):	146	161
Width (mm):	90	105
Height (mm):	186	190
Weight (kg):	0.79	0.79







PETITE SINGLE CIRCUIT SPOTS & KITS





PETITE track kit

- Suitable for use in shops, hotels, pubs, restaurants, entertainment venues, showrooms, museum displays and many rooms in the home
- Track pack comprises 1m track, live and dead ends and 3 x GU/GZ10 die-cast aluminium spotlights
- Suitable for use with GU10 halogen and LED lamps
- Die cast aluminium housing
- Polycarbonate track adaptor
- 90° adjustable tilt and 350° rotation angle
- Wide ambient temperature range of -20°C to +40°C

White	RS806GZ3-01
B Chrome	RS806GZ3-13
IP:	20
Cap Type:	GU10
Length (mm):	1,000
Width (mm):	35
Height (mm):	160
Box Qty:	1
Weight (kg):	1.7



PETITE 50W track spotlight

- Suitable for use in shops, hotels, pubs, restaurants, entertainment venues, showrooms, museum displays and many rooms in the home
- Suitable for use with GU10 halogen and LED lamps
- Die cast aluminium housing
- Polycarbonate track adaptor
- 90° adjustable tilt and 350° rotation angle
- Wide ambient temperature range of -20°C to +40°C

RS806GZ-01
RS806GZ-13
50
20
GU10
6
120
52
45
18
0.4



ACORN SINGLE CIRCUIT SPOTS & KITS





ACORN track kit

- Suitable for use in shops, hotels, pubs, restaurants, entertainment venues, showrooms, museum displays and many rooms in the home
- Suitable for use with GU10 halogen and LED lamps
- · Die cast aluminium housing
- Polycarbonate track adaptor
- 90° adjustable tilt and 350° rotation angle
- Wide ambient temperature range of -20°C to +40°C

White	R888GZ3-01
B Chrome	R888GZ3-13
IP:	20
Cap Type:	GU10
Length (mm):	1,000
Width (mm):	35
Height (mm):	160
Box Qty:	1
Weight (kg):	1.6



ACORN 50W track spotlight

- Suitable for use in shops, hotels, pubs, restaurants, entertainment venues, showrooms, museum displays and many rooms in the home
- · Suitable for use with GU10 halogen and LED lamps
- · Die cast aluminium housing
- Polycarbonate track adaptor
- 90° adjustable tilt and 350° rotation angle
- Wide ambient temperature range of -20°C to +40°C

R888GZ-01
R888GZ-13
50
20
GU10
116
35
130
6
18
0.3



MAINS VOLTAGE TRACK



TRACK single circuit mains 16 amp

- Polyester painted extruded aluminium alloy
- 16 Amp rated conductors for single phase operation (L, N, E)
- . C/w live and dead ends

	1m	2m	3m
White	R1T-01	R2T-01	R3T-01
Black	R1T-04		
B Chrome	R1T-13		
S Silver	R1T-15	R2T-15	R3T-15
Length (mm):	1,000	2,000	3,000
Height (mm):	18	18	18
Width (mm):	35	35	35
Box Qty:	1	1	1
Weight (kg):	0.6	1.2	1.7

ACCESSORIES



L joiner

- Injection moulded plastic power connection and blanking off piece for use with mains voltage track, single phase
- · Accessible screw terminals

White	RL-01
Black	RL-04
S Silver	RL-15
Width (mm):	108
Length (mm):	108
Height (mm):	18



Adaptor

 Injection moulded plastic adaptor with accessible screw terminals for mating fittings to single phase track

White	RTA-01
Black	RTA-04
S Silver	RTA-15
Width (mm):	35
Length (mm):	35
Height (mm):	38

ACCESSORIES



Coupler

- In line connector for single circuit track
- 20mm knock out allows for wiring point into coupler
- · Accessible screw terminals

178
35
RC-15
RC-13
RC-04
RC-01



Live and dead ends

- Power connection constructed from injection moulded plastic
- · Can only be attached from the right side
- · 20mm knock out at rear
- · Accessible screw terminals

White	RLE-01
Black	RLE-04
B Chrome	RLE-13
S Silver	RLE-15
Width (mm):	35
Length (mm):	108
Height (mm):	18



T joiner

- Power connection constructed from injection moulded plastic
- · 20mm knock out at rear
- Accessible screw terminals

RT-01
RT-04
RT-15
108
178
18



252	COMMODORE LED CABINET DOWNLIGHT
253	CAPTAIN LED CABINET DOWNLIGHT
254	ROYAL LED CABINET DOWNLIGHT
255	PRISM LED CABINET DOWNLIGHT
256	SPEAR LED STRIPLIGHT

258 SWORD HF STRIPLIGHT260 SPIRE HF STRIPLIGHT

COMMODORE LED CABINET LIGHT







COMMODORE 2.5W LED mains voltage cabinet light

- Suitable for use in cabinet displays, under or on top of wall cabinets, kitchen kick boards, bedroom wardrobes, reception desk lighting, recessed in stair strings or risers
- LED replacement for 20W Halogen cabinet lights
- No UV or infrared content, ensuring suitability for sensitive display items
- Pressed stainless steel housing with polycarbonate diffuser
- · Can be surface mounted or semi recessed
- · Mains voltage supply with integrated driver
- Complete with 0.3m supply cable

·	Warm White	Neutral White
White	RCD2P530-01	RCD2P540-01
Brushed Chrome	RCD2P530-13	RCD2P540-13
Comparable to:	20W Halogen	20W Halogen
Total Power (W):	2.5	2.5
Total Light Output (lm):	166	166
Efficacy (lm / cctW):	66	66
Lifetime (hrs):	30,000	30,000
Beam Angle (deg):	125	125
CCT (K):	3000	4000
CRI (Ra):	>85	>85
IP:	20	20
Power Factor:	0.9	0.9
Diameter (mm):	71	71
Depth (mm):	30	30
Cut-out (mm):	55	55
Box Qty:	1	1
Weight (kg):	0.13	0.13











CAPTAIN LED CABINET DOWNLIGHTS



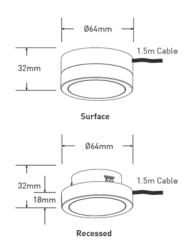


CAPTAIN 2W LED mains voltage cabinet light

- Suitable for use in cabinet displays, under or on top of wall cabinets, kitchen kick boards, bedroom wardrobes, reception desk lighting, recessed in stair strings or risers
- No UV or infra-red content, ensuring suitability for sensitive display items

WW White	R2CLED240-01
WW Satin Silver	R2CLED240-15
CW White	R2CLED240CW-01
CW Satin Silver	R2CLED240CW-15
Comparable to:	10W Halogen
Total Power (W):	1.6
Total Light Output (lm):	83 Warm White
	90 Neutral White
Efficacy (lm / cctW):	52 Warm White
	56 Neutral White
Lifetime (hrs):	20,000
Beam Angle (deg):	120
CCT (K):	3300 Warm White
	4200 Neutral White
IP:	20
Diameter (mm):	64
Depth (mm):	32 Surface
	18 Recessed
Cut-out (mm):	47
Box Qty:	1
Weight (kg):	0.1

- Fully polycarbonate construction
- Can be surface mounted or semi recessed remove outer cowl for semi recessed option
- · Mains voltage supply with integrated driver
- Complete with 1.5m supply cable













ROYAL LED CABINET DOWNLIGHT





ROYAL 2.5W LED mains voltage cabinet light

- Suitable for use in cabinet displays, under or on top of wall cabinets, kitchen kick boards, bedroom wardrobes, reception desk lighting, recessed in stair strings or risers
- LED replacement for 20W Halogen cabinet lights
- No UV or infrared content, ensuring suitability for sensitive display items
- Pressed stainless steel housing with polycarbonate diffuser
- · Can be surface mounted or semi recessed
- · Mains voltage supply with integrated driver
- Complete with 0.3m supply cable

Warm White	Neutral White
RYA2P530-13	RYA2P540-13
20W Halogen	20W Halogen
2.5	2.5
166	166
66	66
30,000	30,000
125	125
3000	4000
>85	>85
20	20
0.9	0.9
124	124
45	45
125	125
1	1
0.15	0.15
	RYA2P530-13 20W Halogen 2.5 166 66 30,000 125 3000 >85 20 0.9 124 45 125 1













PRISM LED CABINET DOWNLIGHT

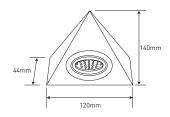


PRISM LED mains voltage cabinet light

- Suitable for use in cabinet displays, under or on top of wall cabinets, kitchen kick boards, bedroom wardrobes, reception desk lighting, recessed in stair strings or risers
- No UV or infra-red content, ensuring suitability for sensitive display items
- Pressed stainless steel housing with polycarbonate diffuser
- Mains voltage supply with integrated driver
- · Complete with 1.5m supply cable

WW B Chrome	R3011LED240-13
NW B Chrome	R3011LED240CW-13
Comparable to:	10W Halogen
Total Power (W):	2
Total Light Output (lm):	80 Warm White
	95 Neutral White
Efficacy (lm / cctW):	40 Warm White
	48 Neutral White
Lifetime (hrs):	20,000
Beam Angle (deg):	120
CCT (K):	3300 Warm White
	4200 Neutral White
IP:	20
Width (mm):	120
Depth (mm):	44
Height (mm):	140
Box Qty:	10
Weight (kg):	0.3





SPEAR LED STRIPLIGHTS



SPEAR LED linkable striplight

- Suitable for use in cabinet displays, kitchen wall units, workbench lighting, wardrobe lighting, under counter, bed headboard
- Energy savings of up to 50% compared with traditional T4 striplights
- Complete kit includes: fitting with male and female butt connectors; 1850mm plug-in power cord; 600mm linking cables; vertical and horizontal mounting clips
- Link up to 15 fittings using linking cable supplied or by plugging fittings directly together
- Integral LED driver makes a fast and neat installation
- Ultra slim with integral switch. Switch all fittings on with main switch or can be individually switched
- Wide operating ambient temperature range of -20°C to +40°C
- *Note: The SPEAR LED strip light range will be upgraded to CCT selectable versions in Q2 2018. One fitting can either be 3000K or 4000K, selected by a switch on the side of the fitting, all other performance details remain the same.



*CCT selectable versions, 3000/4000K

RLEDSTR3X-01 SPEAR 3W, IP20, 275mm, White RLEDSTR4X-01 SPEAR 4W, IP20, 395mm, White RLEDSTR8X-01 SPEAR 8W, IP20, 520mm, White RLEDSTR10X-01 SPEAR 10W, IP20, 620mm, White RLEDSTR14X-01 SPEAR 14W, IP20, 815mm, White



Warm White

RI	EDSTR3W	RLEDSTR4W	RLEDSTR8W	RLEDSTR10W	RLEDSTR14W
Comparable to:	6W T4	8W T4	16W T4	20W T4	30W T4
Power Consumption (W)	3.4	4.6	6.9	9.4	13.3
Total Light Output (lm):	360	510	750	990	1420
Efficacy (lm/cctW):	106	111	109	105	107
Lifetime (hrs):	30,000	30,000	30,000	30,000	30,000
Lux at 1m (lux):	70	100	140	190	280
Beam Angle (deg):	130	130	130	130	130
CCT (K):	3000	3000	3000	3000	3000
CRI:	80	80	80	80	80
IP:	20	20	20	20	20
Power Factor:	0.5	0.5	0.5	0.5	0.5
Length (mm):	275	395	520	620	815
Width (mm):	25	25	25	25	25
Depth (mm):	43	43	43	43	43
Box Qty:	10	10	10	10	10
Weight (kg):	0.1	0.1	0.2	0.2	0.3

Neutral White

RLED	STR3W-CW	RLEDSTR4W-CW	RLEDSTR8W-CW	RLEDSTR10W-CW	RLEDSTR14W-CW
Comparable to:	6W T4	8W T4	16W T4	20W T4	30W T4
Power Consumption (V	V): 3.3	4.5	6.6	9.3	12.9
Total Light Output (lm)	: 370	530	780	1,060	1,510
Efficacy (lm/cctW):	112	118	118	114	117
Lifetime (hrs):	30,000	30,000	30,000	30,000	30,000
Lux at 1m (lux):	75	110	150	210	300
Beam Angle (deg):	130	130	130	130	130
CCT (K):	4000	4000	4000	4000	4000
CRI:	80	80	80	80	80
IP:	20	20	20	20	20
Power Factor:	0.5	0.5	0.5	0.5	0.5
Length (mm):	275	395	520	620	815
Width (mm):	25	25	25	25	25
Depth (mm):	43	43	43	43	43
Box Qty:	10	10	10	10	10
Weight (kg):	0.1	0.1	0.2	0.2	0.3



KITCHEN & FURNITURE SWORD HF STRIPLIGHTS



SWORD T4 linkable striplight

- C/w 185cm power cord, 60cm linking cable, mounting clips, integral switch and warm white T4 tube
- Up to 6 fittings may be linked together in series, using linking cable supplied or by plugging fittings directly together
- Ultra slim design, extruded plastic body and triphosphor tubes
- Flicker free instant start

	6W	8W	16W	20W	30W
	LSTR6W	LSTR8W	LSTR16W	LSTR20W	LSTR30W
Total Power (W):	6	8	16	20	30
IP:	20	20	20	20	20
Cap Type:	T4	T4	T4	T4	T4
Depth (mm):	36	36	36	36	36
Length (mm):	275	395	520	620	815
Width (mm):	18	18	18	18	18
Box Qty:	10	10	10	10	10
Weight (kg):	0.2	0.3	0.4	0.5	0.8



T4 LAMP

- Triphosphor tube provides higher luminous output than normal fluorescent tubes
- For overall lamp length add 17mm for pins

Warm White 2700K		
Code	W	Length
LFT46	6W	205mm
LFT48	8W	330mm
LFT416	16W	440mm
LFT420	20W	550mm
LFT430	30W	750mm

KITCHEN & FURNITURE SPIRE HF STRIPLIGHTS



SPIRE T5 linkable striplight

- C/w diffuser, power cord, butt connector, 60cm linking cord, integral switch & T5 tube
- Energy saving high frequency electronic control gear, with styrene diffuser
- Up to 6 fittings may be linked together in series, using linking cable supplied or by plugging fittings together using butt connector

	8W	13W	18W	24W
	LT58W	LT513W	LT518W	LT524W
Total Power (W)	8	13	18	24
IP:	20	20	20	20
Cap Type:	T5	T5	T5	T5
Depth (mm):	42	42	42	42
Length (mm):	345	572	640	950
Width (mm):	22	22	22	22
Box Qty:	10	10	10	10
Weight (kg):	0.2	0.4	0.4	0.6



T5 LAMP

- Triphosphor tube provides higher luminous output than normal fluorescent tubes
- For overall lamp length add 13mm for pins

Warm White 2700K		
Code	W	Length
LFT58	8W	286mm
LFT513	13W	516mm
LFT518	18W	585mm
LFT524	24W	895mm





264	VOGUE LED CEILING LIGHT
264	GLOBE CEILING LIGHT
266	SHOWER DOWNLIGHTS
268	DIVA LED OVER MIRROR LIGHT
269	DIVA LED DUAL VOLTAGE SHAVER LIGHT
270	ESTONE SHAVER LIGHT
272	CANON WALL LIGHT
274	TOILET ALARM
275	HAIR DRYER
277	HELM HAND DRYER

CEILING LIGHTS





- Suitable for use in toilets, rest rooms, bathrooms or cloak rooms in domestic, commercial, entertainment or retail premises
- LED replacement for 28W 2D fluorescent fittings
- Polycarbonate base with acrylic diffuser
- · Complete with detachable mounting plate
- · Slim profile
- Wide operating ambient temperature range of -20°C to +40°C
- · Suitable for switching by PIR, Microwave or Photocell

Neutral White

RVG02040-01
16.6
1,570
95
30,000
470
120
4000
80
44
0.9
280
53
1
0.75





GLOBE ceiling light

- Base diameter 100mm
- IP44 suitable for bathrooms and damp areas, sealed lamp compartment ensures lamp is safe from splashes & prevents corrosion of electrical contacts
- · Bakelite resin base
- · Pre-wired terminal block connection
- Porcelain BC lamp holder
- · Triple layer blow moulded opal glass globe
- 75mm flying lead
- Suitable for low energy lamps

60W	100W
R60SB	R100SB
44	44
B22	B22
100	100
145	175
175	210
16	10
0.6	0.8
	R60SB 44 B22 100 145 175 16











SHOWER DOWNLIGHTS





ROBIN SHOWER low voltage 12V downlight

- Recessed downlights with pressed steel body and die cast aluminium front bezel
- Sealed to protect ceiling from moisture ingress

White	RS10165-01
Chrome	RS10165-03
B Chrome	RS10165-13
Total Power (W):	50
IP:	65
Cap Type:	G5.3
Diameter (mm):	83
Depth (mm):	105
Cut-out (mm):	72
Box Qty:	10
Weight (kg):	0.3





ROBIN Shower mains voltage GU10 downlight

- Recessed downlights with pressed steel body and die cast aluminium front bezel
- Sealed to protect ceiling from moisture ingress
- GZ10 lamp holder for 230/240V 50W halogen lamps

White	RS10165GZ-01
Chrome	RS10165GZ-03
B Chrome	RS10165GZ-13
Total Power (W):	50
IP:	65
Сар Туре:	GU10
Diameter (mm):	83
Depth (mm):	105
Cut-out (mm):	72
Box Qty:	10
Weight (kg):	0.3











STARLING GU10 mains voltage shower downlight

- Recessed downlights with pressed steel body and die cast aluminium front bezel
- Sealed to protect ceiling from moisture ingress

GZ10 lamp holder for 230/240V 50W halogen lamps

White	RSF20165-01
Chrome	RSF20165-03
B Chrome	RSF20165-13
Total Power (W):	50
IP:	65
Cap Type:	GU10
Diameter (mm):	83
Depth (mm):	105
Cut-out (mm):	72
Box Qty:	10
Weight (kg):	0.3







DIVA LED OVER MIRROR LIGHT



DIVA LED over mirror light

- Suitable for use in toilets, rest rooms, bathrooms or cloak rooms in domestic, commercial, entertainment or retail premises
- LED replacement for >60W halogen mirror lights
- · Extruded aluminium base, polycarbonate diffuser with ABS chrome-coated end caps
- · On/off switch included on end of the fitting
- · Wide operating ambient temperature range of -20°C to +40°C

	RDA1530-03	RDA2030-03
Comparable to:	60	60
Total Power (W):	15.2	20.8
Total Light Output (lm):	1,190	1,680
Efficacy (lm/cctW):	78	81
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	350	430
Beam Angle (deg):	130	130
CCT (K):	3000	3000
CRI:	80	80
IP:	44	44
Power Factor:	0.5	0.5
Length (mm):	600	900
Width (mm):	53	53
Depth (mm):	65	65
Box Qty:	1	1
Weight (kg):	0.5	0.9

















DIVA LED DUAL VOLTAGE SHAVER LIGHT



DIVA 8W LED Dual Voltage Shaverlight

- · Suitable for use in toilets, rest rooms, bathrooms or cloak rooms in domestic, commercial, entertainment or retail premises
- LED replacement for 60W incandescent mirror lights
- Polycarbonate housing and diffuser
- C/w dual voltage 110V/240V shaver socket and on/off switch
- · Wide operating ambient temperature range of -20°C to +40°C
- · Suitable for switching by PIR, Microwave or Photocell
- · Available in white and chrome

White	RDA0830S-01
Chrome	RDA0830S-03
Comparable to:	60W Incandescent
Total Power (W):	9.6
Total Light Output (lm):	780
Efficacy (lm/cctW):	81
Lifetime (hrs):	30,000
Lux at 1m (lux):	170
Beam Angle (deg):	130
CCT (K):	3000
CRI:	>80
IP:	44
Power Factor:	0.5
Length (mm):	488
Width (mm):	56
Depth (mm):	66
Box Qty:	1
Weight (kg):	0.5















BATHROOM SHAVER LIGHTS



ESTONE 7W LED dual voltage shaver light

- Suitable for use in toilets, rest rooms, bathrooms or cloak rooms in domestic, commercial, entertainment or retail premises
- LED replacement for 60W incandescent mirror lights
- Polycarbonate housing and diffuser

- Dual voltage: 115V & 230V shaver socket
- Wide operating ambient temperature range of -20°C to +40°C
- Suitable for switching by PIR, Microwave or Photocell

White	RSH7LED-01
Chrome	RSH7LED-03
Total Power (W):	7.1
Total Light Output (lm):	410
Efficacy (lm/cctW):	58
Lifetime (hrs):	30,000
Beam Angle (deg):	120
CCT (K):	4000
CRI:	87
IP:	20
Power Factor:	0.6
Length (mm):	490
Height (mm):	60
Depth (mm):	70
Box Qty:	1
Weight (kg):	1.1



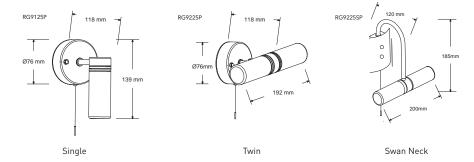


CANON WALL LIGHTS



CANON G9 single/twin/swan neck bathroom wall light

- · Mains voltage
- C/w 1 or 2 x 25W Osram G9 lamps & pull cord
- · Sealed decorative frosted glass enclosed screw-on shades





	Single	Twin	Swan Neck
	RG9125P-03	RG9225P-03	RG9225SP-03
Total Power (W):	25	50	50
IP:	44	44	44
Cap Type:	G9	G9	G9
Diameter (mm):	76	76	N/A
Width (mm):	N/A	192	200
Height (mm):	139	N/A	185
Proj (mm):	118	118	120
Box Qty:	4	4	4
Weight (kg):	0.3	0.5	0.5













TOILET ALARM









TOILET ALARM kit

- · Contains: over-door light and sounder, one toilet reset switch, one main control module, ceiling pull unit with pull cord and disabled WC sticker
- Simply pull cord to activate sound alarm & overdoor light outside room
- System can be extended with 2 additional pull cords or one additional pull cord and sounder
- Pull cord length 275cm
- Monitored 24hr backup battery ensures system works in the event of power failure
- Test facility of alarm sounders and lights provides safety for users
- · Parts also sold separately as accessories

White	RDPTA-01
IP:	20
Box Qty:	4







Spare parts available, codes are as follows: RDPTA indicator RDPTA pull cord RDTPA reset panel



BATHROOM HAIR DRYER



HAIR DRYER, wall mounted

- Automatic cut out after 18mins
- Adjustable temperature setting (40-80°)
- 1,500W heat

- ABS body
- Flexible air nozzle

White	LHD1500-01
Total Power (W):	1,500
IP:	20
Depth (mm):	110
Width (mm):	210
Height (mm):	275
Box Qty:	2
Weight (kg):	2.8





HELM HAND DRYERS

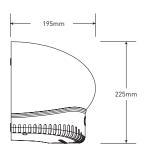


HELM high speed hand dryer

- Warm air
- Up to 50% energy consumption compared to other dryers of similar performance
- · High speed, high efficiency
- Streamlined air duct and nozzle design combine to produce a concentrated stream of high speed air to dry hands in under 10 seconds
- PIR activated. Starts immediately when hands are placed within 15cm of the drying nozzle and stops 1 second after hands are removed ensuring energy is not wasted
- · Aluminium main body
- Noise level = 84dB

White	R1350HSD-01
Satin Silver	R1350HSD-15
Total Power (W):	1,350
IP:	22
Depth (mm):	195
Width (mm):	267
Height (mm):	225
Box Qty:	4
Weight (kg):	3.8







280	DYNAMO LED
281	ORMOND LED
282	BLADE LED
284	FINCH LED TWINSPOT
286	BULKHEADS
291	EMERGENCY PACK FOR PANEL & ETERNITY

EMERGENCY DYNAMO LED



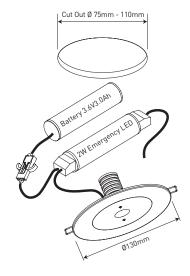
DYNAMO 2W LED non-maintained emergency downlight, recessed

- Suitable for use in offices, public buildings, health centres, hospitals, schools, hotels, pubs, clubs and restaurants, shops and stores
- Complete kit pre-wired with plug & play connectors comprising LED downlight, controller and driver pack, battery pack
- Includes manual-test button and LED status indicator
- Complete with extension bezel allowing mounting in cut outs of 75-110mm
- Provides 3 hour emergency discharge duration
- Maximum spacing of 12m for mounting height of 2.8m
- Emergency spacing details in back section of catalogue

Daylight White

	R2WLEDNME-01
Total Power (W):	1.6
Total Light Output (lm):	200
Lux at 1m (lux):	55
Lifetime (hrs):	30,000
Beam Angle (deg):	150
CCT (K):	6500
CRI:	75
IP:	20
Depth (mm):	21
Diameter (mm):	130
Box Qty:	1
Weight (kg):	0.71





EMERGENCY ORMOND LED



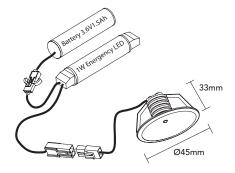
ORMOND LED non-maintained emergency downlight, recessed

- Suitable for use in offices, public buildings, health centres, hospitals, schools, hotels, pubs, clubs and restaurants, shops and stores
- Complete kit pre-wired with plug & play connectors comprising LED downlight, control gear and battery pack
- Includes LED status indicator
- · Provides 3-hour emergency discharge duration

	R1WNME-01
Total Power (W):	1.4
Total Light Output (lm):	120
Illuminance at 1m (lux):	43
Rated Life (hrs):	20,000
Beam Angle (deg):	120
CCT (K):	6500
CRI:	70
IP:	20
Depth (mm):	33
Diameter (mm):	45
Cut-out (mm)	40
Box Qty:	1
Weight (kg):	0.32



- Wide operating ambient temperature range of -10°C to +40°C
- Detailed dimensions: Downlight: Ø45mm x 32mm, Control Gear: Ø27mm x 186mm, Battery Pack: Ø27mm x 143mm
- Emergency spacing details in back section of catalogue



BLADE LED





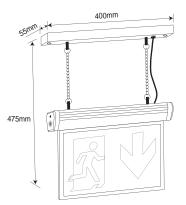
BLADE 4W LED exit light

- Suitable for use in offices, public buildings, hotels, bars & clubs, restaurants, schools, health centres, hospitals
- LED replacement for T4 fluorescent illuminated exit signs
- Maintained
- Exit sign illuminated by 11 LEDs

Satin Silver	RBL4P0E-15
Total Power (W):	4
IP:	20
Power Factor:	0.9
Width (mm):	400
Height (mm):	475
Depth (mm):	55
Box Qty:	6
Weight (kg):	1.2



- NiCad battery providing 3 hour emergency discharge duration
- · Max viewing distance of 48m
- Surface mounted
- · Complete with 6 legends set





FINCH LED TWINSPOT



FINCH 5W LED twinspot

- Suitable for use in industrial units, workshops, warehouses, showrooms, shops and stores, schools, gymnasiums, health centres, hospitals, churches
- LED replacement for 2x20W halogen twin spots
- Fully polycarbonate IP20 housing
- 20mm conduit entries in side and back key hole mounting slots
 • 3 hour emergency operation
- Non-maintained
- . C/w LED status indicators

White	RFN00560I20-01
Total Power (W):	4.2
Total Light Output (lm):	440
Beam Angle (deg):	60
Lux at 1m (lux):	90
Lifetime (hrs):	30,000
CCT (K):	6000
CRI:	70
IP:	20
Power Factor:	0.9
Width (mm):	285
Height (mm):	305
Depth (mm):	60
Box Qty:	1
Weight (kg):	1.1





BULKHEADS



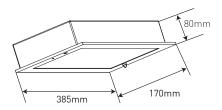


8W LED maintained emergency bulkhead

- Suitable for use in offices, public buildings, hotels, bars & clubs, restaurants, schools, health centres, hospitals
- · Fully flush mounted
- Pressed steel durable housing with polycarbonate diffuser
- C/w white and chrome bezels
- 20mm pre-formed knockouts in rear and all 4 sides
- Large 4 terminal connector block allow loop-in/ loop-out
- NiCad battery providing 3 hour emergency discharge duration
- Complete with green LED charging indicator
- Emergency spacing details in back section of catalogue

White & B Chrome	R8MLED3-01+13
Total Power (W):	8
IP:	20
Cap Type:	G5
Depth (mm):	60
Length (mm):	385
Width (mm):	170
Cut-out (mm):	375 x 150
Box Qty:	4
Weight (kg):	1.6





BULKHEADS





UNIVERSAL LED, self-test, maintained

- Suitable for use in offices, public buildings, hotels, bars & clubs, restaurants, schools, health centres, hospitals
- · LED replacement for T5 emergency bulkheads
- · No UV or IR content
- · Surface or semi-recessed mounted
- Fully polycarbonate housing
- Automatic self-test function: once a week test lasts 15mins. Twice a year – test lasts 3 hours
- · Complete with 4 piece legend set
- Large 4 terminal connector block
- Complete with NiCad battery providing excess of 3 hour emergency discharge duration
- Green, amber and red LED's indicating battery, LED output, charge and test status of the unit
- Emergency spacing details in back section of catalogue

	R8MUSTLED-01
Total Power (W):	6.9
Total Light Output (l	m): 260 standard
	140 emergency
Efficacy (lm/cctW):	38
Lux at 1m (lux):	65
CCT (K):	4000
IP:	20
Power Factor:	0.5
Cap Type:	LED
Depth (mm):	80
Length (mm):	350
Height (mm):	175
Cut-out (mm):	275 x 130
Box Qty:	6
Weight (kg):	1.0



UNIVERSAL EMERGENCY dropped legend

- For use with R8MUSTLED
- · Polycarbonate body, acrylic sign
- · Spring retained drop down sign
- C/w 8 piece legend set
- Mounted flexible clips
- Emergency spacing details in back section of catalogue

Satin Silver	R8MULK-15
Length (mm):	350
Box Qty:	6



EMERGENCY BULKHEADS



EMERGENCY LED BULKHEAD, maintained

- Suitable for use in offices, public buildings, hotels, bars & clubs, restaurants, schools, health centres, hospitals
- LED replacement for T5 emergency bulkheads
- Fully polycarbonate construction
- High impact rating of IK07
- Hinged gear tray allowing for ease of wiring and installation
- R8MLEDTS-01 complete with test switch on the side of the fitting
- Only 3W in maintained mode
- No UV or IR content
- 3 hour emergency operation
- Double sided exit accessory available allowing removal of existing diffuser and conversion to double sided exit (R8MLEDDE)
- Emergency spacing details for R8MLED in back section of catalogue

	Standard	Test Switch
	R8MLED-01	R8MLEDTS-01
Total Power (W):	3.7	2.6
Total Light Output (lm):	140 standard	60
	110 emergency	N/A
Lux at 1m (lux):	45 standard	25
	38 emergency	N/A
CCT (K):	6500	6000
CRI:	85	>65
IP:	65	65
Power Factor:	0.55	0.55
Impact Rating (IK):	07	07
Length (mm):	352	352
Depth (mm):	66	57
Width (mm):	110	110
Weight (kg):	0.6	0.6



EMERGENCY BULKHEADS





BULKHEAD accessory for R8MLED

· Comes with running man 'down' legend

	R8MLEDDE
IP:	65
Length (mm):	350
Depth (mm):	120
Width (mm):	200
Box Qty:	1
Weight (kg):	1



BULKHEAD legend kit

• For use with R8MLED / R8MLEDTS-01

	RBULKLEG
Length (mm):	265
Width (mm):	219
Box Qty:	10



Recessed box for R8MLED

• For use with R8MLED / R8MLEDTS-01

	R8MLEDRSB-01
Length (mm):	161
Depth (mm):	35
Width (mm):	391
Weight (kg):	0.6

EMERGENCY BULKHEADS





EXIT BOX 3W LED maintained

- Suitable for use in offices, public buildings, hotels, bars & clubs, restaurants, schools, health centres, hospitals
- LED replacement for T5 emergency exit signs
- Pressed steel housing with polycarbonate diffuser
- C/w running man with arrow facing up legend
- · Max viewing distance of 30m
- Left, right and up running man legend panels available (RCXR3, RCXL3 and RCXU2)
- · No UV or IR content
- 3 hour emergency operation
- Only 3W in maintained mode
- Can be wired as maintained and non-maintained fitting

White	R8EMLED-01
Total Power (W):	3.7
Total Light Output (lm):	40
IP:	20
Width (mm):	390
Depth (mm):	60
Length (mm):	190
Weight (kg):	1.4



Spare running man legend for R8EMLED

	Direction
RCXR3	Right
RCXL3	Left
RCXU2	Up
Box Qty:	1

Note: All Emergency Legends have been updated in accordance with ISO 7010

EMERGENCY PACK FOR PANEL & ETERNITY





3 hour Emergency Pack, with Swift Connector for use with Space & Atmos Panels & Eternity downlights

- Suitable for use with SPACE and ATMOS LED panels and ETERNITY LED downlights
- Completely plug & play with SPACE and ETERNITY
- · Low power consumption

- Provides 3-hour emergency discharge duration
- Wide operating temperature range of -10°C to +40°C

	R3EMPK-PSU
Total Power (W):	3
IP:	20
Power Factor (PF):	0.9
Length (mm):	160
Width (mm):	38
Depth (mm):	28
Box Qty:	1
Weight (kg):	0.23
Charging Time (hrs):	24
Discharge Time (hrs):	3





CONVERSION KITS





UNIVERSAL emergency gear tray

- · Universal Tray for 2D Fittings
- · 3 hour maintained or non-maintained
- External 1 amp fuse on permanent supply
- · High frequency
- · Low energy
- · Easy mounting
- · Multi-fixing points to adapt to most 2D fittings
- · Centre fixing points 228mm · Extension brackets included for extra
- mounting points
- · Not to be used in IP66 fittings indoors
- · Not suitable for locations with ambient air temperature above 25°C
- · Emergency spacing details in back section of catalogue

	R282DEPK-CU
Total Power (W):	28
IP:	20
Cap Type:	GR10Q
Depth (mm):	36
Length (mm):	240
(Bth) Width (mm):	165
Box Qty:	4
Weight (kg):	1.2



EMERGENCY CONVERSION KIT 1X3W

- . 3W LED conversion kit, can be used in standard fittings. As the control gear and battery are slim, it also suits shallow profile fittings
- . C/w 3-cell battery and green charging indicator
- 3 hour emergency operation
- · Push and lock LED connection for easy installation
- · Can also be used as an alternative to normal
- · Emergency spacing details in back section of catalogue

	R13LEDME-CU2
Total Power (W):	3
Total Light Output (lm):	200
IP:	20
Diameter (mm):	28
Height (mm):	23
Cut-out (mm):	17
Box Qty:	1
Weight (kg):	0.1









CONVERSION PARTS







Batteries

Code	Description	
NCD24SS	2 cell 2.4v 4Ah Ni-Cd Stick used for example in Exit Signs	
NCD34SS	3 cell 3.6v 4Ah Ni-Cd Stick used for example in Exit Signs	
NCD44SS	R4 cell 4.8v 4Ah Ni-Cd Stick used for example in PL Remote Packs	
RNC4B	4 cell 4.8v 4Ah Ni-Cd Bulk used for example in 28W 2D	
RNC5D	5 cell 6v 4Ah Ni-Cd battery (2&3 cell)	
RNC6D	6 cell 7.2v 4Ah Ni-Cd battery	



Modules/Chargers/Inverters

Code	Description
HRN/4	T8 and PL Emergency Module
	3hr duration, operates lamps from 18/36/58W T8 lamps and 13/18/26W PLC
HRN/T5	T5 Emergency Module
	3hr duration, operates lamps from 24/35/49/54W T5 lamps
NED/3/240	240V

Sensors

Code	Description
HC009-KD	2 part microwave sensor
	Sensor operates 10/30/90 seconds; 6/20/30m detection area. 10/25/50/75/100% can be customised. Mounting height 6m.



CONVERSION PARTS



Ballasts

Code	Description
10097544	1x18W/2x18W PLC HF Ballast
	240V High Frequency Ballast for 1x18W
	or 2x18W downlights
10097546	1x26W/2x26W PLC HF Ballast
	240V High Frequency Ballast for 1x26W
	or 2x26W downlights



PLC emergency packs

 All of 3hr duration including emergency module, battery, HF ballast, lamp holder, LED indicator and remote box.

Description
1x18W HF emergency remote pack
2x18W HF emergency remote pack
1x26W HF emergency remote pack
2x26W HF emergency remote pack





Code	Description
R900MM-CU	5W 900mm strip
	3hr duration, can be retrofit to
	convert fittings to emergency
R13LEDME-CU2	3W LED spot
	3hr duration, can be retrofit to
	convert fittings to emergency





LAMPS

- 298 DIAMOND LED
- 300 EMERALD LED
- 302 ECO-GLS LED
- 303 ECO-CANDLE LED
- 305 2D FLUORESCENT

LAMPS

DIAMOND LED LAMPS

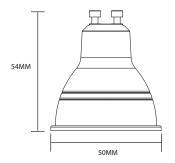




SMD AFFORDABILITY

The DIAMOND range of LED lamps utilises SMD technology. SMD's (Surface Mounted Devices) are a recent generation of LED lighting and are largely responsible for the adoption of LED as a viable alternative to many traditional light sources.

- Suitable for use in shop displays, retail showrooms, hotel function rooms & receptions, bars & restaurants, dining room, kitchen, bedrooms in the home
- · Suitable for use in fire rated downlights
- 38° beam angle
- · No UV or infra-red content
- Die cast aluminium, plastic coated housing and polycarbonate lens
- GU10 cap type
- High quality, high brightness SMD LEDs providing high efficacy of 73-87lm/W
- Wide operating ambient temperature range of -10°C to +30°C
- 5W LED version is dimmable with selected leading and trailing edge dimmers
- Dimmer compatibility list available on website



DIAMOND 4.5W non-dimmable

	RDM4P530	RDM4P540
Comparable to (halogen):	50W	50W
Total Power (W):	4.8	4.5
Total Light Output (lm):	350	370
Efficacy (lm/cctW):	73	82
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	600	650
Beam Angle (deg):	38	38
CCT (K):	3000	4000
CRI:	80	80
IP:	20	20
Power Factor:	0.5	0.5
Height (mm):	54	54
Diameter (mm):	50	50
Box Qty:	1	1
Weight (kg):	0.1	0.1



DIAMOND 5W dimmable

	RDM5P030DU	RDM5P040DU
Comparable to (halogen):	50W	50W
Total Power (W):	5.3	5.3
Total Light Output (lm):	420	460
Efficacy (lm/cctW):	79	87
Lifetime (hrs):	30,000	30,000
Lux at 1m (lux):	675	700
Beam Angle (deg):	38	38
CCT (K):	3000	4000
CRI:	80	80
IP:	20	20
Power Factor:	0.5	0.5
Height (mm):	54	54
Diameter (mm):	50	50
Box Qty:	1	1
Weight (kg):	0.1	0.1



EMERALD LED LAMPS



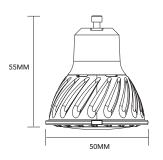


COB QUALITY

The EMERALD range of LED lamps utilises chip-on-board (COB) technology to provide energy efficient and long life solutions to replace inefficient short life halogen lamps. COB LED's produce more light and less heat, inevitably having a longer life with less performance depreciation than a single larger LED of the same input power.

- Suitable for use in shop displays, retail showrooms, hotel function rooms & receptions, bars & restaurants, dining room, kitchen, bedrooms in the home
- · Suitable for use in fire rated downlights
- · 38° beam angle
- · No UV or infra-red content
- · Die cast aluminium, plastic coated housing and polycarbonate lens
- GU10 cap type
- High quality, high brightness SMD LEDs providing high efficacy of 80-91lm/W
- Wide operating ambient temperature range of -10°C to +30°C
- 5W LED version is dimmable with selected leading and trailing edge dimmers
- · Dimmer compatibility list available on website





EMERALD 3.5W, 4.5W non-dimmable

	Warm White	Neutral White	Warm White	Neutral White
	3.5W	3.5W	4.5W	4.5W
	R35GU10-WW	R35GU10-CW	R45GU10-WW	R45GU10-CW
Comparable to (halogen):	35W	35W	50W	50W
Power Consumption (W):	3.5	3.5	4.5	4.5
Total Light Output (lm):	300	320	380	400
Efficacy (lm/cctW):	86	91	84	89
Lifetime (hrs):	30,000	30,000	30,000	30,000
Lux at 1m (lux):	580	650	730	750
Beam Angle (deg):	38	38	38	38
CCT (K):	3000	4000	3000	4000
CRI:	80	80	80	80
IP:	20	20	20	20
Power Factor:	0.5	0.5	0.5	0.5
Length (mm):	55	55	55	55
Diameter (mm):	50	50	50	50
Box Qty:	10	10	10	10
Cap Type:	GU10	GU10	GU10	GU10
Weight (kg):	0.3	0.3	0.3	0.3



EMERALD 5W dimmable

	Warm White	Warm White	Neutral White
	5W	5W	5W
	R50GU10D-27	R50GU10D-WW	R50GU10D-CW
Comparable to (halogen):	50W	50W	50W
Power Consumption (W):	4.9	4.9	4.9
Total Light Output (lm):	400	390	420
Efficacy (lm/cctW):	80	81	86
Lifetime (hrs):	30,000	30,000	30,000
Lux at 1m (lux):	750	750	780
Beam Angle (deg):	38	38	38
CCT (K):	2700	3000	4000
CRI:	80	80	80
IP:	20	20	20
Power Factor:	0.5	0.5	0.5
Length (mm):	55	55	55
Diameter (mm):	50	50	50
Box Qty:	10	10	10
Cap Type:	GU10	GU10	GU10
Weight (kg):	0.3	0.3	0.3



LIA verified

ECO-GLS LED LAMPS

ECO-GLS 6.5W, 10W, 12W LED lamps

- · Suitable for use in shop window displays, bars & restaurants, commercial office buildings, hotel function rooms & receptions, dining rooms, kitchen, bedrooms in the home
- LED replacement for 40-100W incandescent lamps
- · Die cast aluminium, plastic coated housing with polycarbonate diffuser
- Wide operating ambient temperature range of -20°C to +40°C
- Dimmable versions compatible with selected leading and trailing edge dimmers. Compatibility list available on website



Dimmable

	REG01027DUE27	REG01027DUB22	REG01227DUE27	REG01227DUB22
Warm White	10W E27	10W B22	12W E27	12W B22
Total Power (W):	10.8	10.8	11	11
Total Light Output (lm)	: 860	860	970	970
Efficacy (lm/cctW):	80	80	89	89
Lifetime (hrs):	25,000	25,000	25,000	25,000
Lux at 1m (lux):	80	80	100	100
Beam Angle (deg):	230	230	230	230
CCT (K):	2700	2700	2700	2700
CRI:	80	80	80	80
Power Factor:	0.8	0.8	0.8	0.8
Cap Type:	E27	B22	E27	B22
Length (mm):	110	110	125	125
Diameter (mm):	60	60	60	60
Box Qty:	6	6	6	6
Weight (kg):	0.1	0.1	0.2	0.2

















Non-Dimmable

	REG6P527E27	REG6P527B22	REG01227E27	REG01227B22
Warm White	6.5W E27	6.5W B22	12W E27	12W B22
Total Power (W):	6.1	6.1	12.5	12.5
Total Light Output (lm):	450	450	1160	1160
Efficacy (lm/cctW):	74	74	93	93
Lifetime (hrs):	25,000	25,000	25,000	25,000
Lux at 1m (lux):	50	50	100	100
Beam Angle (deg):	230	230	230	230
CCT (K):	2700	2700	2700	2700
CRI:	80	80	80	80
Power Factor:	0.5	0.5	0.6	0.6
Cap Type:	E27	B22	E27	B22
Length (mm):	110	110	120	120
Diameter (mm):	60	60	60	60
Box Qty:	6	6	6	6
Weight (kg):	0.1	0.1	0.1	0.1















ECO-CANDLE LED LAMPS

ECO-CANDLE 4W, 4.5W LED lamps

- · Suitable for use in shop window displays, bars & restaurants, commercial office buildings, hotel function rooms & receptions, dining rooms, kitchen, bedrooms in the home
- · LED replacement for 25W incandescent lamps
- · Unique inverted conical lens mimics the beam pattern of traditional candle
- · Die cast aluminium, plastic coated housing with polycarbonate diffuser
- Wide operating ambient temperature range of -20°C to +40°C
- Dimmable versions compatible with selected leading and trailing edge dimmers. Compatibility list available on website



Dimmable

	REC4P527DUE14	REC4P527DUE27	REC4P527DUB22	REC4P527DUB15
Warm White	4.5W E14	4.5W E27	4.5W B22	4.5W B15
Total Power (W):	4.7	4.7	4.7	4.7
Total Light Output (Ir	n): 320	320	320	320
Efficacy (lm/cctW):	68	68	68	68
Lifetime (hrs):	25,000	25,000	25,000	25,000
Lux at 1m (lux):	25	25	25	25
Beam Angle (deg):	230	230	230	260
CCT (K):	2700	2700	2700	2700
CRI:	80	80	80	80
Power Factor:	0.5	0.5	0.5	>0.5
Cap Type:	E14	E27	B22	B22
Length (mm):	100	100	100	100
Diameter (mm):	36	36	36	36
Box Qty:	8	8	8	8
Weight (kg):	0.1	0.1	0.1	0.1















Non-Dimmable

	REC4P527E14	REC4P527E27	REC4P527B22	REC4P527B15
Warm White	4W E14	4W E27	4W B22	4W B15
Total Power (W):	3.9	3.9	3.9	3.9
Total Light Output (lm):	260	260	260	260
Efficacy (lm/cctW):	67	67	67	67
Lifetime (hrs):	25,000	25,000	25,000	25,000
Lux at 1m (lux):	25	25	25	25
Beam Angle (deg):	230	230	230	230
CCT (K):	2700	2700	2700	2700
CRI:	80	80	80	80
Power Factor:	0.5	0.5	0.5	>0.5
Cap Type:	E14	E27	B22	B22
Length (mm):	98	98	98	98
Diameter (mm):	36	36	36	36
Box Qty:	8	8	8	8
Weight (kg):	0.1	0.1	0.1	0.1

















LAMPS

2D FLUORESCENT



2D Fluorescent lamps

- CCT 3500K
- 10,000 hour average rated LED life
- Non dimmable

L16W235	135mm	16W 2 Pin
L16W435	135mm	16W 4 Pin
L28W235	200mm	28W 2 Pin
L28W435	200mm	28W 4 Pin
L38W435	200mm	38W 4 Pin
Box Qty:		10
Cap Type:		2 Pin: GR8
		4 Pin: GR10a







- 308 INTERNAL PIRS
- 313 EXTERNAL PIRS
- 318 RADAR MICROWAVE SENSOR
- 320 DAYLIGHT HARVEST SENSOR
- 322 LED GRID DIMMER
- 323 UNI-GRID DIMMER
- 324 ELECTRONIC TRANSFORMERS
- 326 SWIFT CONNECTOR

INTERNAL PIRS





PROTON 360° PIR with easy access controls

- Passive infra red ensures light is switched on when sensor detects movement of heat, switched off when area is vacated. Minimises false / unwanted triggering
- · Manual over ride with automatic reset after 8 hours
- Large terminals accept 2 x 1.5mm² conductors in each terminal. Facility for loop in loop out
- Earth terminal included
- 3 wire multiple sensors can be wired in parallel
- Easy access to adjust time and lux controls once PIR installed
- High load contact rating, allows numerous fittings to be switched
- · No minimum load requirements
- Complies with requirements of the Energy Technology Criteria List. Enhanced Capital Allowances may be claimed on the cost of the luminaires, installation and transport to site

	RPR360PIRR-01
Detection Area:	360°
Motion Detection Range:	6m diameter at 2.8M
Loading:	Max 400W fluorescent
	Max 400W LED
	Max 800W incandescent
Time Settings:	10 seconds to 15 minutes adjustable
Lux Settings:	3-2,000lx
IP:	20
Diameter (mm):	80
Depth (mm):	78
Cut-out (mm):	75
Box Qty:	1
Weight (kg):	0.11





ECA Eligible

INTERNAL PIRS





Proton 360° with shield accessory

PROTON 360° PIR with flush front

- Passive infra red ensures light is switched on when sensor detects movement of heat, switched off when area is vacated. Minimises false / unwanted triggering
- · Manual over ride with automatic reset after 8 hours
- Large terminals accept 2 x 1.5mm² conductors in each terminal. Facility for loop in loop out
- · Earth terminal included

- 3 wire multiple sensors can be wired in parallel
- Unobtrusive flush face design
- High load contact rating, allows numerous fittings to be switched
- · No minimum load requirements
- Complete with accessory shield to narrow beam angle

	RPR360PIRF-01
Detection Area:	360°
Motion Detection Range:	5m diameter at 2.8M
Loading:	Max 300W fluorescent
	Max 300W LED
	Max 1,200W incandescent
Time Settings:	10 seconds to 15 minutes adjustable
Lux Settings:	3-2,000lx
IP:	20
Diameter (mm):	76
Depth (mm):	66
Cut-out (mm):	69
Box Qty:	1
Weight (kg):	0.1







ECA Eligible

INTERNAL PIRS





UNIVERSAL 360° PIR Presence Detector

- Suitable for both surface and recessed indoor applications
- Injection moulded ABS body providing high impact resistance of IK10
- · Plug in terminal block and sensor module
- Large terminals accept 2 x 1.5mm² conductors in each terminal; facility to loop in/loop out to parallel sensors or multiple fittings
- Passive infra-red; ensures light is switched on when sensor detects movement of heat, therefore lighting is switched off when the area is vacated and minimize false/unwanted triggering
- Adjustable passive photocell; inhibits switching where natural light is sufficient
- High load contact rating; allows numerous fittings to be switched
- 3 wire- multiple sensors can be wired in parallel
- · No minimum load requirements

Surface /Recessed	RU360-01
Detection Area:	360°
Motion Detection Range:	10m diameter at 2.8m
Occupancy Detection Range:	6m diameter at 2.8m
Loading:	Max 600W fluorescent Max 300W LED Max 2,000W incandescent
Time Settings:	10 seconds to 40 minutes adjustable
Lux Settings:	10-2000lx
IP:	20
Diameter (mm):	106
Depth (mm):	57/66
Cut-out (mm):	84
Box Qty:	1
Weight (kg):	0.2





ECA Eligible

INTERNAL PIRS



MOTION DETECTOR 360°, recessed

- · Suitable for recessed indoor applications
- Injection moulded ABS body providing high impact resistance of IK10
- Clear terminal cover, integral clamp and large mains terminals for 2 x 1.5mm² conductors
- Terminations are safe and visible and enables loop-in/loop-out for supply to other sensors
- Passive infra-red; ensures light is switched on when sensor detects movement of heat, therefore lighting is switched off when the area is vacated and minimize false/unwanted triggering
- 3 wire- multiple sensors can be wired in parallel
- · No minimum load requirements
- Adjustable passive photocell; inhibits switching where natural light is sufficient

	RR360-01
Detection Area:	360°
Motion Detection Range:	9m diameter at 2.8m
Loading:	Max 600W fluorescent
	Max 300W LED
	Max 2,000W incandescent
Time Settings:	5 Seconds to 15 minutes adjustable
Lux Settings:	2-2000lx
IP:	20
Diameter (mm):	75
Depth (mm):	60
Cut-out (mm):	62
Box Qty:	10
Weight (kg):	0.1







INTERNAL PIRS



MOTION DETECTOR 360°, surface

- · Suitable for surface applications
- Injection moulded ABS body providing high impact resistance of IK10
- Rear and side entry knockouts, integral cable clamp and large mains terminals for 2 x 1.5mm² conductors
- Large terminals accept 2 x 1.5mm² conductors in each terminal; facility to loop in/loop out to parallel sensors or multiple fittings
- Adjustable passive photocell; inhibits switching where natural light is sufficient
- Passive infra-red; ensures light is switched on when sensor detects movement of heat, therefore lighting is switched off when the area is vacated and minimize false/unwanted triggering
- High load contact rating; allows numerous fittings to be switched
- 3 wire- multiple sensors can be wired in parallel
- · No minimum load requirements

White	R360N-01
Detection Area:	360°
Motion Detection Range:	9m diameter at 2.8m
Loading:	Max 300W fluorescent
	Max 150W LED
	Max 1,000W incandescent
Time Settings:	5 seconds to 15 minutes adjustable
Lux Settings:	2-2000lx
IP:	20
Diameter (mm):	110
Depth (mm):	40
Projection (mm):	45
Box Qty:	10
Weight (kg):	0.2





ECA Eligible

EXTERNAL PIRS





MOTION DETECTOR 180°

- Suitable for surface indoor and outdoor sheltered applications
- · Weatherproof housing
- Injection moulded ABS body providing high impact resistance
- Manual override facility with automatic reset after 8hrs
- High load contact rating allows numerous fittings to be switched
- Suitable for loop-in/loop-out to parallel sensor or multiple fittings
- · No minimum load requirements
- 3 wire- multiple sensors can be wired in parallel

White	R180-01
Black	R180-04
Detection Area:	180°
Motion Detection Range:	12m diameter at 2.5m
Loading:	Max 300W fluorescent
	Max 150W LED
	Max 1,000W incandescent
Time Settings:	10 seconds to 15 minutes adjustable
Lux Settings:	2-2000lx
IP:	44
Depth (mm):	130
Width (mm):	75
Height (mm):	85
Box Qty:	30
Weight (kg):	0.4





ECA Eligible

EXTERNAL PIRS







PROTON multi-directional 180° PIR, IP65

- · Suitable for outdoor applications
- Manual over ride with automatic reset after 8 hours
- Passive infra red ensures light is switched on when sensor detects movement of heat, switched off when area is vacated. Minimises false / unwanted triggering
- Large terminals accept 2 x 1.5mm² conductors in each terminal. Facility for loop in loop out
- Earth terminal included

- 3 wire multiple sensors can be wired in parallel
- High load contact rating, allows numerous fittings to be switched
- No minimum load requirements
- Complete with accessory shield to reduce detection angle
- Corner mounting bracket available as accessory code: RPRBRK-01

White	RPR180PIR-01	
Black	RPR180PIR-0	
Detection Area:	180	
Motion Detection Range:	12m diameter at 2.5m	
Loading:	Max 300W fluorescent	
	Max 300W LED	
	Max 1.200W incandescent	

	Max 300W LED Max 1,200W incandescent
Time Settings:	10 seconds to 15 minutes adjustable
Lux Settings:	3-2000lx
IP:	65
Depth (mm):	118
Width (mm):	80
Height (mm):	51
Box Qty:	1
Weight (kg):	0.16







Accessories:

RPRBRK-01 RPRBRK-04 Corner mount accessory, white Corner mount accessory, black



EXTERNAL PIRS





PROTON 180° PIR, IP44, wall mounted

- · Suitable for outdoor sheltered applications
- · Manual over ride with automatic reset after 8 hours
- Passive infra red ensures light is switched on when sensor detects movement of heat, switched off when area is vacated. Minimises false / unwanted triggering
- Large terminals accept 2 x 1.5mm² conductors in each terminal. Facility for loop in loop out
- · Earth terminal included
- 3 wire multiple sensors can be wired in parallel
- High load contact rating, allows numerous fittings to be switched
- · No minimum load requirements
- Corner mounting bracket available as accessory code: RPRBRKW-01

RPR180PIRW-01

Detection Area:	180°
Motion Detection Range:	12m diameter at 2.5m
Loading:	Max 300W fluorescent
	Max 300W LED
	Max 1,200W incandescent
Time Settings:	10 seconds to 15 minutes adjustable
Lux Settings:	3-2000lx
IP:	44
Depth (mm):	28
Width (mm):	78
Height (mm):	120







Box Qty: Weight (kg):

Accessory:

RPBRKW-01

Corner mount accessory, white

0.13



RADAR MICROWAVE SENSOR





RADAR 360° MW Sensor, with 3 step dimming, IP65, White

- Can be used on high ceilings, with a maximum mounting height of 15m. Suitable for use in warehouses, indoor and outdoor applications
- Weatherproof IP65 polycarbonate housing with nickel plated stainless steel mount
- · High impact rating of IK10
- Surface mounted
- Power consumption of <0.7W
- Wide operating ambient temperature range of -20°C to +40°C

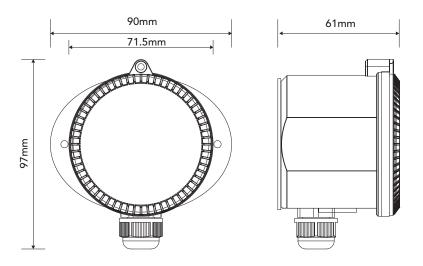
This sensor's primary function is to save energy when the detection area is not occupied. It requires the fitting to have a 1-10VDC dimmable driver and can control up to 800W of LED load. Parameters are selected via dipswitches on the sensor.

These sensors provide a 3-step control function where:

I. Detection triggers light output to 100%

(May be inhibited by lux setting)

- II. After time-out it reduces light output to a selectable standby level for a standby time (this may be indefinite) before:
- III. Turning the output to the driver off



	RRD360MW-01
Detection Area:	360°
Min/Max mounting height (m):	4m to 15m
Detection zone diameter at Min/Max mounting height (m):	8m to 20m
Detection Angle (deg):	360
Sensitivity (%):	50/100
Loading:	Max 800W fluorescent Max 800W LED Max 1,200W incandescent
Hold Times:	5s/30s/90s/3min/5min/10min/20min/30min
Lux Switching Levels (lx):	2/10/50/Full Daylight
Default Standby Level Before Off (%):	10/20/30/50
Standby Times Before Off (min):	0s/10s/60s/5min/10min/30min/60min/∞
IP:	65
Impact Rating (IK):	10
Length (mm):	97
Width (mm):	90
Depth (mm):	61
Box Qty:	1
Weight (kg):	0.3



DAYLIGHT HARVEST SENSOR





Daylight Harvest Sensor, 1-10V Dimming, IP65, Surface Mount

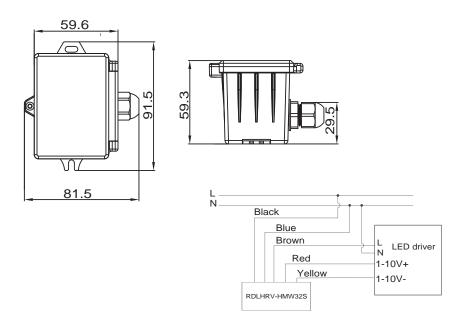
- Suitable for indoor and outdoor applications
- · Weatherproof IP65 housing
- · Surface mounted
- · Maximum mounting height of 15m
- Power consumption of <0.5W

This sensors primary function is to save energy by taking natural light into account and only adding as much additive light as required to attain a set point lux level.

It requires the fitting to have a 1-10VDC dimmable driver and can control up to 800W of LED load. Parameters are selected via a 16-position rotating function wheel on the sensor or using the optional remote control (HRC-11) which provides single button programming.

This sensor provides a range of dimming functionality for:

- I. Detection sensitivity
- II. Daylight threshold (set point)
- III. Hold time
- IV. Standby time and light level



	RDLHRV-HMW32S
Detection Area:	360°
Mounting Height:	4m to 15m
Detection Range:	4m to 15m
Loading:	Max 800W fluorescent
	Max 800W LED
	Max 1,600W incandescent
Time Settings:	10 seconds to 15 minutes adjustable
Lux Settings:	3-2,000lx
Stand-by level:	10% - 50%
IP:	65
Impact Rating (IK):	10
Length (mm):	91.5
Diameter (mm):	N/A
Depth (mm):	61
Width (mm):	81.5
Height (mm):	59.3
Box Qty:	1
Weight (kg):	0.2

LED GRID DIMMER





LOADPRO 200W LED grid dimmer

- Suitable for use with MK (logic and grid plus), MEM, Wandsworth or Crabtree grid systems
- Trailing edge electronic dimmer optimised for LED loads
- Suitable for 2-way switching with standard switch
- Min LED load of 3W

- · Max LED load of 133W
- Max resistive load of 200W
- Soft start
- Push on/off operation
- Overload protection
- Fits standard 41mm depth box

	RLA200DTG-01
Height (mm):	62
Width (mm):	24
Depth (mm):	46
Box Qty:	1
Load Ratings	Min Max
LED:	3W 133W
CFL:	20W 150W
Resistive Halogen / GLS:	20W 200W





UNI-GRID DIMMER





UNI GRID DIMMER 500W

- Suitable for use with MK (logic and grid plus), MEM, Wandsworth or Crabtree grid systems
- · Leading edge
- · Push on/off operation
- Fits standard 41mm depth box
- Min LED load 11W Max LED load 50W
- Min LV Halogen 40W Max LV Halogen 400W
- Min CFL load 11W Max CFL load 66W

RUNI500
500
Max. 50W LED
Max. 66W Fluorescent
Max. 400W Incandescent
20
60
26
46.6
1
0.1

.....



DIMMER SWITCHES

1 Gang 2 Way 2 Gang 2 Way 3 Gang 2 Way

- Push on/off operation
- · Bakelite resin front plates in white RAL9010 finish
- · Leading edge dimmer
- Min Load 40W
- Max Load 250W
- De-rating for LED 50%, CFL 50%, LV Halogen 25% and Mains Halogen 50%

Box Qty:		6
3 gang 2 way	L2503G2W	3x250W
	L4002G2W	400W
2 gang 2 way	L2502G2W	250W
	L10001G2W	1,000W
	L4001G2W	400W
1 gang 2 way	L2501G2W	250W



DIMMABLE ELECTRONIC TRANSFORMERS FOR 12V DOWNLIGHTS





ELECTRONIC TRANSFORMER 20-60W, 12V

- · C/w 250mm flying leads
- Dimmable with standard dimmers
- Integral thermal fuse enhancing safety of the transformer

	LEB60D
Total Power (W):	60
IP:	20
Length (mm):	98
Width (mm):	38
Height (mm):	32
Box Qty:	10
Weight (kg):	0.1





ELECTRONIC TRANSFORMER 35-150W, 12V, IP20, 172mm, dimmable

- · Flat profile, suitable for furniture
- · Dimmable with standard dimmers
- Large mains terminal for loop in & loop out

 no need for junction box
- Integral thermal fuse enhancing safety of the transformer

	LDT150N
Total Power (W):	150
IP:	20
Length (mm):	172
Width (mm):	55
Height (mm):	33
Box Qty:	10
Weight (kg):	0.2



DIMMABLE ELECTRONIC TRANSFORMERS FOR 12V DOWNLIGHTS



ELECTRONIC TRANSFORMER 105W, 12V

- 12V power supply for MR16 lamps
- Pre-heat soft-start function for input voltage surge protection. Suitable for 2-way switching with standard switch
- Integral in-line fuse to ensure complete safety at end of life
- Thermal fuse ensures safe failure if in excess of ambient temperature
- Large mains terminals for loop in/ loop out, suitable for up to two 1.5mm² T&E cables

	RM105DN
Total Power (W):	70/105
IP:	20
Diameter (mm):	45
Length (mm):	120
Box Qty:	30
Weight (kg):	0.1



SWIFT CONNECTOR





SWIFT 4-pin pluggable connector

The Swift connector system saves time and money by providing a fast and simple method of connecting an infinite number of standard and emergency fittings to the wiring infrastructure

It utilises 4 poles, each of which is able to accept $3 \times 1.5 \text{mm}^2$ or $2 \times 2.5 \text{mm}^2$ conductors on the supply (female side) and has cable restraint for 3×4 core cables. These would typically consist of:

Cable 1: Permanent live, earth & neutral

Cable 2: Earth, live & switched live to/from switch

Cable 3: Loop out permanent live, neutral, earth and switched live to additional fittings

- 4-pole connector with spare live eliminates junction box in wiring light fittings with a switched live
- 4-pole male connector allows in line emergency power supplies to be connected to DOB LED downlights
- Large terminals accept 3 x 1.5mm² multi-strand or solid conductors

	RSW44-P
Width (mm):	43
Height (mm):	22.5
Length (mm):	122
Box Qty:	54
Weight (kg):	0.1











ACCESSORIES

330 LAMP HOLDERS

331 CLIPS, GLANDS

ACCESSORIES LAMP HOLDERS



SCGZ1050 / RBRGZ10 / RBRGZ10SC

GZ1050 lamp holder c/w 250mm leads

- Lamp holder for GU10 lamps
- Ceramic with silicon insulated wire

	SCGZ1050
Box Qty:	10
Weight (kg):	0.03





Bracket & lamp holder c/w terminal block housing for GU/GZ10 fittings

- Lamp holder for GU10 lampsC/w terminal block & support

	RBRGZ10
Total Power (W):	50
Cap Type:	GU10
Box Qty:	10
Weight (kg):	0.06





ACCESSORIES

CLIPS, GLANDS



Lamp retention spring clip

• Spare retention clip for R101/R108 downlight

	TLSC
Box Qty:	100



Spare ceiling clips for recessed fitting

· Spare retention clip for R101/R108 downlight

Clip	CCLIP
Box Qty:	100



Metric cable glands, IP68

- Water-proof cable glands, can also be used as cable clamps
- C/w lock nut
- Constructed from flame retardant UL94V-2 plastic moulding
- IP68 liquid tight seal
- · Rubber seal with integral ridges to grip cable securely
- · Easy and safe installation
- · Protects cables both indoors and outdoors

	RAG20	RAG25
Knock out hole diameter (mm):	20	25
Cable diameter range (mm):	7-14	10-18
IP:	68	68
Box Qty:	36	20

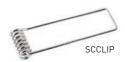




Lamp retention circular clip

• Spare circular retention clip for RS201E/RS208E

TLSCRS20XE	
Box Qty:	100



Single Clip	SCCLIP
Box Qty:	100

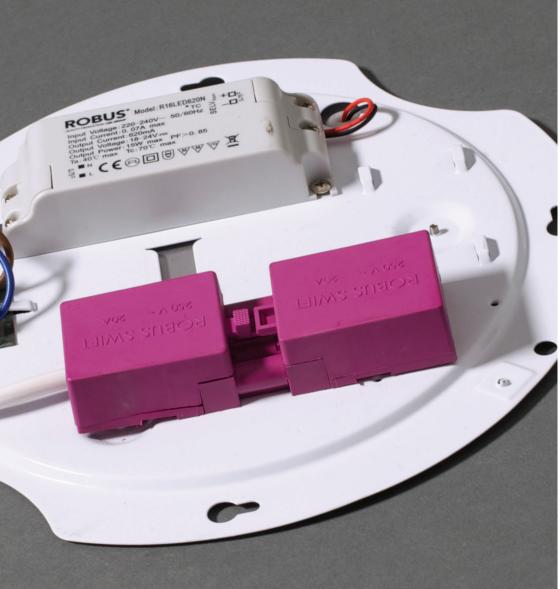


IP68 Connector

- IP68 connector for outdoor applications
- Suitable to use for mains and low voltage circuits
- Max. conductor size of 2.5mm²

Black	RCONIP68-04
Length (mm):	78
Width (mm):	26
Height (mm):	26
Box Qty:	20
Weight (kg):	0.31





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CUSTOMISED CONVERSIONS provide bespoke product solutions – converting light fittings to suit individual project requirements. This enables ROBUS customers to reduce lead times and offer alternative product solutions.

We have been carrying out this service for 15 years for electrical wholesalers. Our highly experienced team are based in Dublin, and site visits are available by appointment.

We invest in stock holding of conversion equipment components to ensure we provide a fast and efficient turnaround. We can convert any light fitting, regardless of light source. All converted products are supplied with CE classification in accordance with EN50598-2-22. We also commission sites and provide certificates of compliance of emergency lighting.

THE MOST REQUESTED CONVERSIONS ARE EMERGENCY WITH OPTIONS AROUND:

- Self Test
- 3 Step Dimming
- Analogue Dimming
- Dual Power
- Sensor
- DALI Dimming
- Switch Dimming
- Photocell

We can also adapt or modify fittings; add an extra cable; add male, female connectors; add swift connectors to reduce labour time on sites and/or provide a pre-wiring service.

We also convert older fitting technologies to existing emergency standards e.g. with battery, module or ballast conversion.



We can ship direct to the end user if required. They receive a delivery note and we can track these details as proof of delivery.

We also hold stock for draw down; this is a great service for a wholesaler who requires "customised conversions" for project fittings.

QUALITY

CE classification issued
LIA certified
EN60598-2-22 compliance
ISO 9001 certified

SERVICE

Established since 2002
Expert technical advice
Speedy quotation
Colour coded wiring
72 hour turnaround
Direct delivery
After sales service

CONTACT US TODAY ON +353 1 709 9000 - ASKING FOR CUSTOMISED CONVERSIONS

OUR GUARANTEE

All converted luminaires are subject to rigorous test procedures and guaranteed for 12 months. All conversions meet the relevant requirements of

BS EN 60598-1

(Luminaires Part 1: General requirements and tests) and BS EN 60598.2.22 (Luminaires for emergency lighting).

CONVERSIONS: **A STEP BY STEP GUIDE**



Conversion is the process of taking a standard light fitting and adding a modification to enhance it's functionality. Whether it is adding a battery pack to allow a fitting become an emergency fitting or, adding sensors to a fitting to enhance the energy savings a fitting can deliver, we provide a superior conversion.

All **CUSTOMISED CONVERSIONS** modifications use top of the range components from industry leaders such as HYTRONIK, LITEPLAN & ONELUX. This offers peace of mind to our customers and industry leading warranties on our modifications.

We adapt and modify fittings, for example:

- Add extra cable
- Add ROBUS SWIFT Connectors
- · Add male/female connectors
- · We can also provide a pre-wiring service

On the next page, we will show you step-by-step how we would convert a 15W ROBUS GOLF LED fitting into an easier and faster to install fitting by adding a SWIFT connector.

CASE STUDY: CREATE A MODIFIED PRODUCT TO REDUCE LABOUR & INSTALLATION TIME

Frequently, when a project has hundreds of fittings to be installed and the contractor would like to bring down the installation time of the fitting to allow them to complete the project in a shorter time frame, we are asked to perform the following conversion.

The example below is a step by step guide converting a 15W ROBUS GOLF LED (R150LED-01) into a 15W ROBUS GOLF LED with SWIFT CONNECTOR (R150LED-01WC).



STEP 1

We take a standard 15W GOLF LED



STFP 2

We add flex to the terminal block



STEP 3

We strip the flex to desired length of cable



STEP 4

We add a SWIFT Connector to cable



STEP 5

We mount the SWIFT connector to gear tray ensuring we do not damage any other components on the fitting



STEP 6

The modified 15W GOLF plate is ready to go back in the base. Ready for installation.

The benefits of a conversion like this are:

- Cost Saving
- · Ease of replacing lamp

- · Time/Labour cost reduction
- No need to turn off the power which means a day to day operation can still run smoothly

INTRODUCING OUR TEAM

CONVERSIONS TEAM

The CUSTOMISED CONVERSIONS team has over 50 years of combined experience in the conversions industry, with most members working here for over 10 years.

Members include:

Left to Right: Robbie O'Neill, Patrick Dunne, John Lynch, Anthony Nolan, Jason Kennedy, Denislav Martinov, Michael Buqqy, Joe Wall and Brian Stewart



WHO TO CONTACT



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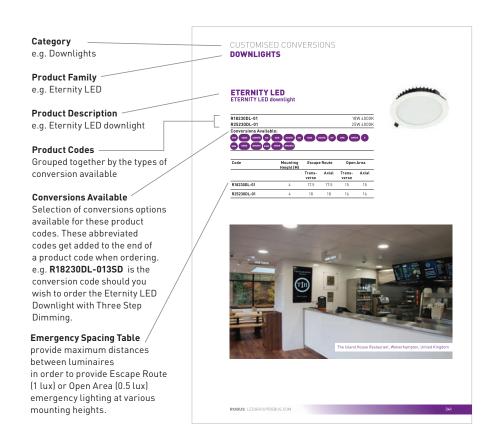


JOHN LYNCHTeam Lead
T: +353 1 709 9042



BRIAN STEWART Team Lead T: +353 1 709 9042

HOW TO ORDER YOUR PRODUCT?



ORDERING MADE EASY

R18230DL-01 +

3SD

= R18230DL-013SD

It is really simple to order from CUSTOMISED CONVERSIONS, simply use the Product Code you require converted, select one of the abbreviated Customised Conversion Codes (detailed explanation of CC codes are on the page overleaf) to create your order code.

Add this code to your ROBUS order to set the wheels in motion!

CODES & EXPLANATIONS



3 Step Dimming

Similar to the Microwave Sensor, the 3SD Driver + Sensor also detects motion. The advantage of the 3SD is that the unit in question will Dim to a selected output (example 10%) for a selected time before switching totally off.



Analogue Dimming

Analogue dimming is usually referred to as 1 - 10v dimming. In this case, a dc voltage is sent to the driver, which dims the LEDs in response to the voltage.



Customised Conversion

This is a specific request from a customer: example, pre-wiring a product and adding a swift connector to save on installation time. Each CC request will need to be provided with clear instructions of what is required from the customer before commencing the project.



DALI Addressable Emergency

Converted units connected to a DALI bus are immediately visible to your DALI command centre. Unless programmed by the DALI controller, the fitting will enter a self-command is received the fitting enters DALI mode and will perform functional and duration tests according to chosen DALI settings.



DALI Dimming

Digital Addressable
Lighting Interface (DALI)
is a trademark for network
-based systems that control
lighting in building automation
that can be controlled from
one central point.



Day Light Sensor

The DLS can be connected to a 1-10v Dimming Driver, when natural light enters the DLS, a signal is sent to the dimming driver allowing the light source to decrease when there is natural light present and increase when natural light decreases. e.g. available in Disk High Bays



Dual Power

The Dual Power Driver can operate a unit at a reduced light output (example 10%) and can be controlled by either Microwave Sensor or manual switches.



Emergency

An emergency converted product operates in Emergency Mode when the Mains Power fails for a minimum of 3hr duration; this is to allow adequate safe escape lighting within an area.







Mains Dimming

Mains dimming is a simple way of dimming an LED product that can be controlled by a normal 240V dimmer. No additional control cables are required. This can help in areas that cannot be re-wired with additional cables.



Photocell

Photocells are basically sensors that are controlled by natural light. During the day, the light source will be **OFF**, at dusk, the light source switches **ON**. At dawn, the light source switches **OFF** again.



Remote Controlled Dimming

In conjunction with the HRC-05 Handset, we can supply a range of Remote Dimming Options. These include Manual, Preset, Motion Detection and Auto Dimming.



Sensor (Microwave)

A Microwave Sensor detects motion in an area and allows the product to switch on to illuminate the area for a desired time. The maximum mounting height for Sensor products is 6M.



Self Test Emergency

Self-Test fittings perform a self-commissioning test at first power on. After charging for 24 hours a full duration test (3 hours) is performed. Initial function and duration tests are randomly generated reducing the costs of manual testing.



Switch Dimming

With Switch Dim it is possible to create lighting systems that can be easily switched and dimmed at low cost.



COMBINED CODES

3SDE	3 Step Dimming a
JJDL	Emergency

3 step Dim Self Test E

3 step Dimming & Self Test Emergency ADE An

Analogue Dimming & Emergency

ADSTE

Analogue Dimming & Self Test Emergency

DDDAE

DALI Dimmable & DALI Addressable

DDE

DALI Dimmable & Emergency

Dual Power &

DDSTE

DALI Dimmable & Self Test Emergency

DPE

Dual Power & Emergency DPSENSTE

Dual Power & Self Test Emergency PCE

Photocell & Emergency PCSTE

Sensor & Self Test Emergency Photocell & Self

Test Emergency

DPSTE

RCDE

RC Dimming & Emergency

RCDSTE

RC Dimming &
Self Test Emergency

SENE

Sensor & Emergency

SENSTE

Sensor & Self Test Emergency

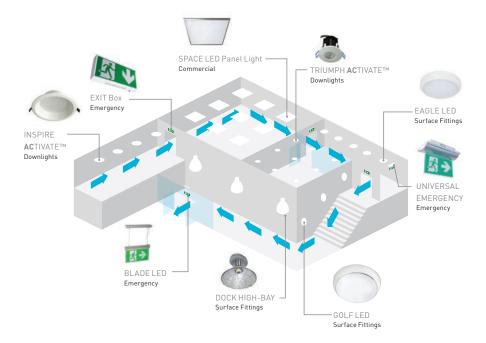
SWDE

Switch Dimming & Emergency

SWDSTE

Switch Dimming & Self Test Emergency

WHAT IS EMERGENCY LIGHTING?



An emergency light is a lighting device with a battery pack that switches on automatically when a building suffers a power cut.

An emergency fitting's battery pack is required to power the light fitting for a minimum of 3 hours. To maintain power, the light output from the emergency light fitting is reduced usually to 10% of the regular light output.

Maintained fittings operate and are controlled as normal light fittings with all the other light fittings in the area. When power fails however, the maintained emergency light fitting continues to operate at a reduced light output.

Non-maintained fittings are usually switched off, with their batteries being continuously charged and a green LED showing fully charged. When power fails, non-maintained fittings switch on using the battery power supply. Non-maintained emergency fittings are not part of the general lighting but are more specific functional lighting such as emergency exit signs.

LIGHT LEVELS DURING AN EMERGENCY:

OPEN AREAS

The safest, quickest escape route without obstruction should be lit to a minimum of 1 lux during an emergency. Should the open area be less than 60m2 and is not part of an escape route then emergency lighting is not required. However, the exit doors for the emergency escape route must have signs or an emergency bulkhead.

DESIGNATED CORRIDORS

An escape route should not be obstructed and lit to a minimum of 1 lux during an emergency.

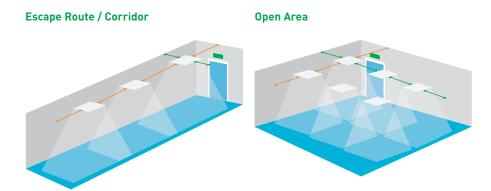
STAIRWELLS

Stairwells have increased hazards, therefore these areas should be lit to a minimum of 2 lux during an emergency.

SPACING TABLES EXPLAINED

ROBUS emergency spacing tables provide the installer with the information to decide the number of luminaires required for the emergency lighting scheme.

The tables provide maximum distances between luminaires in order to provide Escape Route (1 lux) or Open Area (0.5 lux) emergency lighting at various mounting heights.



TRANSVERSE is the spacing measurements for between the walls and emergency light fittings at right angles to the escape route.

AXIAL refers to the spacing measurement between the walls and emergency light fittings that run parallel to the escape route.

Code	Mounting Height (M)	Escape Route				Open A	rea
		Transverse	Axial	Transverse	Axial		
RSP32406060G-01	2.4	14	14	16	16		
	4	17.5	17.5	19.5	19.5		
RSP32506060G-01	2.4	14.5	14.5	16.5	16.5		
	4	18	18	20	20		

TYPES OF DIMMING CONTROL PROTOCOLS

Selecting the proper dimmer was once a simple task with a few choices for your home or business lighting systems. With all the changes over recent years, selecting the proper dimmer now has many new considerations such as type of lighting, wattage load, single/multi-location and style. Dimmer Control Protocols are the method of transmitting information to the light fittings.

Switch Dimming



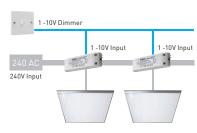
With Switch Dimming it is possible to create lighting systems that can be easily switched and dimmed at low cost. It involves using standard mains retractable switch for lighting controls.

The different switching and dimming functions are performed depending on the operating status at the time and how long the switch is pressed.

A **short press** on the switch, switches the connected driver to turn the fitting on or off.

A **long press** on the switch will dim the connected driver up or down depending on its current operating status.

1-10V analogue



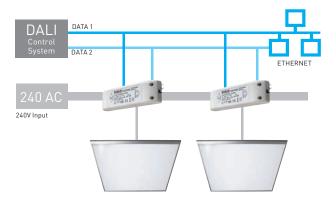
100% 50% 0% Analogue dimming uses a separate control wire to notify the driver that the power of the LEDs should be changed . The separated control signal is a DC (direct current) and can be adjusted from 1 up to 10 volts, the voltage level is interpreted by the driver to set the LED power.

The 1-10V method of control is a low current system (typically 1mA) meaning it can be run along relatively thin cables with little voltage drop and depending on dimmer manufacturer recommendations. This allows for up to 50 LED dimmable drivers on one wall mounted dimmer.

What is DALI?

Digital Addressable Lighting Interface

It is a testing and control system, programmed by the DALI controller/system. The fitting will enter a self-commissioning phase; DALI Units also offer status feedback reports to the system. Once the module has received a valid DALI command, the module enters DALI mode and adopts default settings for test pre-programmed



DALI is a digital communications protocol that was developed for the lighting industry. A separate control wire of BUS is used to send digital information to light fittings and allows the individual light fittings and sensors to communicate with an advanced lighting control system. Although DALI is a standard protocol beware of mixing components between manufacturers with our testing first. Along with the correct LED Driver the DALI system requires additional control equipment including DALI BUS controllers, power supplies, sensors and user interfaces.

COMMERCIAL



SPACE UGR<19 LED panel, 600x600mm, White

RSP32406060G-01 32W Neutral White 4000K RSP32506060G-01 32W Cool White 5000K

Conversions Available:



Code	Mounting Height (M)	Escape Route		Open Area	
		Trans- verse	Axial	Trans- verse	Axial
RSP32406060G-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5
RSP32506060G-01	2.4	14.5	14.5	16.5	16.5
	4	18	18	20	20



ATMOS LED panel, 600x600mm, White

RAM40306060-01 40W Warm White 3000K RAM40406060-01 40W Neutral White 4000K RAM40506060-01 40W Cool White 5000K



Code	Mounting Height (M)	Escape Route		Open Area	
		Trans- verse	Axial	Trans- verse	Axial
RAM40306060-01	2.4	13	13	15	15
	4	16	16	18	18
RAM40406060-01	2.4	13	13	15	15
	4	16	16	18	18
RAM40506060-01	2.4	13.5	13.5	15.5	15.5
	4	16.5	16.5	18.5	18.5

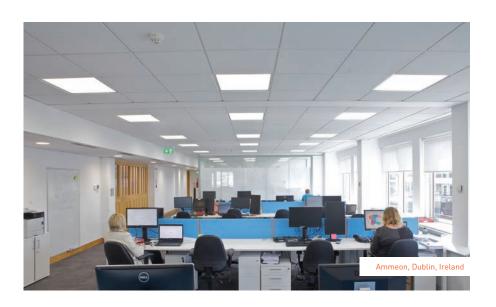
COMMERCIAL

ATMOS LED panel, 300x1200mm and 600x1200mm, White

RAM40403012-01 40W 300x1200mm Neutral White 4000K **RAM60406012-01** 60W 600x1200mm Neutral White 4000K



Code	Mounting Height (M)	Escape Route		Open Area	
		Trans- verse	Axial	Trans- verse	Axial
RAM40403012-01	2.4	13	12	15	14
	4	15	14	18	17
RAM60406012-01	2.4	15	14.5	16	15.5
	4	18	17.5	21	20



COMMERCIAL



SUN LED circular panels, White

R120LEDC30-01	6W 3000K
R120LEDC40-01	6W 4000K
R150LEDC30-01	9W 3000K
R150LEDC40-01	9W 4000K
R170LEDC30-01	12W 3000K
R170LEDC40-01	12W 4000K
R225LEDC30-01	18W 3000K
R225LEDC40-01	18W 4000K
R300LEDC40-01	25W 4000K



Code	Mounting Height (M)	Escape Route		Open Area	
		Trans- verse	Axial	Trans- verse	Axial
R120LEDC30-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5
R120LEDC40-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5
R150LEDC30-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5
R150LEDC40-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5
R170LEDC30-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5
R170LEDC40-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5
R225LEDC30-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5
R225LEDC40-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5
R330LEDC40-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5

COMMERCIAL

VULCAN LED corrosion proof, White

RVUF486FT-01*	1.8M 1 x 48W standard
RVUF966FT-01*	1.8M 2 x 48W standard
RVUF405FT-01*	1.5M 1 x 40W standard
RVUF805FT-01*	1.5M 2 x 40W standard
RVUF244FT-01	1.2M 1 x 24W standard
RVUF484FT-01*	1.2M 2 x 24W standard
RVUF242FT-01	0.6M 2 x 12W standard





Code	Mounting Height (M)	Escape Route		Open Area	
		Trans- verse	Axial	Trans- verse	Axial
RVUF486FT-01	2.4	14	14	16	16
	4	17.5	17.5	19.5	19.5
	6	17.5	17.5	19.5	19.5
RVUF966FT-01	2.4	14	12.5	14.5	12.5
	4	18.5	15.5	16.5	14.5
	6	19.5	18	18	16
RVUF405FT-01	2.4	18	14.5	17	14
	4	21.5	18	19	17
	6	24	21	21	19
RVUF805FT-01	2.4	18	15	17	14.5
	4	21	18	19.5	17
	6	23.5	21	21	19.5
RVUF244FT-01	2.4	18	14.5	18	13.5
	4	21	18	20	17
	6	24.5	21.5	21.5	18
RVUF484FT-01	2.4	18	14.5	17	14
	4	21.5	17.5	19	16.5
	6	24.5	20	20.5	18.5
RVUF242FT-01	2.4	15	12	17	14
	4	18.5	15	20	17
	6	21	18	22.5	20

^{* 3}DS & 3DSE Not available



COMMERCIAL



VULCAN LED corrosion proof 2ft, Grey

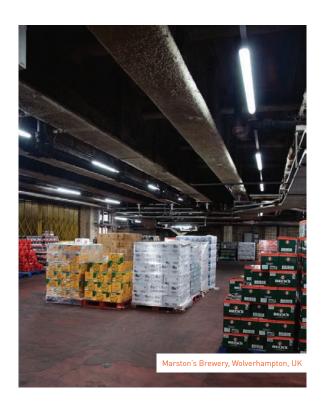
RVUF122FT-24 0.6M 1 x 12W standard







Code	Mounting Escape Rou Height (M)		Route	Open Area	
		Trans- verse	Axial	Trans- verse	Axial
RVUF122FT-01	2.4	15	13	15	12
	4	18	15.5	18	15
	6	20	17.5	20	17



COMMERCIAL

SULTAN LED corrosion proof, Grey

RSUF244FT-24	1.2M 1 x 24W standard
RSUF484FT-24*	1.2M 2 x 24W standard
RSUF405FT-24*	1.5M 1 x 40W standard
RSUF805FT-24*	1.5M 1 x 80W standard





Code	Mounting Height (M)	Escape Route		Open Area	
		Trans- verse	Axial	Trans- verse	Axial
RSUF244FT-24	2.4	15	13	14	12.5
	4	18	15.5	17	15
	6	20	18	18	16.5
RSUF484FT-24	2.4	15	13	14	12.5
	4	18	15.5	17	15
	6	20	18	18	16.5
RSUF405FT-24	2.4	15	13	14	13
	4	17.5	16	16.5	14.5
	6	20	18.5	17.5	16.5
RSUF805FT-24	2.4	15	13	14	13
	4	17.5	16	16.5	14.5
	6	20	18.5	17.5	16.5

^{* 3}DS & 3DSE Not available



COMMERCIAL



CAESAR LED batten, White

RCA244006-01	0.6M 24W standard
Conversions Available:	
E SEN SENE SENSTE STE	
RCA484012-01	1.2M 48W standard
RCA484015-01	1.5M 48W standard
RCA804015-01	1.5M 80W standard
RCA604018-01	1.8M 60W standard



Code	Mounting Height (M)		Escape Route		Open Area	
		Trans-	Axial	Trans-	Axial	
		verse		verse		
RCA244006-01	2.4	15	13	14	13	
	4	17.5	16	16	15	
	6	19.5	18.5	18	17	
RCA484012-01	2.4	15	13	14	12.5	
	4	18	15.5	17	15	
	6	20	18	18	16.5	
RCA484015-01	2.4	15	13	14	12.5	
	4	18	15.5	17	15	
	6	20	18	18	16.5	
RCA804015-24	2.4	15	13	14	13	
	4	17.5	16	16.5	14.5	
	6	20	18.5	17.5	16.5	
RCA604018-01	2.4	15	13	14	13	
	4	17.5	16	16.5	14.5	
	6	20	18.5	17.5	16.5	
RCA964018-01	2.4	15	13	14	13	
	4	17.5	16	16.5	14.5	
	6	20	18.5	17.5	16.5	

COMMERCIAL

SCHOLAR LED batten, White

RSC504012-01	2 x 25W standard
RSC604015-01	2 X 30W standard

Conversions Available:



Code	Mounting Height (M)	Escape Route		Open Area	
		Trans- verse	Axial	Trans- verse	Axial
RSC504012-01	2.4	13	12	13	11.5
	4	15.5	14.5	15	14
RSC604015-01	2.4	13.5	12	13.5	12
	4	16	14.5	15	14

CASEY 120W LED low bay, White

RCY12055-01	120W standard
Conversions Available:	
AD ADSTE DD DDSTE RCD RCDSTE SEN SENSTE SWD SWDSTE	
RCY12055E-01	120W emergency
Conversions Available:	



DISK LED high bay, Black

RDS16050DA-04	160W
RDS20050DA-04	200W

Conversions Available:

AD DD RCD SEN SWD





DOWNLIGHTS



TRIUMPH ACTIVATE™ LEDCHROIC downlight

RATR6P03038-01	6W 3000K 38° Beam Angle
RATR6P04038-01	6W 4000K 38° Beam Angle
RATR8P03038-01	8W 3000K 38° Beam Angle
RATR8P04038-01	8W 4000K 38° Beam Angle
RATR113060-01	11W 3000K 60° Beam Angle
RATR114060-01	11W 4000K 60° Beam Angle

Conversions Available:



Code	Mounting Height (M)		Escape Route		Open Area	
		Trans- verse	Axial	Trans- verse	Axial	
RATR6P03038-01/	2.4	8.5	8.5	8	8	
RATR6P04038-01	4	10	10	9.5	9.5	
RATR6P03038-01-60°/	2.4	9	9	8.5	8.5	
RATR6P04038-01 - 60°	4	10.5	10.5	10	10	
RATR6P03038-01/	2.4	6.5	6.5	6	6	
RATR6P04038-01	4	8.5	8.5	8	8	
RATR6P03038-01-60°/	2.4	7.5	7.5	7	7	
RATR6P04038-01 - 60°	4	9.5	9.5	9	9	
RATR113060-01-38°/	2.4	11.5	11.5	11	11	
RATR114060-01 - 38°	4	13	13	12.5	12.5	
RATR113060-01/	2.4	9	9	8.5	8.5	
RATR114060-01	4	10.5	10.5	10	10	



CAVAN 8W COB LED CCT3 selectable

Conversions Available:	
RC8CCT3-13	Brushed Chrome
RC8CCT3-01	White

E

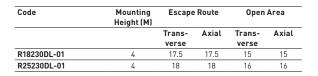
DOWNLIGHTS

ETERNITY LED downlight













SURFACE FITTINGS



EAGLE LED surface fitting

REES7P040-01	7W 4000K
Conversions Available:	
3SD PC SEN	
REEM01040-01	10W 4000K
REEM01540-01	14W 4000K
REEL02440-01*	24W 4000K
Conversions Available:	
3SD 3SDSTE AD ADSTE DD DDSTE MD P	PCSTE SEN SENSTE STE
REES7P040E-01	7W 4000K emergency
Conversions Available:	
35D	
REEM01040E-01	10W 4000K emergency
REEM01540E-01	14W 4000K emergency
REEL02440E-01*	24W 4000K emergency



Code	Mounting Height (M)	Escape Route		Open Area	
		Trans- verse	Axial	Trans- verse	Axial
REES7P040-01	2.4	9.5	9.5	9	9
	4	11	11	10.5	10.5
REEM01040-01	2.4	13.5	13.5	13	13
	4	16	16	15.5	15.5
	6	19	19	18.5	18.5
REEM01540-01	2.4	11.5	11.5	11.5	11.5
	4	14	14	13.5	13.5
	6	17	17	16.5	16.5
REEL02440-01	2.4	13.5	13.5	13	13
	4	16	16	15.5	15.5
	6	19	19	18.5	18.5

^{*} Mains Dimming not available

SURFACE FITTINGS

HAWK LED surface fitting

RHKM01040-01 10W 4000K **RHKM01540-01** 15W 4000K





RHKM01040E-01 10W 4000K emergency **RHKM01540E-01** 15W 4000K emergency



Code	Mounting Height (M)	Escape	Route	Open Area	
		Trans- verse	Axial	Trans- verse	Axial
RHKM01040-01	2.4	13.5	13.5	13	13
	4	16	16	15.5	15.5
	6	19	19	18.5	18.5
RHKM01540-01	2.4	11.5	11.5	11.5	11.5
	4	14	14	13.5	13.5
	6	17	17	16.5	16.5





SURFACE FITTINGS



GOLF LED with Pro-diffuser

R075LED-01	7.5W 4000K
R075LEDE-01	7.5W 4000K emergency

Conversions Available:

3SD PC SEN

 R100LED-01
 10W 4000K

 R100LEDWW-01
 10W 3000K

 R150LED-01
 15W 4000K

Conversions Available:

35D 35DSTE AD ADSTE CC DD DDSTE MD PC PCSTE SEN SENSTE STE SWD

R100LEDE-01 10W 4000K emergency **R150LEDE-01** 15W 4000K emergency



Code	Mounting Height (M)	Escape Route		Open Area	
		Trans- verse	Axial	Trans- verse	Axial
R075LED-01	2.4	11	11	11.5	11.5
	4	13	13	13	13
R100LED-01	2.4	11	11	11	11
	4	13	13	13	13
R150LED-01	2.4	11	11	11	11
	4	13	13	13	13

CUSTOMISED CONVERSIONS

SURFACE FITTINGS

GOLF 10W & 15W SMD LED retrofit tray

R100LEDRET 10W 4000K R150LEDRET 15W 4000K Conversions Available:



R150LEDRETE

R100LEDRETE

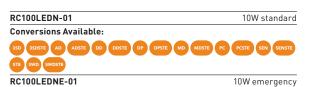
10W 4000K emergency 15W 4000K emergency





Code	Mounting Height (M)	Escape Route		Escape Route Open A		
		Trans- verse	Axial	Trans- verse	Axial	
R100LEDRET	2.4	11	11	11	11	
	4	13	13	13	13	
R150LEDRET	2.4	11	11	11	11	
	4	13	13	13	13	

COMPACT LED fitting



Conversions Available:







SURFACE FITTINGS



OYSTER LED fitting

R18WLED40EU-01	18W 4000K White
Conversions Available:	



R24WLED40EU-01 24W 4000K White

Conversions Available:



Code	Mounting Height (M)	Escape Route		Open	Area
		Trans- verse	Axial	Trans- verse	Axial
R18WLED40EU	2.4	9	9	9	9
	4	10	10	9.5	9.5
R24WLED40EU	2.4	13.5	13.5	13	13
	4	15.5	15.5	15	15



CUSTOMISED CONVERSIONS

OUTDOOR

FALCON LED wall light

RFA03555-04 30W 5500K Standard RFA05055-04 50W 5500K Standard



Conversions Available:



RFA05055DMX-04 30W 5500K Microwave Sensor Back Wire Entry

Conversions Available:



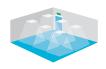








Lur	minaire S _l	pacing (m) On E	merge	ncy Es	cape R	outes			
			verse e to Wall		erse to verse			Avial to Avia		o Axial
Product Code	Mounting Height (m)	0.5 Lux	1.0 Lux	0.5 Lux	1.0 Lux	0.5 Lux	1.0 Lux	0.5 Lux	1.0 Lux	
SPACE										
RSP32406060GE-01	2.5	8	6.4	15.5	12.5	8	6.4	15.5	12.5	
	3	8.7	6.9	17	13.5	8.7	6.9	17	13.5	
	4	9.7	7.7	19	15	9.7	7.7	19	15	
ATMOS				l	l	l				
RAM40406060E-01	2.5	7.2	5.6	14	11	7.2	5.6	14	11	
	3	7.7	6.1	15	12	7.7	6.1	15	12	
	4	8.2	6.6	16	13	8.2	6.6	16	13	
RAM40506060E-01	2.5	7.2	5.6	14	11	7.2	5.6	14	11	
	3	7.7	6.1	15	12	7.7	6.1	15	12	
	4	8.2	6.6	16	13	8.2	6.6	16	13	
VULCAN										
RVUF405FTE-24	2.5	7.1	5.6	14	11	7.6	6.1	15	12	
	3	7.6	5.8	15	11.5	8.3	6.4	16.5	12.5	
	4	8.6	6.1	17	12	9.1	6.6	18	13	
RVUF805FTE-24	2.5	7.1	5.6	14	11	7.6	6.1	15	12	
	3	7.6	5.8	15	11.5	8.3	6.4	16.5	12.5	
	4	8.6	6.1	17	12	9.1	6.6	18	13	
SULTAN & SULTAN 110V										
RSUF484FTE-24	2.5	7.7	5.8	15	11.5	8.2	6.4	16	12.5	
	3	8.2	6.4	16	12.5	8.7	6.9	17	13.5	
	4	8.7	7.2	17	14	9.7	7.6	19	15	
RSUF405FTE-24	2.5	7.1	5.6	14	11	7.6	6.1	15	12	
	3	7.6	5.8	15	11.5	8.3	6.4	16.5	12.5	
	4	8.6	6.1	17	12	9.1	6.6	18	13	
RSUF805FTE-24	2.5	7.1	5.6	14	11	7.6	6.1	15	12	
	3	7.6	5.8	15	11.5	8.3	6.4	16.5	12.5	
	4	8.6	6.1	17	12	9.1	6.6	18	13	
RSUF244FTE-24	2.5	7.7	5.8	15	11.5	8.2	6.4	16	12.5	
	3	8.2	6.4	16	12.5	8.7	6.9	17	13.5	
	4	8.7	7.2	17	14	9.7	7.6	19	15	
CAESAR										
RCA484012E-01	2.5	6.7	4.6	13	9	8.2	6.1	16	12	
	3	7.2	5.4	14	10.5	8.7	6.6	17	13	
	4	7.7	6.1	15	12	9.1	7.2	18	14	
RCA484015E-01	2.5	6.7	4.6	13	9	8.2	6.1	16	12	
	3	7.2	5.4	14	10.5	8.7	6.6	17	13	
	4	7.7	6.1	15	12	9.1	7.2	18	14	
RCA804015E-01	2.5	6.7	4.6	13	9	8.2	6.1	16	12	
	3	7.2	5.4	14	10.5	8.7	6.6	17	13	
	4	7.7	6.1	15	12	9.1	7.2	18	14	



	Transverse Distance to Wall	Transverse to Transverse	Axial Distance to Wall	Axial to Axial
Product Code	0.5 Lux	0.5 Lux	0.5 Lux	0.5 Lux
SPACE				
RSP32406060GE-01	7.6	15	7.6	15
	8.3	16.5	8.3	16.5
	9.5	18.5	9.5	18.5
ATMOS			,	
RAM40406060E-01	6.8	13.5	6.8	13.5
	7.3	14.5	7.3	14.5
	7.5	15.5	7.5	15.5
RAM40506060E-01	6.8	13.5	6.8	13.5
	7.3	14.5	7.3	14.5
	7.5	15.5	7.5	15.5
VULCAN			ı	<u> </u>
RVUF405FTE-24	6.8	13.5	7.3	14.5
	7.3	14.5	8	16
	8.3	16.5	8.8	17.5
RVUF805FTE-24	6.8	13.5	7.3	14.5
	7.3	14.5	8	16
	8.3	16.5	8.8	17.5
SULTAN & SULTAN 110V	,			
RSUF484FTE-24	7.3	14.5	7.8	15.5
	7.8	15.5	8.3	16.5
	8.3	16.5	9.5	18.5
RSUF405FTE-24	6.8	13.5	7.3	14.5
	7.3	14.5	8	16
	8.3	16.5	8.8	17.5
RSUF805FTE-24	6.8	13.5	7.3	14.5
	7.3	14.5	8	16
	8.3	16.5	8.8	17.5
RSUF244FTE-24	7.3	14.5	7.8	15.5
	7.8	15.5	8.3	16.5
	8.3	16.5	9.5	18.5
CAESAR			ı	<u> </u>
RCA484012E-01	6.5	12.5	7.5	15.5
	6.8	13.5	8.3	16.5
	7.3	14.5	8.8	17.5
RCA484015E-01	6.5	12.5	7.5	15.5
	6.8	13.5	8.3	16.5
	7.3	14.5	8.8	17.5
RCA804015E-01	6.5	12.5	7.5	15.5
	6.8	13.5	8.3	16.5
	7.3	14.5	8.8	17.5



	Luminaire Spacing (m) On Emergency Escape Routes								
			verse e to Wall		erse to verse		istance Vall	Axial t	o Axial
Product Code	Mounting Height (m)	0.5 Lux	1.0 Lux	0.5 Lux	1.0 Lux	0.5 Lux	1.0 Lux	0.5 Lux	1.0 Lux
CASEY									
RCY12055E-01	2.5	6.7	5.1	13	10	7.7	6.1	15	12
	3	7.2	5.6	14	11	8.2	6.6	16	13
	4	7.7	6.1	15	12	9.1	7.7	18	15
DISK			<u>I</u>	l		l	l	ļ	
RDS16050DA-04E	2.5	8.2	6.7	16	13	8.2	6.7	16	13
	3	8.7	7.2	17	14	8.7	7.2	17	14
	4	9.7	7.7	19	16	9.7	8.2	19	16
RDS20050DA-04E	2.5	6.6	5.6	13	10.5	6.6	5.6	13	10.5
	3	7.2	5.8	14	11.5	7.2	5.8	14	11.5
	4	8.2	6.6	16	13	8.2	6.6	16	13
EAGLE				ı					
REES7P040E-01	2.5	5.2	4.1	10	8	5.2	4.1	10	8
	3	5.7	4.3	11	8.5	5.7	4.3	11	8.5
	4	6.2	4.6	12	9	6.2	4.6	12	9
REEM01040E-01	2.5	5.2	4.1	10	8	5.2	4.1	10	8
	3	5.7	4.3	11	8.5	5.7	4.3	11	8.5
	4	6.2	4.6	12	9	6.2	4.6	12	9
REEM01540E-01	2.5	5.2	4.1	10	8	5.2	4.1	10	8
	3	5.7	4.3	11	8.5	5.7	4.3	11	8.5
	4	6.2	4.6	12	9	6.2	4.6	12	9
REEL02440E-01	2.5	6.3	5.2	12.5	10	6.3	5.2	12.5	10
	3	6.9	5.4	13.5	10.5	6.9	5.4	13.5	10.5
	4	7.2	6.1	14.5	12	7.2	6.1	14.5	12
HAWK	-							ļ	
RHKM01040E-01	2.5	5.2	4.1	10	8	5.2	4.1	10	8
	3	5.7	4.3	11	8.5	5.7	4.3	11	8.5
	4	6.2	4.6	12	9	6.2	4.6	12	9
RHKM01540E-01	2.5	5.2	4.1	10	8	5.2	4.1	10	8
	3	5.7	4.3	11	8.5	5.7	4.3	11	8.5
	4	6.2	4.6	12	9	6.2	4.6	12	9
GOLF		1				1			
R075LEDE-01	2.5	6.2	4.8	12	9.5	6.2	4.8	12	9.5
	3	6.8	5.2	13	10	6.8	5.2	13	10
	4	7.2	5.4	14	10.5	7.2	5.4	14	10.5
R100LEDE-01	2.5	6.2	4.8	12	9.5	6.2	4.8	12	9.5
	3	6.8	5.2	13	10	6.8	5.2	13	10
	4	7.2	5.4	14	10.5	7.2	5.4	14	10.5
R150LEDE-01	2.5	6.2	4.8	12	9.5	6.2	4.8	12	9.5
	3	6.8	5.2	13	10	6.8	5.2	13	10
	4	7.2	5.4	14	10.5	7.2	5.4	14	10.5

EMERGENCY SPACING INFORMATION **SPACING TABLES**



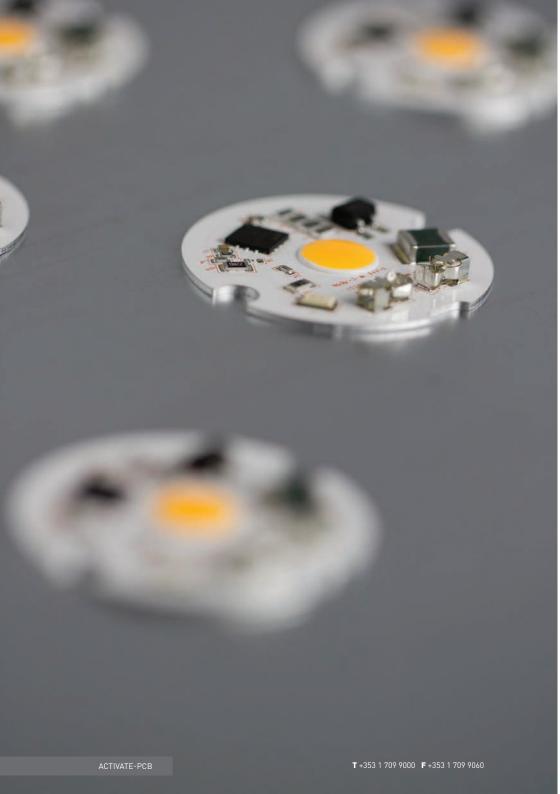
Luminaire	Luminaire Spacing (m) In Anti Panic Open Areas (Incl 0.5m Border Area)								
	Transverse Distance to Wall	Transverse to Transverse	Axial Distance to Wall	Axial to Axial					
Product Code	0.5 Lux	0.5 Lux	0.5 Lux	0.5 Lux					
CASEY			'						
RCY12055E-01	6.5	12.5	7.3	14.5					
	6.8	13.5	7.5	15.5					
	7.3	14.5	8.8	17.5					
DISK				1					
RDS16050DA-04E	7.5	15.5	7.5	15.5					
	8.3	16.5	8.3	16.5					
	9.5	18.5	9.5	18.5					
RDS20050DA-04E	6.5	12.5	6.5	12.5					
	6.8	13.5	6.8	13.5					
	7.5	15.5	7.5	15.5					
EAGLE			1	I					
REES7P040E-01	5	9.5	5	9.5					
	5.5	10.5	5.5	10.5					
	6	11.5	6	11.5					
REEM01040E-01	5	9.5	5	9.5					
	5.5	10.5	5.5	10.5					
	6	11.5	6	11.5					
REEM01540E-01	5	9.5	5	9.5					
	5.5	10.5	5.5	10.5					
	6	11.5	6	11.5					
REEL02440E-01	6.1	12.1	5.2	12.1					
	6.8	13	5.4	13					
	7.1	14	6.1	14					
HAWK									
RHKM01040E-01	5	9.5	5	9.5					
	5.5	10.5	5.5	10.5					
	6	11.5	6	11.5					
RHKM01540E-01	5	9.5	5	9.5					
	5.5	10.5	5.5	10.5					
	6	11.5	6	11.5					
GOLF			,						
R075LEDE-01	6	11.5	6	11.5					
	6.5	12.5	6.5	12.5					
	7	13.5	7	13.5					
R100LEDE-01	6	11.5	6	11.5					
	6.5	12.5	6.5	12.5					
	7	13.5	7	13.5					
R150LEDE-01	6	11.5	6	11.5					
	6.5	12.5	6.5	12.5					
	7	13.5	7	13.5					



Lui	Luminaire Spacing (m) On Emergency Escape Routes									
		Trans Distance			erse to verse		istance Vall	Axial to Axial		
Product Code	Mounting Height (m)	0.5 Lux	1.0 Lux	0.5 Lux	1.0 Lux	0.5 Lux	1.0 Lux	0.5 Lux	1.0 Lux	
DYNAMO										
R2WLEDNME-01	2.5 3 4	7 7.3 7.5	5.5 5.8 6	14 14.5 15	11 11.5 12	7 7.3 7.5	5.5 5.8 6	14 14.5 15	11 11.5 12	
ORMOND										
R1WLEDNME-01	2.5 3 4	5.3 5.8 6.3	4.5 4.7 5.3	10.5 11.5 12.5	9 9.5 10.5	5.3 5.8 6.3	4.5 4.8 5.3	10.5 11.5 12.5	9 9.5 10.5	
8W LED										
R8MLED3-01+13	2.5 3 4	3.8 4.1 4.3	2.7 2.9 3.1	7.5 8 8.5	5.3 5.8 6.3	4.2 4.5 4.8	2.8 3.1 3.4	8 8.5 9	5.5 6 6.5	
LED BULKHEAD										
R8MLED-01	2.5 3 4	4.2 4.5 4.7	3.2 3.4 3.6	8 8.5 9	6 6.3 6.5	4.2 4.5 4.7	3.2 3.4 3.6	8 8.5 9	6 6.3 6.5	
UNIVERSAL GEAR TRAY										
R8MUSTLED-01	2.5 3 4	5.8 6 6.2	4.5 4.7 4.9	11 11.5 12	8.5 9 9.5	6.3 6.5 6.7	5 5.2 5.4	12 12.5 13	9.5 10 10.5	
CONVERSION KIT										
R13LEDME-CU2	2.5 3 4	5.2 6.4 7	4.3 4.8 5.2	10 11 12.5	8.5 9.2 10	5.2 6.4 7	4.3 4.8 5.2	10 11 12.5	8.5 9.2 10	



Luminaire Spacing (m) In Anti Panic Open Areas (Incl 0.5m Border Area)								
	Transverse Distance to Wall	Transverse to Transverse	Axial Distance to Wall	Axial to Axial				
Product Code	0.5 Lux	0.5 Lux	0.5 Lux	0.5 Lux				
DYNAMO								
R2WLEDNME-01	6 7 7.3	13 14 14.5	6 7 7.3	13 14 14.5				
ORMOND			I.	l.				
R1WLEDNME-01	5 5.5 6	10 11 12	5 5.5 6	10 11 12				
8W LED								
R8MLED3-01+13	3.8 4.1 4.5	7.2 7.8 8.2	4.1 4.5 4.9	7.8 8.2 8.8				
LED BULKHEAD				J.				
R8MLED-01	4.1 4.4 4.6	7.8 8.2 8.8	4.1 4.4 4.6	7.8 8.2 8.8				
UNIVERSAL GEAR TRAY								
R8MUSTLED-01	6 6.3 6.6	10.5 11 11.5	5 5.3 5.8	9.5 10 10.5				
CONVERSION KIT								
R13LEDME-CU2	5 6.2 6.8	9.7 10.8 12.2	5 6.2 6.8	9.7 10.8 12.2				



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HOW TO USE THIS CATALOGUE

SYMBOLS GUIDE



Indicates x years warranty



Lumens per Watt



Energy Saving



Fire Rated Symbol



Suitable for Customised Conversion



Dimmable



Suitable for use in indicated bathroom zone*



Rotation Angle



Adjustment Angle (tilt)



High Frequency Electronic Control Gear included



Photometrics available



Ingress Protection against dust and water (see technical information)



Operating Voltage - 12V AC



Operating Voltage - 220V / 230V - 12V





Operating Voltage - 220V / 240V

COLOUR APPEARANCE

		 ,
Summer Sunlight (Northern Hemisphere)	5,500	 Daylight White
	5,000	Cool White
	4,500	
	4,000	Neutral White
	3,500	
	3,000	
	2,500	Warm White
Candle	2,000	
	1,500	

12V DC Operating Voltage - 12V DC



Pull Switch



Integral Switch



Safety Class I

Electrically insulated and earthed. In the event of a basic insulation failure, exposed metal parts that could become live are protected by the earth



Safety Class II

Live parts are equipped with additional insulation protection such as reinforced or double insulation and do not require an earth



Safety Class III

Safety extra low voltage (SELV), requires no additional protection less than 24V AC or 55V DC



Safety Isolating Transformer



Compliance with Part L1 of Building Regulations



Compliance with Part L2 of Building Regulations



Swift Connector



Chip on Board



Driver on Board



COLOUR ABBREVIATIONS

- -01 White
- -02 Brass
- -03 Chrome
- -04 Black
- -07 Blue
- -09 Yellow
- -10 Matte Black
- -11 Matte White
- -13 Brushed Chrome
- -14 Antique Brass
- -15 Satin Silver
- -23 Aluminium
- -24 Grey
- -25 Dark Grey
- -CW Cool White LEDs
- -WW Warm White LEDs
- -RGB Colour Changing LEDs

IP RATING AND BATHROOM ZONES

WHAT IS IP RATING?

The resistance offered by the fixture to the penetration of solids and liquids is indicated by the IP (Ingress Protection) rating. This is a two digit number, the first number identifies the degree of protection against the ingress of solids and the second number against liquids e.g. IP65 indicates total protection against dust and protection against low pressure jets of water

First Digit Protection against solids

- 0 No protection
- 1 Protected against solid objects greater than 50mm (e.g. accidental contact with the hand)
- 2 Protected against solid objects greater than 12mm (e.g. accidental contact with finger)
- **3** Protected against solid objects greater than 2.5mm (e.g. tools and wires)
- 4 Protected against solid objects greater than 1mm (e.g. fine tools and wires)
- 5 Protected against dust
- 6 Total protection from dust

Second Digit Protection against liquids

- 0 No protection
- 1 Protection against vertical water drops (e.g. condensation)
- 2 Protection against direct sprays of water, up to 15° from vertical
- 3 Protection against direct sprays of water, up to 60° from vertical
- **4** Protection against water spray from all directions
- 5 Protection against low pressure jets of water from all directions
- 6 Protection against jets of water of similar force to heavy seas
- **7** Protection against immersion between 15–100cm
- 8 Protection against submersion

BATHROOM ZONES

Zone 0:

Is the area inside the bath or shower basin. A minimum rating of IPX7 is required (protection against immersion in water) and only SELV (max 12v AC) equipment may be used in this zone.

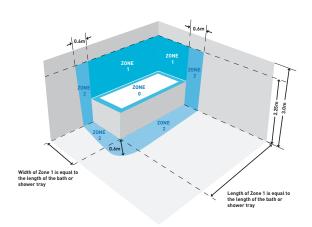
Zone 1:

Is the area directly above Zone 0 to a height of 2.25m above finished floor level or the top of the highest fixed water outlet, whichever is higher. A minimum of IPX4 is needed in this zone. If there is a possibility of water jets then IPX5 is required. 17th edition IEC regulations allow for the use of certain 240v electrical equipment in zones 1 and 2 if controlled by the appropriate RCD.

Zone 2:

Is the area 60cm external to zone 1 and to a height of 2.25m above fixed floor level or the top highest fixed water outlet, whichever is higher. A minimum of IPX4 is needed in this zone. If there is a possibility of water jets then IPX5 is required. 17th edition IEC regulations allow for the use of certain 240v electrical equipment in zones 1 and 2 if controlled by the appropriate RCD.

Zone 3 is no longer used. There is no minimum IP rating area external to zones 0, 1 and 2.



IK RATING

WHAT DOES IK RATING MEAN?

The IK rating of a fixture indicates the level of impact protection the fixture has. This is a two digit rating after the letters 'IK' that identifies the degree of protection against harsh impacts to the body of a fixture. The higher the number equates to a higher level of protection.

IK RATING	DEGREE OF PROTECTION
IK00	No protection
IK01	Protected against 0.14 joules impact. Equivalent to impact of 0.25 kg mass dropped from 57mm above impacted surface.
IK02	Protected against 0.2 joules impact. Equivalent to impact of 0.25 kg mass dropped from 80mm above impacted surface.
IK03	Protected against 0.35 joules impact. Equivalent to impact of 0.25 kg mass dropped from 140mm above impacted surface.
IK04	Protected against 0.5 joules impact. Equivalent to impact of 0.25 kg mass dropped from 205mm above impacted surface.
IK05	Protected against 0.7 joules impact. Equivalent to impact of 0.25 kg mass dropped from 285mm above impacted surface.
IK06	Protected against 1 joules impact. Equivalent to impact of 0.25 kg mass dropped from 405mm above impacted surface.
IK07	Protected against 2 joules impact. Equivalent to impact of 5 kg mass dropped from 400mm above impacted surface.
IK08	Protected against 5 joules impact. Equivalent to impact of 5 kg mass dropped from 100mm above impacted surface.
IK09	Protected against 10 joules impact. Equivalent to impact of 5 kg mass dropped from 200mm above impacted surface.
IK10	Protected against 20 joules impact. Equivalent to impact of 5 kg mass dropped from 405mm above impacted surface.

LAMP TYPES

SYMBOL	TYPE	LUMINOUS EFFICACY (lm/w)	LUMEN OUTPUT (lm)	CCT (k)	CRI	AVERAGE LIFE (Hours)	CAP TYPE
self.	Fluorescent U shape 2 pin	50 - 80	250 – 900	4000	56 - 90	6000	G23/-2G7
***************************************	Fluorescent Double U shape	40 - 70	600 – 1800	4000	56 - 90	8000	G24d/-q
	Fluorescent U shape 4 pin		600 – 2900	4000	56 – 90	8000	2G11
*4	3 U Dulux Fluorescent	40 - 76	300 - 3200	4000	65 - 90	8000	G24d/-q
	Dichroic	12 – 19	240 – 975	3000	100	3000	G5.3
	CFL	40 - 65	400 – 1500	3000	65 – 90	8000	E27/B22
	Fluorescent	65 – 71	1050 – 2700	3500	65 – 90	8000	GR10q
D	Fluorescent tube	66 – 100	430 – 3150	3000	65 – 90	5000 – 1200	G5/G13
	G9 Capsule lamp	8 - 9	190 – 370	2700	100	1500	G9
	Halogen lamp	15 – 29	350 – 1450	3000	100	3000	G4/G6.35
	Halogen linear lamp	16 – 20	3520 – 9900	3000	100	2000	R7S
	AR111	10 – 12	3000	3000	100	2000	G53
Ä	GU10 lamp	7 – 8	250 – 600	2700	100	2000	GU10
	MBF	45 – 50	2000 – 5600	2000 – 3500	40 – 49	8000	E27
	HPS	70 – 130	3500 – 130,000	2000	25	12,000	E27/E40
	Incandescent	6 – 12	150 – 3150	2700	100	1000	E27/B22

LAMP TYPES

SYMBOL	TYPE	LUMINOUS EFFICACY (lm/w)	LUMEN OUTPUT (lm)	CCT (k)	CRI	AVERAGE LIFE (Hours)	CAP TYPE
	Reflector incandescent	6 –12	200 – 500	2700	100	1000	E27/B22
	Quartz metal halide 1 end	60 - 80	3400 - 1350	4200	65 – 85	6000	G12
	Quartz metal halide 2 end	60 - 80	5000 – 11000	4200	65 – 85	6000	R7S
	Metal Halide	60 - 80	3400 – 13,500	3000	65 - 85	9000	G12
•	CFL GX53	28	260	2700 – 4000	80 - 90	10,000	GX53
	CFL GU10	31	350	2700 – 4000	80 - 90	10,000	GU10 CFL
LED	LED	80 – 150+	10 – 10,000	2700 – 6500	65 – 95	50,000	LED

Luminance = amount of light emitted from a particular area (cd/m²)

Luminous Flux = total energy emitted by a light source in the visible spectrum (lm)

Luminous Efficacy = amount of light emitted per unit of energy consumed (lm/w)

CCT - Correlated Colour Temperature

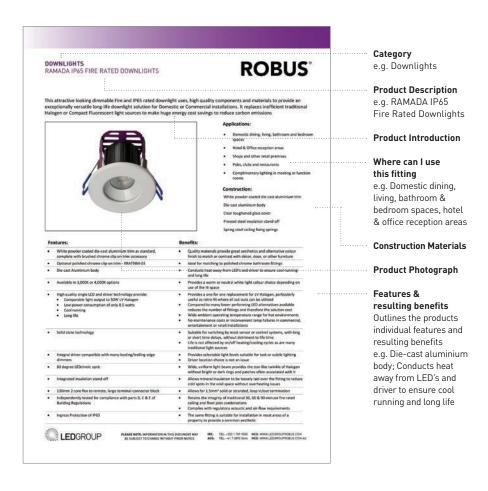
of white light (warm 3,000K, cool 4,000K of COMMISSION REGULATION (EU) No etc) by comparing to a black body at a certain temperature (K)

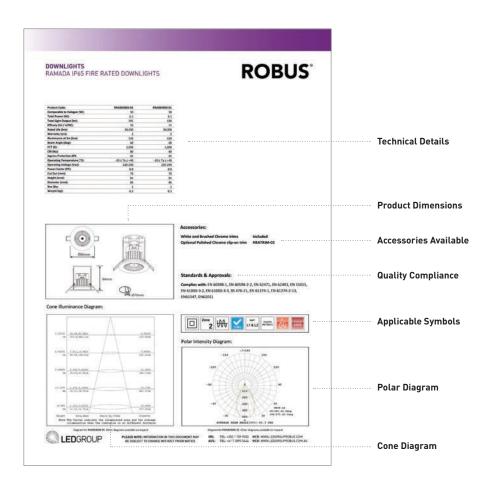
CRI - Colour Rendering Index = a measure to describe the ability of a light source to reproduce colours accurately with reference to an ideal source

Note: LED lamp/luminaire lifetime is = a measure to describe the appearance based on the definition from Annex II 1194/2012

PRODUCT INFORMATION DOCUMENT

The majority of our products are supported with a more detailed Product Information Document which is available to download online – simply browse to the 'Downloads' option at the end of each product page online.





DIGITAL SUPPORT







Ledgrouprobus.com

Our website is fully optimised for use on mobiles, tablets and desktops. Focusing on user experience, our site is easy to navigate with in-depth product information included in the online catalogue.

Our sites also include case study galleries and an energy saving calculator.



Recognised as the best online ordering system in the industry for stockists only.





QUALITY APPROVALS

ROBUS®

ACCREDITED SUPPLIER FOR THE CARBON TRUST GREEN BUSINESS FUND

ROBUS have been approved by The Carbon Trust as an Accredited Supplier for the Green Business Fund.

It is an independent validation and recognition of the skills and services of Robus to supply high quality energy efficient lighting solutions - a much needed and trusted quality standard in a crowded and fast-growing market place.

To gain Accredited Supplier status Robus have shown that they meet or exceed criteria set by the Carbon Trust designed to examine their capability to deliver thoughtful, well-designed, energy efficient and renewable energy solutions.

The Carbon Trust Green Business Fund provides direct funded support through energy assessments, training workshops, equipment procurement support and up to £5,000 capital contribution (none repayable) per company towards energy saving equipment purchases for small and medium size businesses.

The Green Business fund is estimated to be available until the summer of 2018. If other funding is obtained, the scheme will be extended.

GREEN BUSINESS FUND ELIGIBILITY



Who is eligible current GBF sen	
Small & medium sized businesses	✓
Schools	✓
Sole Traders	1
Charities	✓
Domestic properties	×
Public Sector	×
New builds	×

How does the GBF define an SME?

Business which meets any two of the following criteria:

No more than 250 employees;

Annual turnover not in excess of £25,9 M; or

Annual balance sheet not in excess of £12,9 M

AND not more than

25% owned by an entity which does not meet the criteria

CAPITAL CONTRIBUTION

- 15% towards the purchase of energy saving equipment for projects £5,000 to £33,333
- Upper limit £5,000 contribution for projects ≥£33,333
- Lower limit £750 contribution for projects of £5,000 (£0 for projects
- Projects should 'payback' in 5 years
- Projects should be delivered by Carbon Trusts Accredited Suppliers
- Evidence required prior to transfer of funds
- Can't retrospectively fund projects

(A wholesaler or installing contractor can supply a quotation for Robus products and should clearly state the Robus products being used/quoted, together with Product Information Documents for them) Customers should consult the Carbon Trust Green Business Fund Website for more information www.carbontrust.com





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LED GROUP WESTERN RETAIL PARK NANGOR ROAD DUBLIN 12

TEL FAX: EMAIL: +353 1 709 9000 +353 1 709 9060 INFORLEDGROUPROBUS.COM WWW.LEDGROUPROBUS.COM WWW.ROBUISDIRFCT.COM



Below is an extract from the Carbon Trust Green Business Fund Website for the eligibility criteria. If this is met, the application process can be instigated with the Carbon Trust Green Business Fund team.

Before applying to the scheme, you need to check if your business is eligible;

Is your business a small to medium sized business?

Is your business based in England, Scotland or Wales?

Are you considering a project that will deliver on site fossil fuel energy savings?

If you can answer 'yes' to the above, then please gather the following information:

- Organisation Details: Number of full time employees, annual turnover, total value of gross assets, trading
 period, and knowledge of whether a large enterprise has more than a 25% controlling interest in your business.
- Project Details: Brief details of the equipment being replaced and installed. It is necessary to provide details
 of existing energy consumption, hours of operation, unit prices for each fuel type, your current use in kWh, and
 projected usage after the equipment has been installed.
- Total Project Cost: This can include both the cost of capital expenditure and installation.
- Accredited Supplier Details: The name of your chosen accredited supplier from the Green Business Directory
 or BESA's accredited supplier list.
- Energy Saving: A completed Energy Savings Assessment Template, which captures information about the
 projected energy savings relating to the project. Your accredited supplier will assist you in completing this.
- Supplier's quote: An electronic copy of your supplier's quotation. This quotation must meet our requirements, which are shown in the sample documentation guide '<u>Getting it Right First Time - supplier documentation</u>'.
- Existing Capital Contribution: Details of any previous capital contributions received from the Green Business Fund.
- Bank Details: Your business bank details into which funds will be transferred.
- Additional information: Depending on whether your business is incorporated or unincorporated, you will need
 to provide additional information as shown on our guide 'Green Business Fund What We Need'.









LED GROUP WESTERN RETAIL PARK NANGOR ROAD DUBLIN 12 D12 E7VP IRELAND

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QUALITY ROBUS PRODUCTS BY LED GROUP

QUALITY APPROVALS

ENHANCED CAPITAL ALLOWANCES

Businesses are often tempted to opt for products with the lowest purchase price but such immediate cost savings often prove to be a false economy. Take advantage of the Enhanced Capital Allowance scheme for energy-saving technologies by installing ROBUS ETCL (Energy Technology Criteria List) approved products.



Enhanced Capital Allowances (ECAs) are a straightforward way for a business to improve its cash flow through accelerated tax relief on the cost of lighting products, transport to site and cost of installation.

Example:

NON-ETCL APPROVED LIGHTING For a business installing Non-ETCL applighting to the value of £8,500 and paying		ROBUS ETCL APPROVED LIGHTING For a business installing ROBUS ETCL approved lighting to the value of £8,500 and paying tax @ 20%		
Write down allowed Year 1 18% Tax relief @ 20%	= £1,530 = £306	Write down allowed Year 1 100% Tax relief @20%	= £8,500 = £1,700	
So, for every £8,500 spent, the tax bill is reduced by £306 in Year 1 Net cost in Year 1	= £8,194	So, for every £8,500 spent, the tax bill is reduced by £1,700 in Year 1 Net cost in Year 1	= £6,800	

For more information visit www.carbontrust.com

SEAL

Investing in SEAI Triple E registered products improves energy efficiency results, reducing energy bills and shorter payback periods.



Use ROBUS Triple E registered products to reduce future operating costs and see utility bills dramatically lowered.

All products on the Triple E Products Register meet a minimum set of stringent efficiency criteria and typically will be of a best in class efficiency standard.

Public Procurement Regulations

The EUROPEAN UNION (ENERGY EFFICIENT PUBLIC PROCUREMENT) REGULATIONS 2011 state that a public body shall only procure equipment or vehicles which

(a) are listed on the Register*, or

(b) satisfy the published SEAI energy efficiency criteria for the equipment or vehicle concerned, and the public body shall specify this requirement in any documentation describing its procurement requirements.

LIA

Considering the future operating cost of lighting before investing can help make the right investment decision – the LIA Verified Scheme covers products designed to replace existing / old technologies and new innovations. LED luminaires covered by the scheme are those with built-in non-replaceable LED modules designed to be used for household and commercial purposes as the primary light source of an environment.

Use ROBUS products tested and approved by the LIA Verified Scheme which references EN/IEC/CIE standards and European Directives outlined below. ROBUS also test in-house using an integrated sphere measurement system – approved by the LIA.

For more information visit www.lialabcert.org.uk



DIRECTIVES:

2009/125/EC

Ecodesign requirements for directional lamps, light emitting diode lamps and related equipment

2006/95/

EC Low Voltage Directive

SAFETY STANDARDS:

60598: Luminaires. General requirements and tests

62031: LED Modules for general lighting-safety specifications.

62560: Self-ballasted LED-lamps for general lighting services >50V-Safety specification

61347: Lamp control gear. General and safety requirements

61347-2-13: Particular requirements for DC or AC supplied electronic control gear for LED modules. Safety requirements

62471:2006. CIE S 009:2006: Photo biological safety of lamps and lamp systems.

60061: Lamp caps and holders together with gauges for the control of interchangeability and safety.

61195: Double-capped fluorescent lamps. Safety specifications

PERFORMANCE STANDARDS:

61341: Method of measurement of centre beam intensity and beam angle(s) of reflector lamps.

62612: Self-ballasted LED-lamps for general lighting services. Performance requirements

62384: DC and AC supplied electronic control gear for LED modules. Performance requirements

MEASUREMENT STANDARDS:

CIE 127: Measurement of LEDs

CIE 13.3: Method of measuring and specifying colour rendering

CIE 1960: Uniform Colour space

GENERAL INFORMATION QUALITY & RELIABILITY

QUALITY APPROVALS

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CE Approval

All ROBUS products carry the CE mark. CE mark is a statement that the product complies with all relevant European directives and standards. CE marking indicates compliance with the requirement of:

- Low voltage directive for electrical safety (73/23/EEC as amended by 93/96/EEC)
- EMC directive for electro magnetic compatibility (89/336/EEC as amended 92/31/EEC)

Installation

All ROBUS products are supplied with installation instructions. ROBUS will not be held responsible for failure of products due to installations not in accordance with supplied installation instructions or in an unsuitable environment.

Unless stated otherwise, products contained within this catalogue are for installation in 'normal' environments. Ambient temperature, control methods and environmental conditions have an influence on the suitability of many products for installation in some areas. IP ratings of products should be considered relative to the environmental conditions in which they are to be installed - ingress protection. Life expectancy of some light sources and control gear may be reduced significantly by short time delay switching, particularly PIR and time lag switches. Time delay off should be set to 30 minutes to minimise premature failure of some fluorescent light sources. Where shorter time delay periods are required to make optimum energy savings, LED products should be considered, as although more expensive initially, they will pay back in relatively short periods of time. Please contact technical support if you are in any doubt about the suitability of products for specific operating conditions

All performance data listed are subject to tolerances of +/-10% unless otherwise stated.

QUALITY & RELIABILITY

LED Lighting boasts many advantages; energy efficiency, low maintenance, long life and ease of installation to name a few. But all LED Lighting is not the same.

The upfront investment in LED technology is higher, and easily justified; but how do you know if the LED's you are buying are good quality or suitable for purpose? What LED brands are you investing in and what do you know about their quality assurances?



Questions you should ask your LED lighting supplier

QUESTION 1: What LED is used in the product?

The supplier should know the LED used as the quality of an LED product can depend strongly on this.

Lower tier LEDs can exhibit significant reductions in light output and shifts in colour after only a short operating period. Datasheets and LM-80 data should be available for the LEDs in question, which can be used to determine if they are being driven at the correct current and temperature and what the expected lifetime will be.

QUESTION 2: What lifetime is claimed for the product and what is the warranty period?

Lifetime claims can be greatly exaggerated and reflect LEDs operating under ideal conditions rather than the actual product as a whole.

A fitting is only as good as its weakest link.

Lifetime and warranty periods are not the same!

Warranty period is most applicable for energy saving and return on investment calculations.

Be very wary of any warranty period offered that is longer than the supplier has been in business.

Consider the level of support available if there are any future issues with the product.

QUESTION 3: Are full photometric files (.LDT, .IES, etc.) available for the product?

Lumen output and efficacy claims may be exaggerated by basing values on LEDs operating under optimum conditions, rather than on the complete fitting. In general, products must be sent to an independent test lab to generate the photometric files.

These files are a very useful means to verify product performance.

Photometric files are also essential for lighting designers to model lighting installations in Relux or Dialux lighting design software.

QUESTION 4: What is the colour binning range for the product (e.g.

range for the product (e.g. 4000K +/- 5%) and what are the specific colour bins used?

LED products can vary significantly in colour from batch to batch unless the supplier understands and controls the binning range.

The supplier should be able to provide this binning information and ensure that there is the minimum of colour variation [MacAdam Ellipses] between batches.

QUESTION 5: Does the product have the relevant certification approvals for the application?

Certification is best practice to ensure a product meets Safety, EMC and Environmental requirements.

For this reason, and since it is expensive for suppliers to obtain, evidence of certification is a useful way to determine product and supplier quality.

CE Marking also carries with it obligations with respect to meeting minimum product performance levels as defined by ERP Directives.

It is the responsibility of the supplier to be able to prove that a product is inherently safe and fit for purpose – there are sanctions for not meeting this.

QUESTION 6: If it is a dimmable product, what dimmers is the product compatible with?

LED products are suitable for dimming if properly specified.

The supplier should be able to provide a list of compatible dimmers that can be used with the product.

QUESTION 7: What is the CRI (Colour Rendering Index) of the product?

Light quality is measured by CRI, which is important for many illumination applications, as it indicates how realistic colours may appear.

Most internal lighting applications should use CRI of 80 or above, whereas CRI of 65 or above is acceptable for external lighting applications.

QUESTION 8: What is the Power Factor of the product?

Poor power factor results in inefficient use of power from the electrical grid.

This is important for larger installations as electricity providers can sometimes impose penalties for this.

For fittings of 25W or greater, power factor must exceed 0.9.

QUESTION 9: What is the THD (Total Harmonic Distortion) of the product?

High levels of THD can result in voltage and current spikes when a product is switched on, resulting in circuit breakers tripping.

This is important for larger installations as the effect is increased for increased fittings.

PART L1 AND L2

PART L1 AND L2 REQUIREMENTS - APRIL 2014

The April 2014 lighting compliance guide provides guidance on the specification of fixed internal and external lighting for new and existing dwellings to meet relevant energy efficiency requirements in the Building Regulations.

PART L1

PART L2

Limits remain unchanged (>45lm/cctW and >400lm).

Limits increased (>60lm/cctW).

Light fittings LESS THAN 5W do not count towards the total number of light fittings so performance is irrelevant. This would apply to lamps less than 5W.

This is MINIMUM 60lm/cctW. Displaying lighting products should be MINIMUM 22lm/cctW

DOMESTIC BUILDING SERVICES COMPLIANCE

Recommended minimum standards for fixed internal and external lighting

Lighting	New and existing systems	Supplementary Information
Fixed internal lighting	a. In the areas affected by the building work, provide low energy light fittings (fixed lights or lighting units) that number not less than three per four of all the light fittings in the main dwelling spaces of those areas (excluding infrequently accessed spaces used for storage, such as cupboards and wardrobes). b. Low energy lighting fittings should have lamps with luminous efficacy greater than 45 lamp lumens per circuit-watt and a total output greater than 400 lamp lumens. c. Lighting fittings whose supplied power is less than 5 circuit-watts are excluded from the overall count of the total number of light fittings.	Lighting fittings may be either: • dedicated fittings which will have separate control gear and will take only low energy lamps (e.g. pin based fluorescent or compact fluorescent lamps); or • standard fittings supplied with low energy lamps with integrated control gear (e.g. bayonet or Edison screw base compact fluorescent lamps). Light fittings with GLS tungsten filament lamps or tungsten halogen lamps would not meet the standard. The Energy Saving Trust publication GIL20,
Fixed internal lighting	Where fixed external lighting is installed, provide light fittings with the following characteristics: a. Either: i. lamp capacity not greater than 100 lamp-watts per light fitting; and iii. all lamps automatically controlled so as to switch off after the area lit by the fitting becomes unoccupied; and iii.all lamps automatically controlled so as to switch off when daylight is sufficient. b. Or: i. lamp efficacy greater tan 45 lumens per circuit-watt; and iii. all lamps automatically controlled so as to switch off when daylight is sufficient; and iii.light fittings controllable manually by occupants.	Low energy domestic lighting, gives guidance on identifying suitable locations for fixed energy efficient lighting. A single switch should normally operate no more than six light-fittings with a maximum total load of 100 circuit-watts.

PART L1 AND L2

NON - DOMESTIC BUILDING SERVICES COMPLIANCE

There are two alternative approaches, applicable both to systems in new buildings and to replacement systems in existing buildings. The guidance applies to a) general interior lighting and b) display lighting.

Recommended minimum lighting efficacy with controls in new and existing buildings

		Initial luminaire lumens/circuit-watt
General lighting in office, industrial and storage spaces		60
Controls	Control factor	Reduced luminaire lumens/circuit-watt
a daylit space with photo-switching with or without override	0.90	54
b daylit space with photo-switching and dimming with or without override	0.85	51
c unoccupied space with auto on and off	0.90	54
d unoccupied space with manual on and auto off	0.85	51
e space not daylit, dimmed for constant illuminance	0.90	54
a + c	0.80	48
a + d	0.75	45
b + c	0.75	45
b + d	0.70	42
e + c	0.80	48
e + d	0.75	45
General lighting in other types of space		The average initial efficacy should be not less than 60 lamp lumens per circuit-watt
Display lighting		The average initial efficacy should be not less than 22 lamp lumens per circuit-watt

Recommended minimum standards for metering of general and display lighting in new and existing buildings

	Standard
Metering for general or display lighting	a. kWh meters on dedicated lighting circuits in the electrical distribution; or b. local power meter copuled to or integrated in the lighting controllers of a lighting or building management system; or c. a lighting management system that can calculate the consumed energy and make this information available to a building management system or in an exportable file format. (This could involve logging the hours run and the dimming level, and relating this to the installed load).

Note: The LENI (Lighting Energy Numerical Indicator) method is an alternative to complying with the efficacy standards set out in the tables above. The LENI method calculates the performance of lighting in terms of energy per square metre per year (kWh/m²/year), based on BS EN 15193:2007, Energy performance of buildings.

PART L1 AND L2

KEY TERMS

Circuit-watt means the power consumed in lighting circuits by lamps and, where applicable, their associated control gear (including transformers and drivers) and power factor correction equipment.

Light fitting means a fixed light or lighting unit that can comprise one or more lamps and lampholders, control gear and appropriate housing. The control gear may be integrated in the lamp or located elsewhere in or near to the fixed light.

Fixed external lighting means lighting fixed to an external surface of the dwelling supplied from the occupier's electrical system. It excludes lighting in common areas of blocks of flats and in other communal accessways.

Office area means a space that involves predominantly desk-based tasks – e.g. a classroom, seminar or conference room.

Daylit space means any space:

- a. Within 6m of a window wall, provided that the glazing area is at least 20% of the internal area of the window wall
- b. Below rooflights, provided that the glazing area is at least 10% of the floor area

The normal transmittance of the glazing should be at least 70%; if the light transmittance is below 70%, the glazing area should be increased proportionately for the space to be defined as daylit.

Local manual switching means that the distance on plan from any local switch to the luminaire it controls should generally be not more than six metres, or twice the height of the light fitting above the floor if this is greater. Where the space is a daylit space served by side windows, the perimeter row of lighting should in general by separately switched.

Photoelectric control is a type of control which switches or dims lighting in response to the amount of incoming daylight.

Presence detection is a type of control which switches the lighting on when someone enters a space, and switches it off, or dims it down, after the space becomes unoccupied.

Absence detection is a type of control which switches the lighting off, or dims it down, after the space becomes unoccupied, but where switching on is done manually.

Lamp lumens means the sum of the average initial (100 hour) lumen output of all the lams in the luminaire.

Lamp lumens per circuit-watt is the total lamp lumens summed for all luminaires in the relevant areas of the building, divided by the total circuitwatts for all the luminaires.

LOR is the light output ratio of the luminaire, which means the ratio of the total light output of the luminaire under stated practical conditions to that of the lamp or lamps contained in the luminaire under reference conditions.

Luminaire lumens per circuit-watt is the (lamp lumens x LOR) summed for all luminaires in the relevant areas of the building, divided by the total circuit-watts for all the luminaires.

TERMS & CONDITIONS

Definitions

- 1.1 'Buyer' means the person who agrees to buy the goods from the Seller in the course of their business, trade or profession.

 1.2 'Consumer' means a person who agrees to buy the goods from the
- Seller and who has rights under current Irish Consumer legislation including the Sale of Goods Act 1893, the Sale of Goods and Supply of Services Act 1980, the Consumer Credit Act 1995 and the Consumer Protection Act 2007.
- 1.3 'Goods' means the articles which the Buyer or Consumer agrees to buy from the Seller.
- 1.4 'Seller' means LED Lighting and Electrical Distribution Group of
- Western Retail Park, Nangor Road, Dublin 12, Ireland.

 1.5 'Price' means the price for the Goods including carriage and packaging costs, but excluding VAT unless otherwise stated. Please note that a price quotation for orders for European and Worldwide destinations (excluding Ireland & UK) does not include the carriage fee.

2. Conditions, Order Confirmation and Cancellation

- 2.1 Any variation of these Conditions (including any special terms and conditions agreed between the parties) shall be inapplicable unless agreed in writing by Seller.
- 2.2 An order is deemed to be confirmed once a valid purchase order is received from Buyer or Consumer. Buyer and Consumer acknowledge that they have read and understood these terms and conditions as they appear in our current catalogue from which the Goods have been selected and/or our website (in the case of internet orders) and/or prior to sending a purchase order and in all applicable cases, agree to be
- 2.3 Cancelled Delivery: An order may be cancelled up to the point of it being despatched with no additional charges. If the Goods have left Seller's premises, then Buyer or Consumer shall pay the cost of carriage for shipping back to Seller. The local Area Sales Manager will issue a return authorisation to be sent with Buyer or Customer's debit note.
 This only applies to orders cancelled within 24 hours of the order being placed. After this, the Goods can only be returned as a stock cleanse or Goods not required, under clause 8.2 or 8.3 below.
- 2.4 All orders for Goods shall be deemed to be an offer by Buyer or Consumer to purchase Goods from Seller and Seller's delivery of the Goods ordered shall constitute acceptance of such offer.

3. Price and Payment

- 3.1 Prices are in Euro (€) or Pound Sterling (£) or US Dollars (\$) exclusive of VAT unless otherwise stated
 3.2 Payment of the Price (and VAT unless otherwise stated) by Buyer shall
- be due strictly within the prior negotiated period of 30, 60 or 90 days as agreed between the parties from the date of the invoice and on approved accounts and in the case of Consumer or unapproved Buyer account sales, at the point of purchase.
- 3.3 If payment is not received from Buyer on the due date then without prejudice to any of the Seller's other rights Seller may: 3.3.1 suspend or cancel deliveries of any Goods due to Buyer; and/or without prior potice
 - 3.3.2 appropriate any payment made by Buyer to such Goods (or made under any other contract with Buyer) that Seller may in its sole discretion think fit: and/or
 - 3.3.3 treat this contract as repudiated by Buyer.
- 3.4 Buyer or Consumer may not withhold payment of any invoice or other amount due to Seller by reason of any right of set-off or counterclaim which Buyer or Consumer may assert for any reason whatsoever.

- 4. Risk and Loss or Damage to Goods
 4.1 The risk in respect of all Goods supplied by the Seller shall pass to the Buyer or Consumer upon delivery to the Buyer or Consumer or dispatch by Seller in accordance with Buyer or Consumer's delivery instructions. It is Buyer or Consumer's responsibility to inspect the Goods prior to acceptance. Signature of a delivery docket by or on behalf of Buyer or Consumer shall be deemed acceptance of the Goods in the condition in which they are delivered and release Seller from all liability in respect of damage in transit or shortages.
 4.2 Where damage or loss or shortages occur to the Goods prior to
- risk passing to the Buyer or Consumer, it shall be Buyer or Seller's responsibility to note such damage or loss or shortages on the delivery docket and, within 2 working days from the date of delivery, notify Seller in writing of the particulars in order to validate a claim, quoting the delivery docket reference.
- 4.3 Buyer or Consumer must return all Goods damaged in transit that have not been accepted to Seller properly packaged within one month of inspection

5. Retention of Title

5.1 Ownership of the Goods shall remain the property of Seller until such a time as Buyer or Consumer has paid the Price (including VAT) in full, and no other sums whatever shall be due from Buyer or Consumer to Seller whether in respect of those Goods or delivered Goods the subject of any other order from Buyer or Consumer.

5.2 If Buyer or Consumer fails to make a payment for the Goods in accordance with the terms and conditions of this Contract or commits any other breach of this contract, or commits an act of bankruptcy or if Buyer or Consumer being a company is the subject of a winding up petition or resolution or a receiver shall be appointed over Buyer's or Consumer's assets all sums due respect of the Goods shall become payable immediately and Seller may in its absolute discretion and without prejudice to any other rights which it may have, exercise its rights pursuant to clause 3.3

6. Remedies and Liabilities

- 6.1 The entire liability of Seller to Buyer or Consumer arising out of this contract shall be limited to repayment of the Price.
- 6.2 Seller shall not be liable for any loss, costs, damages, charges or expenses caused, directly or indirectly, by any delay in the delivery of the Goods.
- 6.3 The statutory rights of Consumer under current Irish legislation remain unaffected.

7. Alteration of Order

Prior to delivery Buyer and Consumer have the right to alter the order. Any changes to the order will be deemed a cancellation of the original order. A revised order confirmation will be issued by Seller. Seller reserves the right to alter the Price as a result of any change to an order requested by Buyer and Consumer.

8. Returns Policy

- 8.1 Faulty Goods: Goods that are faulty (for reasons other than damage in transit) must be inspected by Seller's local Area Sales Manager who will provide a return authorisation number to be included with Buyer or Consumer's debit note. Without these documents the return will be refused and returned to Buyer or Consumer with a charge made for carriage and an administration charge of £45. Any Goods that are subsequently found not to be faulty will be returned to Buyer or Consumer, with no credit being issued and the carriage costs will be charged to Buyer or Consumer.
- 8.2 Goods Not Required: Any Goods purchased that are no longer required, incorrectly ordered or unwanted may be returned to Seller. On such occasions a handling charge of 25% plus the carriage to return the Goods will be applied. All Goods must be in resalable condition with the boxes undamaged and intact and be part of Seller's current catalogue offer. Any Goods not required must be inspected by the local Area Sales Manager who will provide a return authorisation number to be included with Buyer or Consumer's
- 8.3 Stock Cleanse: An annual stock cleanse is available to non-Consumer stockists. The value of the replacement order is a minimum of two for one. The following criteria must be adhered to:
- All Goods must be in box quantities.
- All Goods must be in our current catalogue
- The stock cleanse cannot exceed 10% of that Buyer's branch turnover from the previous trading year.
 The stock cleanse must be authorised by the local Area Sales
- Manager, who will provide a return authorisation number for the Goods.
- The stock cleanse must be inspected by the local Area Sales Manager before the Goods are returned.
- Buyer is responsible for the return of the Goods along with any shipping costs. Collections are available and are chargeable. The local Area Sales Manager can provide costings for this service. Stock cleanse cannot be authorised between 1 November and 31
- December of any trading year.
- 8.4 Returns: Buyers and Consumers shall ensure that any Goods being returned are packed/wrapped sufficiently to prevent cartons being damaged. If Goods are damaged and not fit for resale, credit will not be issued for these Goods. Goods will be returned and a carriage charge to return will be applied.
- 8.5 Short Delivery: Buyer or Consumer must notify Seller's Sales Office within 3 working days of receipt of delivery if there is a shortfall of Goods to invoice/delivery note. Requests received after 3 working days cannot be entertained.

9.1 This Contract is subject to the law of the Republic of Ireland and the parties submit to the non-exclusive jurisdiction of the Irish Courts sitting in Dublin

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ROBUS°

- 1. **n.** stronghold, position of strength
- 2. n. mainstay, source of strength
- 3. effectiveness, fastness, hardiness, heart, purpose, resolve, robustness, solidity, strength, main strength, stronghold, strongest element, toughness, tough core, vigor

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