

# Emergency Lighting Product Catalogue

**The Emergi-Lite portfolio from Thomas & Betts delivers a highly versatile choice of emergency lighting and fire detection products and systems for a wide range of applications. Our aim is to enable customers to achieve the maximum benefit in investment. This is gained through product design, for quick and simple installation with inherent energy efficiency and minimum maintenance, whilst keeping the protection and safety of human life paramount.**

Since 1998, the Emergi-Lite brand has been included in the product portfolio of the Thomas & Betts Corporation.

In 1898 Thomas & Betts was founded in New York. The corporate headquarters now reside in Memphis, Tennessee with the company being listed on the New York stock exchange. Thomas & Betts has now over 100 years of experience of successfully supplying quality products to the market by using innovative design and manufacturing techniques. A truly global player having a presence in Europe, North & Central America, Australia and the Far & Middle East. Worldwide 13,000 employees are dedicated to ensuring that Thomas & Betts is fast, flexible and customer focussed.

Whilst one of our main businesses remains in the electrical products, principally Emergency Lighting and Fire Detection Systems, Thomas & Betts also has leading brands along with significant market share in Steel Structures, Communications, Electronic Systems Protection and Earthing & Lightning Protection.

In recent years, Thomas & Betts has developed a formidable European safety products division, the principal products of which are emergency lighting and fire detection systems. This division serves as a key knowledge platform. Emergi-Lite being one of the leading brands within this division, benefits from the economies of scale in product development and production, facilitating the efficient further development of emergency lighting and fire detection technology.



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### Waste Electrical and Electronic Equipment Regulations 2006 (“the WEEE Regulations”)

The Government has introduced the Waste Electrical and Electronic Equipment Regulation 2006 (“WEEE”), which has been effective from 1st July 2007.



#### Producer Responsibility

Thomas & Betts Ltd (Emergi-Lite Safety Systems) meets its producer responsibility via membership of the Lumicom Producer Compliance Scheme (registration no. WEEE/DH0073UQ). Under this scheme, de-polluted luminaires (ie those with the lamps, batteries and liquid filled capacitors removed), which are being replaced by our fittings, will be recycled in an environmentally sound manner.

#### Recycling Cost

Producers (or their agents) are required to finance the environmentally sound disposal of non-household luminaires and the gas discharge lamps within them. Therefore there will be a recycling charge, which may vary from time to time.





**Emergi-Lite Safety Systems is a leading manufacturing company of emergency lighting & fire detection systems and a key innovator in the life safety market.**

The company provides services to the customer from a trained field sales team at the project design stage through to commissioning and maintenance of installed systems.

Emergi-Lite is uniquely placed to provide state of the art solutions in the fields of:

**Emergency Lighting:** Serenga LED emergency lighting, Endurance and Hy-Lite ranges exemplify the extent and variety of product available.

**Testing systems:** 'Centrel' PC-managed, 'IR' infra-red remote testing and EMEXtest central power supply & slave testing systems developed to meet the rigorous demands of regulations and the market.

**Advanced fire detection and alarm products:** 'Eurofire', 'Firetec' and 'Anatec-Pro' panels for the varied fire protection requirements of buildings of different sizes and use.

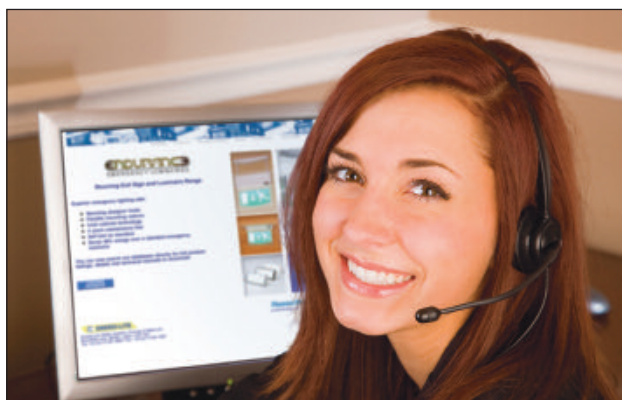
Emergi-Lite is a member of Thomas & Betts group of companies, which includes Van Lien in Holland, Kaufel S.A (France), Kaufel Stromversorgungssysteme (Germany) and Stanilite (Australia) [Emergency Lighting and Safety product manufacturers and suppliers].

## Quality and BSI

Emergi-Lite products are manufactured to the highest quality standards. Our procedures are certified by BSI under BS EN ISO 9001:2000 certificate no. FM/09470 for the manufacture and supply of emergency lighting, manufacture of Central Power Supply Systems for emergency lighting use, fire detection and alarm equipment, together with the modification of mains luminaires for emergency lighting applications.

All Emergi-Lite ICEL registered products meet the new ICEL1001:2000 requirements, for certification to BS EN 60598.2.22, flammability of plastic parts of the luminaire, battery performance, authenticated photometric data and the design life expectancy of electronic components.

Emergi-Lite is now licensed to carry out ICEL1004 conversions, licence no. 4030923.



## Customer sales/technical advice and service

Tel +44 (0) 113 281 0610

Fax +44 (0) 113 281 0611

A field sales team covers the UK, backed by experienced internal sales and technical staff, all ready to assist with your emergency lighting needs and concerns.

Please call our sales helpline for further information. Calls may be monitored to assist with sales training and our customer care programme.

## Distribution network

Emergi-Lite products are available through selected electrical wholesale distributors nationwide. Your local stockist will be pleased to assist with your requirements.

## Export

We are pleased to provide advice and service on all your export requirements. Technical advice and support on specific requirements is also available.

## Scheme design

We offer expert assistance in Fire Alarm and Emergency Lighting scheme design to the latest standards, as a supplementary service to that provided by qualified Consulting Engineers and local Fire Authorities.

Our field sales managers are able to assist you on your premises or have schemes worked on in our design office.



## Testing emergency lighting

It is a legal requirement that emergency lighting is regularly tested and a maintenance procedure is set in place to British Standards BS 5266 Parts 1 and 8 (the Simplified Testing Regime – EN 50172). The Regulatory Reform (Fire Safety) Order 2005/Fire (Scotland) Act 2005 makes reference to the proper maintenance of systems according to the relevant standards. Work Place Directive 89/654 states that emergency lighting shall be maintained in an effective state, in efficient working order and in good repair. In the Fire Precaution Section of the Directive, it states that emergency lighting should be regularly maintained and any faults found and rectified as quickly as possible.

Emergi-Lite manufacture a choice of testing systems that enables the specifier or user to test self-contained emergency luminaires in the system according to current and forthcoming testing requirements. Our testing solutions include:

- Self-Test – each luminaire includes a built-in test facility with internal timer for programmed testing
- infra-red testing (IR2) – luminaire tests initiated via remote control, eliminating the need for costly wiring installation
- Automatic testing – Each luminaire is coded with an electronic address and tests can be implemented from the users control panel or PC, with records held digitally

## Maintenance support and servicing

As leader in our field, Emergi-Lite Safety Systems offers complete and comprehensive after sales support.

Our team of qualified and experienced service engineers is available to commission new systems or service existing ones, to ensure full working order within the scope of the appropriate British Standards. The occupier of premises covered by these codes is obliged to arrange for a scheme where regular tests and inspections are performed. Our Service Manager will be pleased to provide advice and/or details of our maintenance and service schemes to cater for such requirements. Recommended spares only are to be used.

## CPD-Accredited Training Course – Emergency lighting, testing and monitoring

Committed to providing a comprehensive service to our customer base, we support our sales activity through the provision of a fully interactive training course to consultants, installers and other parties who are looking to gain an in-depth understanding of emergency lighting legislative and testing requirements.

The course details the correct procedures for testing and monitoring all emergency lighting, in accordance with British Standards, Codes of Practice and current Working Directives, along with the methodologies best used to maximise effectiveness and efficiency of your installations.

# Welcome to Emergi-Lite

## Lighting related product ranges

Emergi-Lite Safety Systems offers a broad range of emergency lighting products to suit a wide variety of applications and commercial or industrial settings. Our standard product portfolio includes:

Emergency lighting

- Self-contained luminaires
- Slave luminaires AC/AC and AC/DC
- Matching mains luminaires

Testing facilities

- Infra-red remote testing (IR2)
- 'Centrel' PC controlled (CT)
- Static inverter system (EMEXtest)
- Manual testing (TELER)
- Self-Test (ST)

Mains luminaire conversion to emergency lighting:  
Fluorescent and low voltage filament

- General conversion products and services
- Conversions with testing facility
- IR2, CT and EMEXtest
- Self-Test (ST)

Special use products

- Help-Lite
- Hazard-Lite: Explosion proof
- Hand-Lite portable luminaire
- Guide-Lite low level escape route lighting

## Special products

This product guide provides a wide choice of luminaires in style and technical features. However, if the product you seek is not shown, please contact us to discuss your special requirements.

## Conversion service

Emergi-Lite offers an expert conversion service for free issue fittings at three nationwide conversion centres.

All conversion work is fully guaranteed and is compliant with CE requirements.



### CE Marking Scheme

Emergency Luminaires carry the  mark

### Key



Denotes that fittings are available in Centrel/IR2 or with in-built Self-Test facility



**70** Strikethrough denotes lumens output from an exit sign panel cannot be considered for a lighting scheme.



Denotes weatherproof

## Product ordering

Each product has a unique reference code which enables specific ordering. Legend panels/stickers are to order separately from luminaires or bulkheads and are shown on page with the relevant product to assist with selection.

Our sales team is available to discuss your particular requirements with the planning of emergency lighting installations, or with selection of the appropriate replacement emergency lighting products. Please contact Emergi-Lite for further assistance.

## Legend panels/stickers

Legends are highlighted on page with their specific lighting product, and are also shown in our handy reference table on page 72, for quick reference.

The standard 'Signs Directive' format is shown below. Other legend formats with different arrow directions, HTM65 format (below), BS 5499 mixed 'image/word' and foreign language variants are available by special request.



## Legend format (signs directive format)

The European style pictogram (Eurogram) format of the sign is shown below.



Escape is to the right.



Escape is to the left.



Escape route when passing through doors or when directly over an escape route.



Escape route is upstairs (eg from a basement or underground parking) and used for straight on in certain circumstances.

## Viewing distance and size of sign

The relationship between the size of sign and the viewing distance to an observer is prescribed by the standard EN1838 (BS 5266 Part 7: 1999). For a given pictogram height there is a maximum viewing distance derived from the formula:

$D_{max} < h \times 200$  metres  
(for internally illuminated signs)

$D_{max} < h \times 100$  metres  
(for externally illuminated signs)

D = viewing distance

h = pictogram legend height







## Endurance & Serenga emergency lighting

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## Endurance luminaires



Stylish enough to look good in the most prestigious of projects, matched with leading edge technical design which will complement any building interior.

### Advanced 'energy saving' technology

A cold cathode fluorescent lamp with a long life expectancy of over 50,000 hours. The cold cathode lamp also provides energy savings of 40% over a comparable T5 8w tube.

### Minimal maintenance

The cold cathode lamp, advanced battery charging and quality components enables a long lifespan of at least 4 years without maintenance.

### Assured performance

Intelligent Self-Test is standard. All fittings are designed to fully comply with BS EN 60598.2.22 (Kitemark KM13139).

### Easy 'first-fix' installation

Luminaires have a first-fix design which allows full wiring of the universal base unit with a positive snap-in fixing of the luminaire body.

### Intelligent Self-Test as standard

All Endurance luminaires have an in-built self-testing system, ensuring all testing and fault identification is handled automatically. This feature is offered as standard on all versions of the product. The fitting will do weekly operation checks and conduct its own full duration test after 1 year.

A "press to test" is also incorporated.

### Long life components

The key functional elements to this unit are the lamp, battery and circuit. Endurance uses long life components including lamp and batteries that will enable the product to endure a period of at least 4 years without replacement parts. After this period, in the unlikely event that a fault occurs, then simply unplug and fit a new luminaire body.

In essence, 'Endurance' does not require any user intervention, maintenance or replacement of its parts, over a long period of time, giving confidence and peace of mind to the user, whilst minimising maintenance costs.

### Edge-lit exit sign available in 3 colours

- Standard White
- Smart Silver
- Classic Black





The Endurance exit sign is versatile enough to be installed in the most awkward of spaces. With a range of mounting accessories especially designed to enhance the fitting's flexibility, designers can now choose from wall, ceiling, recessed and suspended fixings, with rods or wires, as well as a unique horizontal version for installations where space is restrictive.

Comprises: A first-fix plate, luminaire body complete with lamp, batteries, circuit and sign-plate cover. The first-fix plate has a 5-way terminal block to which all the electrical connections are made. The luminaire body 'snaps' into the first-fix plate and the sign-plate cover snaps onto the body and hides the lamp etc. The sign-plate is the main accessory and is sold separately to the base unit. Available with different directional arrows and as single sided or double sided versions.

This unit is self-contained with restmode facility.

## SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230v 50Hz
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Microprocessor controlled dual rate
<b>Charging monitor</b>	Green LED
<b>M operation</b>	High frequency operation
<b>Recharge period</b>	24 hours
<b>Lamp</b>	CCFL
<b>Lamp o/p (lumens)</b>	70
<b>Rated lumen output measured on a sign-plate over a 3hr duration (test at BSI)</b>	After 3 hour duration 13 lumens
<b>Consumption (amps)</b>	0.04
<b>Fault indicator</b>	Amber LED. Self-Test as standard

## CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Provision via 20mm diameter knockouts/holes for easy connection to first-fix plate
<b>Construction</b>	Polycarbonate high impact plastic
<b>Environment</b>	0 – 25°C ambient
<b>Ingress class</b>	IP20
<b>Dimensions lwd (mm)</b>	Base Unit 310 x 282 x 53
<b>Weights (kg)</b>	Main unit with first fix and diffuser: 0.78 Packaged carton: 0.94 Sign-plate: 0.5
<b>Product standard/Approvals</b>	Designed and manufactured to BS EN 60598.2.22 EM3-001, -002 & -003 Kitemarked
<b>Uniformity</b>	Endurance conforms to the minimum requirement of 2cd/m <sup>2</sup> (on any point of the sign-plate) for uniformity



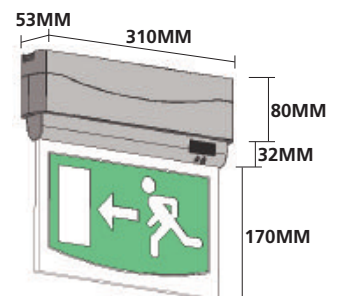
Base unit in white with legend



Base unit in black with legend



Base unit in silver with legend



# Endurance edge-lit mounting accessories



With horizontal mounting in white



With recessed kit in white



With wall bracket in silver – centred



With wall bracket in silver – angled

## Horizontal EMH

Attachment is available which allows the luminaire to be mounted horizontally with the sign-plate hanging vertically. This kit consists of a reflector to redirect light to the sign-plate, an alternative sign-plate cover and screws to secure the sign-plate. Ideal for use above doors where space is limited.

## Recessed Kit EMF

Comprising a recessing cage, trim plate and fasteners. The recessing cage has side wings that are used to secure the cage to the ceiling. The luminaire is installed by simply pressing it into place and replacing the cover.

## Wall Brackets EMV

The bracket moulding features a ratchet detail allowing the sign to be angled at virtually any angle to the wall, specifically parallel and perpendicular mountings.

## Suspension Kits EMS

The suspension mounting is available in 2 basic forms, either as a wire suspension or by twin rod mounting. The adjusting device for the wire is pulled through a clutch mechanism until the desired length is reached, then the wire is cut to length. The ability to cut the wire to length makes this version especially suitable for angled mounting surfaces where different lengths of wire need to be achieved. The cut end does not enter the first-fix plate so cannot chafe electrical wiring or compromise safety.

## Rod Suspension EMR

A number of rod suspension kits are available for specific mounting heights.



With wire suspension in white



With rod suspension in white

When ordering an Exit Sign system, the basic luminaire must be ordered with an appropriate sign-plate and the specific mounting kit for any fixing other than standard ceiling.

### When ordering:

Choose one order code from each box

Order the <b>base unit</b> in the appropriate colour	(from Box 1)
Order the <b>special mounting accessory</b> if required	(from Box 2)
Order <b>sign-plate</b> with correct arrow indication	(from Box 3)

### TO ORDER

#### BOX 1 – BASE UNIT DETAILS

DESCRIPTION	ORDER CODE
Basic safety sign luminaire (white)	EM3-001
Basic safety sign luminaire (black)	EM3-002
Basic safety sign luminaire (silver)	EM3-003

#### BOX 2 – MOUNTING ACCESSORIES

Wall bracket (white)	EMV-001
Wall bracket (black)	EMV-002
Wall bracket (silver)	EMV-003
Horizontal (white)	EMH-001
Horizontal (black)	EMH-002
Horizontal (silver)	EMH-003
Recessing kit (white)	EMF-001
Recessing kit (black)	EMF-002
Recessing kit (silver)	EMF-003
Adjustable wire suspension kit (white)	EMS-001
Adjustable wire suspension kit (black)	EMS-002
Adjustable wire suspension kit (silver)	EMS-003
0.30m rod suspension kit (white)	EMR300-001
0.30m rod suspension kit (black)	EMR300-002
0.30m rod suspension kit (silver)	EMR300-003
0.50m rod suspension kit (white)	EMR500-001
0.50m rod suspension kit (black)	EMR500-002
0.50m rod suspension kit (silver)	EMR500-003
1m rod suspension kit (white)	EMR1000-001
1m rod suspension kit (black)	EMR1000-002
1m rod suspension kit (silver)	EMR1000-003

#### BOX 3 – ENDURANCE LEGEND

Running man arrow left	ESS010
Running man arrow right	ESS011
Running man arrow down	ESS012
Running man arrow up	ESS013
Double sided; arrows left/right	EDS020
Double sided; arrows down	EDS021
Double sided; arrows up	EDS022

#### Example of a written specification for an Endurance project

Emergency Lighting safety signs should be from the Endurance range of low maintenance self-contained luminaires incorporating long life cold cathode lamps.

The equipment should be manufactured in Polycarbonate and utilise a separate 'first-fix' installation plate. The safety sign luminaires should be mounted using the appropriate 'Endurance' mounting kit.

Please specify colour option, white being standard.



Endurance colour choices, White, Smart Silver and Classic Black

#### EXAMPLE ORDER

##### BOX 1 BASE UNIT

- Basic safety sign luminaire (white) EM3-001

##### BOX 2 MOUNTING ACCESSORIES

- Wall bracket (white) EMV-001

##### BOX 3 ENDURANCE LEGEND

- Arrow left ESS010



## Endurance fittings

Long life, energy saving & 'Self-Test'

A range of Endurance bulkheads and exit signs that complement the original Endurance edge-lit exit sign.

Common electrical specification for standard sized luminaires is given in the table right. Specific luminaire information including construction and cable entry is listed in the standard emergency lighting section.

### ELECTRICAL SPECIFICATION

ELECTRICAL SPECIFICATION	SELF-CONTAINED WITH RESTMODE FACILITY
Input voltage	230v 50Hz
Duration	3 hours (maintained and non-maintained)
Battery	High temperature nickel cadmium
Charger	Constant current
Charging monitor	Green LED
M operation	High frequency
Recharge period	24 hours
Lamp	Cold cathode fluorescent (CCFL) T2
Lamp o/p (lumens)	70, L.O.R: 0.78
Consumption (amps)	0.04
Fault indicator	Amber LED, Self-Test as standard
Product standard/Approvals	Designed and manufactured to BS EN 60598.2.22

Note: Tunnelway luminaire is non-standard requiring specific project assessment.



Tunnelway luminaire



Specific legends/language variants are available to order

### Endurance tunnelway luminaire ETU

Road, rail or infrastructure service tunnels all require emergency lighting dependent on local regulations and standards. Luminaires of different sizes and operations are needed. Emergi-Lite is a specialist in this field having gained experience in providing tunnel lighting in Europe over a period of years. The example illustrated in this section is designed for a multi-lane road tunnel with adequate wall mounting space where substantial directional sign viewing distance is required.

A high specification, heavy-duty safety luminaire designed to cope with the most demanding environments such as tunnels, industrial complexes etc. Ingress rated to IP65 with an angulated style for improved passageway visibility.

- Stainless steel bodywork, polycarbonate diffuser cover
- Downlight provision
- Cold cathode energy saving lamp - rated working life of 50,000 hours with 40% energy saving over comparable T8 fluorescent tubes
- Legend to suit user requirement

### TO ORDER

STANDARD ORDER CODE	DESCRIPTION
ETUNM3-005	Angulated luminaire, CCFL T2, M3, opal diffuser, IP65

Endurance tunnelway luminaire is a non-standard, heavy duty luminaire. For specific projects, legend information will differ dependent on location and particular requirements. To specify this product please contact Emergi-Lite Technical Sales department.

## Silver-Scape ERBM

A recessed emergency bulkhead or luminaire suited to escape routes in premises with false ceilings where a good measure of style is preferred.









- Fully recessed
- Light dispersal cover with sign panel slot option
- Sign version with floating legend for direction
- Winged installation feature for ceiling tile mount

### TO ORDER

STANDARD ORDER CODE	DESCRIPTION
ERBM3-001	Recessed base fitting, CCFL T2, M3, white trim
RB00	Recessed diffuser panel
RE00	Recessed diffuser panel with sign panel slot

### LEGENDS (Separate order item)

#### SCREEN PRINTED LEGEND

	XE02A31
	XE03A31
	XE06A31
	XE05A31
 	XE03/6A32
 	XE02/2A32



Endurance Silver-Scape



Endurance Silver-Scape sign

## Day-Lite EXM

A slim and attractive Endurance bulkhead for general emergency lighting use. This luminaire is supplied with a light optimised diffuser and is ingress rated to IP65.

### TO ORDER





STANDARD ORDER CODE	DESCRIPTION
EXM3-0011	Surface bulkhead, CCFL T2, M3, clear, IP65

#### ACCESSORIES

XTR	Semi-recess bezel kit in white
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### LEGENDS (Separate order item)

#### SELF ADHESIVE STICKER

	RSE2X
	RSE3X
	RSE6X
	RSE5X



Endurance Day-Lite



Endurance Navigator

## Navigator Compact EVEM

The 'Navigator Compact' metal box exit sign is now available using cold cathode technology.

- Exceptional legend enhancement using the cold cathode light source
- 30 metres viewing distance with a Euro pictogram legend panel

### TO ORDER

STANDARD ORDER CODE	DESCRIPTION
EVEM3-001	Exit sign, CCFL T2, M3, white

### LEGENDS (Separate order item)

#### SCREEN PRINTED LEGEND

	XE02V31
	XE03V31
	XE06V31
	XE05V31



IP65 version – Endurance Weatherforce

## Weatherforce EVM

Endurance is now extended into the Weatherforce range, a type preferred by installers for durability and the ease of wiring access.

- Available with an opal or clear prismatic cover
- Screw-fixed cover for IP65 integrity

### TO ORDER

STANDARD ORDER CODE	DESCRIPTION
EVM3-001	Surface bulkhead, CCFL T2, M3, opal, IP65
EVM3-011	Surface bulkhead, CCFL T2, M3, clear, IP65

### LEGENDS & ACCESSORIES (Separate order item)

SELF ADHESIVE STICKER	ACCESSORIES	
	RSE2120	Semi-recessing bezel in white <b>BBZ</b>
	RSE3120	Vandal resisting security screw kit <b>VRKIT</b>
	RSE6120	Protective wireguard <b>BWG</b>
	RSE5120	
Self assembly sticker	RSE120	



IP65 version – Endurance Weatherforce double sided sign

## Weatherforce double sided sign

A practical and robust double sided sign suited to public walkways, enclosed car parks or educational establishments.

- Ingress rated to IP65
- Screw-fixed diffuser

### TO ORDER

STANDARD ORDER CODE	DESCRIPTION
EVM3-001/XE22	Double sided exit sign, CCFL T2, M3, IP65, Euro pictogram with arrows down both sides
EVM3-011/XE36	Double sided exit sign, CCFL T2, M3, IP65, Euro pictogram with arrows left/right



## Serenga LED



Serenga LED is a high specification emergency exit sign system. Contemporary in design, the fitting is ideal for commercial and public sector environments, such as offices, schools, shops and hotels. Robust in construction, the system also performs well in more demanding environments, such as light industrial and storage facilities.

For architects, designers, consultants, installers or service agents alike, the Serenga range offers tremendous advantages. The range includes Serenga Escape, a unique modular LED exit sign concept enabling the user to choose from a wide variety of options to suit the building premises, and Serenga Sun-Lite, a discreet recessed or surface mounted downlight emergency light fitting for escape routes and open areas.

### Ultimate flexibility

With its ceiling and wall mounting options, choice of recessed, surface mounted or suspended fitting, and its variety of frames and legend panels, Serenga LED offers the ultimate flexibility when designing an emergency exit signage system. Furthermore, the control module, light source frames and legend panels are fully interchangeable, permitting easy modification of the design during the construction process.

### Easy 'first-fix' installation

Luminaires have a 'first-fix' design, which allows full wiring of the base unit with a positive snap-in fixing of the luminaire at a later point in construction.

The luminaire itself assembles in three easy steps – first-fix plate, followed by installation of frame and mounting kit, and finalised by fitting of legend plate.

### Advanced energy saving LED technology

LED technology combines a long life span with low energy consumption. The LED light source has a life expectancy in excess of 5 years and uses 25% less power than a comparable 8wT5 fluorescent.

Compared to a conventional tube an LED unit requires less maintenance, giving cost savings in material and labour.

### Assured performance

All fittings are designed to fully comply with BS EN 60598.2.22.

### Automatic Self-Test

Serenga Escape luminaires and Sun-Lite downlighters include automatic Self-Test as standard. The system continuously monitors battery operation, electronics and the power LED.

### Minimal maintenance

The Serenga modular 'plug and play' approach permits easy disassembly and replacement, minimising the effort required to maintain the system. Serenga control modules, light source frames and legend panels are fully interchangeable, allowing easy replacement of parts.

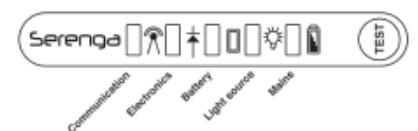
Ask for our separate brochure on Serenga LED for more details about this unique system.



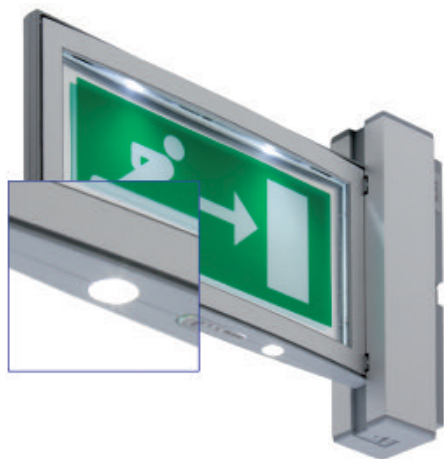
The Escape downlight feature contributes to escape route emergency lighting



'First-fix' base unit with positive snap-in fixing of luminaire



Indicator panel



Mounting options

## Serenga Escape luminaire

Comprises: electronic control module, including the electronics and first-fix fittings, plus one of three possible light frames (smart-frames). The first-fix plate and control panel are available separately to the smart-frames. All frames and fixings are fully interchangeable allowing enhanced flexibility in design and installation. Highly versatile, exit signs can be ceiling mounted, suspended or recessed, or wall mounted, either back to wall or side-on dependent on the preference of the design.

Automatic Self-Test is included as standard. The system continuously monitors battery operation, the power LED, and the electronics.

### Smart-frame versatility

Three frames are available – back-lit, edge-lit and back-lit double sided, with either 2 x or 4 x 1 watt LEDs.

Frames include the unique SmartLocker® feature whereby the light frame secures to the electronic control module with a simple 'locate, click and fit' action, minimising handling times and therefore installation and maintenance costs.

### LED technology

High brightness LED light sources provide superb soft illumination from the exit smart-frame.

### Legend panels

A range of legend panels is available including blank, up, down, left and right. All are available in either curved or normal (flat) face.

## SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v AC/DC
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel metal hydride (NiMh)
<b>Indicators</b>	Charge: green LED, Fault: amber LED
<b>Operation</b>	Maintained, switch maintained or non-maintained
<b>Recharge period</b>	24 hours
<b>BLF</b>	100% on mains failure
<b>Lamp</b>	2 or 4, 1W high power LED
<b>Lamp o/p (lumens)</b>	45 lumens per LED
<b>Lamp life</b>	50k hours, 70% light output
<b>Power consumption</b>	2 LED: 6W13VA 4 LED: 8W16VA
<b>Power consumption (slave)</b>	2 LED: 3W7VA 4 LED: 6W14VA AC

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Entry points in first-fix base
<b>Construction</b>	Polycarbonate, with aluminium trim
<b>Insulation class</b>	II
<b>Environment</b>	5 – 35°C
<b>Ingress class</b>	IP20
<b>Dimensions lwd (mm)</b>	Smart-frame: 340 x 205, Control enclosure: 293 x 60 x 69
<b>Weight (kg)</b>	Smart-frame: 0.9kg, module: 0.8kg
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22. ENEC certified

## Serenga Sun-Lite downlighters

Serenga Sun-Lite recessed LED downlighters offer designers and architects tremendous scope to include simple, unobtrusive general or object-specific emergency lighting into the design scheme.

Three formats are available: **SER-DW**, designed for escape route use, with optional optimised lenses for enhanced light spread; **SER-DA**, for open area installation and **SER-DS** single LED unit for highlighting 'points of emphasis' such as fire call points, hoses, etc.

General illumination is provided by two angled LEDs housed in a disc shaped unit and connected to a separate control module with battery. LED light sources offer increased longevity, with power consumption some 25% less than comparable 8wT5 fluorescent systems, providing excellent value to the designer seeking a low maintenance, low operating cost solution.

Self-Test functionality is included as standard, with visual fault reporting from two LED indicators in the disc face.



SER-DW downlighter



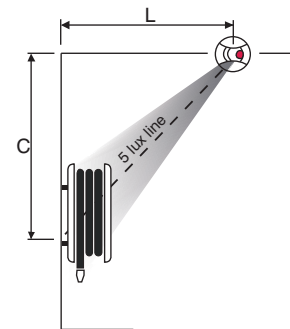
SER-DA downlighter

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	200 – 240V AC/DC
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel metal hydride (NiMh)
<b>Indicators</b>	Charge: green LED, Fault: amber LED
<b>Operation</b>	Maintained, switch maintained or non-maintained
<b>Recharge period</b>	24 hours
<b>BLF</b>	100% on mains failure
<b>Lamp</b>	1W, 1 or 2 high power LEDs
<b>Lamp o/p (lumens)</b>	45 lumens per LED
<b>Lamp life</b>	50k hours, 70% light output
<b>Power consumption</b>	1 LED: 4.4w/10.3VA    2 LED: 5.5w/12.7VA
<b>Power consumption (slave)</b>	1LED : 2.38W/4.8VA    2LED: 3.68W/7.63VA AC

### CONSTRUCTION & INSTALLATION

<b>Construction</b>	Downlighter: Polycarbonate, white & grey. Optional clear clip-on IP40 cover included. Module enclosure: Polyamide, white & grey
<b>Insulation class</b>	II
<b>Environment</b>	0 – 40°C
<b>Ingress class</b>	Downlighter fixture without cover: IP30, with cover: IP40
<b>Dimensions Ø (mm)</b>	Downlighter: 143 (to suit 5-20mm false ceiling thickness)
<b>Electronic Module fit</b>	Through a 68mm hole, with a minimum deck head height of 125mm
<b>Weight (kg)</b>	Downlighter: 0.07, module enclosure: 0.37
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22. ENEC certified



Spotlight: 5 lux on centre of object

Centre object to ceiling (C)	Luminaire to wall (L)
0.5	0.2
1.0	0.6
1.5	0.9
2.0	1.3
2.5	1.6
3.0	2.0
3.5	2.3
4.0	2.6

Distances in metres

### SPACING DATA TABLE

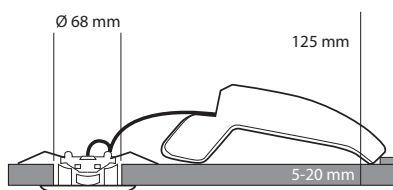
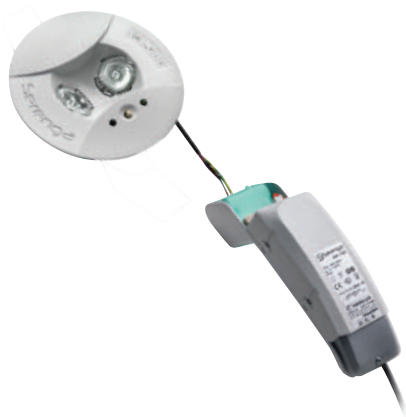
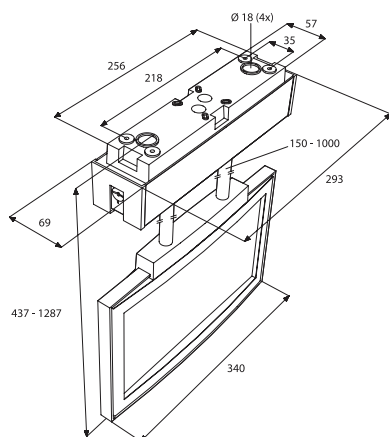
SER-DA Open area model				SER-DW Escape route model			
Mount height (m)	Lgt lev (lux)	Diagram		Mount height (m)	Lgt lev (lux)	Diagram	
2.5	0.5	3.0	6.1	2.5	1.0	3.7	8.5
3.0	0.5	3.2	6.4	3.0	1.0	3.9	9.1
4.0	0.5	3.1	6.3	4.0	1.0	4.5	11.2
5.0	0.5	2.9	5.8	5.0	1.0	4.1	9.5

Spacing: escape routes  
Distances in metres





# Serenga order codes



Self contained control module in situ

## Serenga Escape luminaire

**STANDARD ORDER CODE DESCRIPTION**

**ELECTRONIC CONTROL MODULE**

**LED LIGHT SOURCE FRAMES**

<b>SER-M3-003</b>	Self-contained control module, Self-Test
<b>SER-FB2</b>	Back-lit curved face smart-frame 2 X 1 watt LED
<b>SER-FB4</b>	Back-lit curved face smart-frame 4 X 1 watt LED
<b>SER-FE2D</b>	Edge-lit normal face smart-frame 2 X 1 watt LED
<b>SER-FE4D</b>	Edge-lit curved face smart-frame 4 X 1 watt LED
<b>SER-FS2D</b>	Back-lit double sided curved face smart-frame 2 X 1 watt LED
<b>SER-FS4D</b>	Back-lit double sided curved face smart-frame 4 X 1 watt LED

**SCREEN PRINTED LEGEND PANEL FOILS (CURVED FACE)**

For single sided use a blank backing foil supplied with light frame as standard

<b>SER-SC010</b>	Arrow left
<b>SER-SC011</b>	Arrow right
<b>SER-SC012</b>	Arrow down
<b>SER-SC013</b>	Arrow up
<b>SER-SCN10-PK</b>	10 pack assorted

**SCREEN PRINTED LEGEND PANEL FOILS (NORMAL FACE)**

For single sided use a blank backing foil supplied with light frame as standard

<b>SER-SN010</b>	Arrow left
<b>SER-SN011</b>	Arrow right
<b>SER-SN012</b>	Arrow down
<b>SER-SN013</b>	Arrow up

**ACCESSORIES**

<b>SER-BZKIT</b>	Recess kit
<b>SER-RKIT150</b>	Rod suspension kit (150mm)
<b>SER-RKIT300</b>	Rod suspension kit (300mm)
<b>SER-RKIT500</b>	Rod suspension kit (500mm)
<b>SER-RKIT1000</b>	Rod suspension kit (1,000mm)

## Serenga Sun-Lite Downlighters

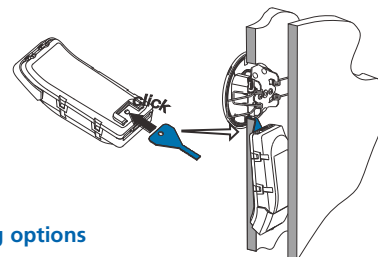
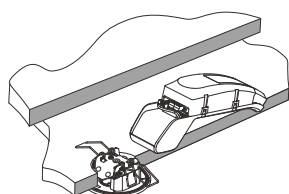
**STANDARD ORDER CODE DESCRIPTION**

<b>SER-DS-RM3</b>	LED Downlighter, spot version, Self-Test
<b>SER-DW-RM3</b>	LED Downlighter, escape route version, Self-Test
<b>SER-DA-RM3</b>	LED Downlighter, open area version, Self-Test

**ACCESSORIES**

<b>SER-DBZ5-AL</b>	Trim bezel aluminium – pack of 5
<b>SER-DBZ5-BR</b>	Trim bezel brass – pack of 5
<b>SER-DBZ5-SI</b>	Trim bezel silver – pack of 5

Diameter: 92mm, hole cut out 68mm, through a false ceiling thickness of 5-20mm



Ceiling or wall mounting options



# Bulkheads – sign use

<b>Day-Lite XW</b>	<b>18</b>
<b>Day-Lite Ex-cel XXW</b>	<b>19</b>
<b>Weatherforce V8, B8</b>	<b>20</b>
<b>Weatherforce Heavy Duty VA, WA, Weatherforce Marine WM</b>	<b>21</b>
<b>Fine-Lite EV</b>	<b>22</b>
<b>Way-Fer PL, PLX</b>	<b>23</b>
<b>Horizon OH</b>	<b>24</b>
<b>Silver-Lite AR, ARV</b>	<b>25</b>
<b>Silver-Scape RB</b>	<b>26</b>
<b>Cold-store Freez-Lite STF</b>	<b>27</b>
<b>Site-Lite SL</b>	<b>28</b>

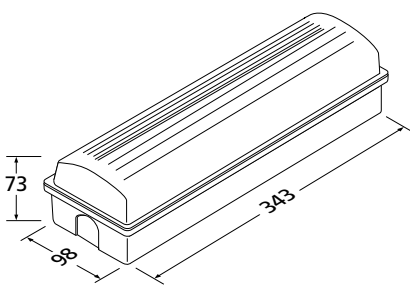
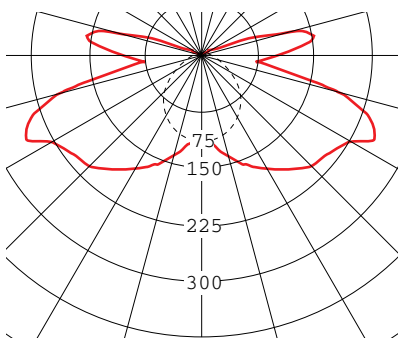
# Bulkheads – sign use



Day-Lite – Indoor version – XW series



Semi-recessed option



## Day-Lite XW

ICEL 1001

The optically sculpted diffuser produces directed light distribution allowing greater flexibility with lighting schemes.

Rated for outdoor use with a screw-fixed cover.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5
<b>Lamp o/p (lumens)</b>	100
<b>Consumption (amps)</b>	0.03 (non-maintained), 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Rear and end moulded locations, 20mm
<b>Construction</b>	Polycarbonate high grade plastic body in white. Clear polycarbonate optically engineered diffuser
<b>Housing</b>	Screw-fixed diffuser, sealed to IP65 outdoor
<b>Environment</b>	0 – 25°C
<b>Dimensions lwd (mm)</b>	343 x 98 x 73
<b>Weight (kg)</b>	1.0 (non-maintained), 1.3 (maintained)
<b>Product standard/Approvals</b>	Approved to BS EN 60598.2.22. Kitemarked and ICEL1001 registration scheme no. 950401

### SPACING DATA TABLE

Clg Mtg Hts (M)	Lgt Und (lux)	Escape route (min. 0.2 lux) Permanently unobstructed	Escape route (min. 1 lux) + Normal risk	Anti panic (min. 0.5 lux) open area
2.5	1.2	5.0 13.4 7.3 2.8	1.65 6.0 3.55 0.5	3.3 9.7 5.2 1.7
4.0	0.5	4.7 13.4 7.9 2.7	- 2.7 0.5 -	1.0 9.5 5.5 0.7
6.0	0.2	2.8 13.2 7.3 1.3	- - - -	- - - -

### TO ORDER

#### STANDARD ORDER CODE

<b>XW23111</b>	Bulkhead, 8w NM3, clear
<b>XW33111</b>	Bulkhead, 8w M3, clear

#### ACCESSORIES

<b>XTR</b>	Complete semi-recess kit including bezels and fixings
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● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

### LEGENDS (Separate order item)

#### SELF ADHESIVE STICKER

	<b>RSE2X</b>
	<b>RSE3X</b>
	<b>RSE6X</b>
	<b>RSE5X</b>





## Day-Lite Ex-cel XXW

Ex-cel is an enhanced performance unit to aid scheme designers in achieving escape route lighting levels to European standards.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	3.6V 4Ahr High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5
<b>Lamp o/p (lumens)</b>	170
<b>Consumption (amps)</b>	0.03 (non-maintained), 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

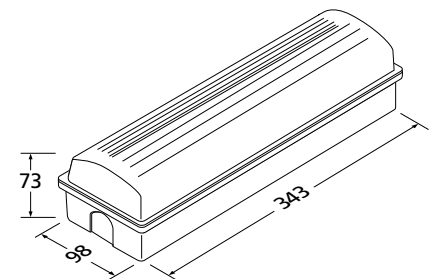
<b>Cable entry</b>	Rear and end moulded locations, 20mm
<b>Construction</b>	High grade plastic body in white. Clear, optically engineered diffuser
<b>Indoor</b>	Snap fit diffuser action
<b>Outdoor</b>	Screw-fixed diffuser, sealed to IP65
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP65
<b>Dimensions lwd (mm)</b>	343 x 98 x 73
<b>Weight (kg)</b>	1.2 (non-maintained), 1.5 (maintained)
<b>Product standard/Approvals</b>	Designed and manufactured to meet the requirements of BS EN 60598.2.22



Day-Lite Ex-cel



Detail – Day-Lite IP65 version



### SPACING DATA TABLE

Clg Mtg Hts (M)	Lgt Lev Und (Lux)	Escape route (min. 0.2 lux) Permanently unobstructed				Escape route (min. 1 lux) + Normal risk				Anti panic (min. 0.5 lux) open area			
		Diagram 1	Diagram 2	Diagram 3	Diagram 4	Diagram 5	Diagram 6	Diagram 7	Diagram 8	Diagram 9	Diagram 10	Diagram 11	Diagram 12
2.5	2.1	6.4	16.0	8.6	3.4	2.9	8.5	4.7	1.6	4.6	12.3	6.4	2.5
4.0	0.81	6.7	18.8	10.0	3.7	-	7.8	3.9	-	4.2	12.6	6.8	2.0
6.0	0.36	6.3	18.9	10.6	3.3	-	-	-	-	-	-	-	-

### TO ORDER

#### STANDARD ORDER CODE

<b>XXW23111</b>	Bulkhead, 8w NM3, clear, IP65
<b>XXW33111</b>	Bulkhead, 8w M3, clear, IP65





#### ACCESSORIES

<b>XTR</b>	Complete semi-recess kit including bezels and fixings
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- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

### LEGENDS (Separate order item)

#### SELF ADHESIVE STICKER

	<b>RSE2X</b>
	<b>RSE3X</b>
	<b>RSE6X</b>
	<b>RSE5X</b>



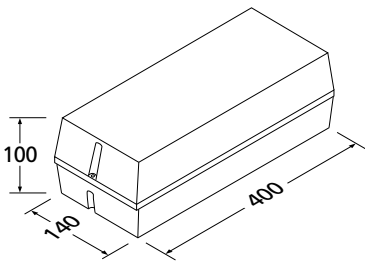
# Bulkheads – sign use



Surface mount



Semi-recessed opal



## Weatherforce V8 100 Lumens B8 170 Lumens

ICEL 1001

A simple vandal resistant design with a screw-fixed opal or an optional clear prismatic diffuser for IP65 performance.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamps</b>	8wT5
<b>Lamp o/p (lumens) B -</b>	400 (mains 1 x 8W lamp). 800 (mains 2 x 8W lamp)
<b>Lamp o/p (lumens) B -</b>	170 (non-main'd 1 x 8W). 250 (non-main'd 2 x 8W)
<b>Lamp o/p (lumens) V -</b>	100 (maintained, combined non-maintained)
<b>Consumption (amps)</b>	0.17 (mains 1 lamp), 0.32 (mains 2 lamp). 0.03 (non-main'd 1 lamp), 0.06 (non-main'd 2 lamp). 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Moulded plastic to both ends and rear
<b>Construction</b>	High grade plastic, flame resistant and UV protected
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP65
<b>Dimensions lwd (mm)</b>	400 x 140 x 100
<b>Weight (kg)</b>	1.2, 1.4 (mains 1 & 2 lamp). 1.4, 1.6 (non-main'd 1 & 2 lamp). 1.9 (maintained), 2.0 (combined non-main'd)
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22. V8 Kitemarked and ICEL1001

### SPACING DATA TABLE (V23111/V33111 prismatic). (V23111/V33111 opal data, see opposite page)

Clg Mtg Hts (M)	Lgt Lev Und (lux)	Escape route (min. 0.2 lux) Permanently unobstructed					Escape route (min. 1 lux) + Normal risk				Anti panic (min. 0.5 lux) open area			
			□	□	□	□		□	□	□	□		□	□
2.5	1.8	4.1	12.7	7.1	2.8	1.4	4.5	4.2	1.3	2.6	7.2	6.1	2.3	
4.0	0.7	3.5	10.5	8.4	3.3	-	2.9	3.0	-	1.9	7.2	6.2	1.6	
6.0	0.3	2.7	10.0	9.5	2.7	-	-	-	-	-	-	-	-	
(B2311/B3311 opal)														
2.5	2.7	4.7	11.9	9.7	3.9	2.2	6.4	5.6	1.9	3.2	8.5	7.3	2.8	
4.0	1.1	5.0	13.4	11.4	4.4	0.7	5.9	5.2	0.4	3.0	9.1	7.8	2.6	
6.0	0.5	4.8	14.1	12.3	4.2	-	-	-	-	-	-	-	-	



### TO ORDER

#### STANDARD ORDER CODE

<b>V2311</b>	Bulkhead, 8w NM3, opal, IP65
<b>V3311</b>	Bulkhead, 8w M3, opal, IP65
<b>V4321</b>	Bulkhead, 8w CNM3, opal, IP65
<b>B2311</b>	Bulkhead, 8w NM3, 170lumen, opal, IP65
<b>B2321</b>	Bulkhead, 2 x 8w NM3, 170lumen, opal, IP65
<b>B3311</b>	Bulkhead, 8w M3, 170lumen, opal, IP65
<b>B4321</b>	Bulkhead, 2 x 8w CNM3, 170lumen, opal, IP65

#### OPTIONS

<b>SUFFIX 1</b>	Clear prismatic diffuser
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### LEGENDS (Separate order item)

#### SELF ADHESIVE STICKER

	<b>RSE2120</b>
	<b>RSE3120</b>
	<b>RSE6120</b>
	<b>RSE5120</b>
Self assembly sticker	<b>RSE120</b>

#### ACCESSORIES

Semi-recessing bezel in white	<b>BBZ</b>
Vandal resisting security screw kit	<b>VRKIT</b>
Protective wireguard	<b>BWG</b>

● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

## Weatherforce Heavy Duty WA IP65 high output WM Marine VA IP65

A corrosion resistant aluminium design that is both vandal resistant and weatherproof, suitable for industrial complexes, public walkways, car parks and a wide variety of other sites.

The WM series is certified for use in the marine environment and complies with ICEL1001:2 Marine. Dept. of Transport Shipping Notice M1299.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamps</b>	8w T5
<b>Lamp o/p (lumens)</b>	400 (mains 1 x 8W). 800 (mains 2 x 8W)
<b>Emergency Lamp o/p (lumens)</b>	100 (non-main'd 1 x 8W). 250 (non-main'd 2 x 8W). 100 (maintained, combined non-main'd)
<b>Consumption (amps)</b>	0.17 (mains 1 lamp), 0.32 (mains 2 lamp). 0.03 (non-main'd 1 lamp), 0.06 (non-main'd 2 lamp). 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	20mm rear knockout, M20 threaded entry at each end
<b>Construction</b>	Epoxy powder coated die cast aluminium base, moulded opal polycarbonate diffuser. Screw-fixed metal geartray
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP65
<b>Dimensions lwd (mm)</b>	400 x 140 x 100
<b>Weight (kg)</b>	2.0 (mains 1), 2.3 (mains 2). 1.9 (non-main'd 1), 2.2 (non-main'd 2). 2.1 (maintained, combined non-main'd)
<b>Product standard/Approvals</b>	Designed and Manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE (V2311/V3311 VA2311/VA311 opal)

Clg Mtg Hts (M)	Lgt Lev Und (lux)	Escape route (min. 0.2 lux) Permanently unobstructed	Escape route (min. 1 lux) + Normal risk	Anti panic (min. 0.5 lux) open area
2.5	1.8	3.5 8.2 7.8 3.0	1.1 4.4 3.8 0.9	2.6 7.2 6.1 2.3
4.0	0.7	3.4 10.0 8.6 3.0	- 1.3 1.1 -	1.9 7.2 6.2 1.6
6.0	0.3	1.9 9.4 8.3 1.6	- - - -	- - - -

### TO ORDER

#### STANDARD ORDER CODE

<b>VA2311</b>	Bulkhead, 8w NM3, opal, IP65
<b>VA3311</b>	Bulkhead, 8w M3, opal, IP65
<b>VA4321</b>	Bulkhead, 2 x 8w CNM3, opal, IP65
<b>WA2321</b>	Bulkhead, 2 x 8w NM3, opal, IP65
<b>WM3311</b>	Bulkhead, 8w M3, 170lumen, opal, ICEL1001:2 Marine

#### OPTIONS

<b>SUFFIX 1</b>	Clear prismatic diffuser
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● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

### LEGENDS (Separate order item)

#### SELF ADHESIVE STICKER

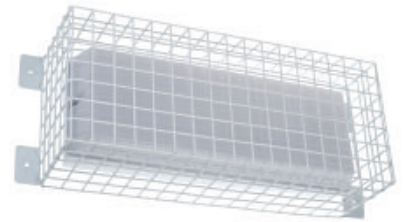
	<b>RSE2120</b>
	<b>RSE3120</b>
	<b>RSE6120</b>
	<b>RSE5120</b>
Self assembly sticker	<b>RSE120</b>

#### ACCESSORIES

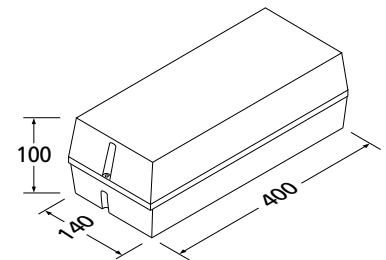
Semi-recessing bezel in white	<b>BBZ</b>
Vandal resisting security screw kit	<b>VRKIT</b>
Protective wireguard	<b>BWG</b>



VA Series (also available in aluminium body 3 cell version)



Wire guard protected

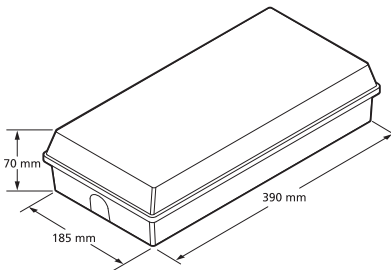




Fine-Lite – white



70mm depth



## Fine-Lite EV

A versatile, slim luminaire for a less obtrusive feel. Suited to hotels, restaurants and offices. Opal or prismatic diffuser options are available to suit the surroundings. The cover is a snap-fit type for a clean finish and ease of assembly.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5
<b>Lamp o/p (lumens)</b>	400 mains only. 100 em lamp (maintained and non-maintained)
<b>Consumption (amps)</b>	0.17 (mains), 0.03 (non-maintained), 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Moulded locations at ends and rear
<b>Construction</b>	High grade plastic body in white with an opal snap fit diffuser. White painted steel geartray
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP20
<b>Dimensions lwd (mm)</b>	390 x 185 x 70
<b>Weight (kg)</b>	1.4 (mains only), 1.5 (non-maintained), 1.7 (maintained)
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE (EV2311/EV3311)

Clg Mtg Hts (M)	Lgt Lev Und (Lux)	Escape route (min. 0.2 lux) Permanently unobstructed				Escape route (min. 1 lux) + Normal risk				Anti panic (min. 0.5 lux) open area			
		Diagram 1	Diagram 2	Diagram 3	Diagram 4	Diagram 5	Diagram 6	Diagram 7	Diagram 8	Diagram 9	Diagram 10	Diagram 11	Diagram 12
2.5	1.8	3.5	8.2	7.8	3.0	1.1	4.4	3.8	0.9	2.6	7.2	6.1	2.3
4.0	0.7	3.4	10.0	8.6	3.0	-	1.3	1.0	-	1.9	7.2	6.2	1.6
6.0	0.3	1.9	9.4	8.3	1.6	-	-	-	-	-	-	-	-

### TO ORDER

#### STANDARD ORDER CODE

<b>EV2311</b>	Bulkhead, 8w NM3, opal, IP20
<b>EV3311</b>	Bulkhead, 8w M3, opal, IP20

#### OPTIONS

<b>Suffix 1</b>	Clear prismatic diffuser
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● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

### LEGENDS (Separate order item)

#### SELF ADHESIVE STICKER

	<b>RSE 2S</b>
	<b>RSE 3S</b>
	<b>RSE 6S</b>
	<b>RSE 5S</b>



## Way-Fer PL/PLX

A slim-profile emergency luminaire with a light optimised cover suitable for use in hotels, public buildings, offices, bars, cafes etc. The luminaire can easily be transformed into a back-lit or edge-lit exit sign by adding a legend sticker or legend plate.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	Green LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5
<b>Lamp o/p (lumens)</b>	100 (standard version), 170 (high output)
<b>Consumption (amps)</b>	0.03 (non-maintained), 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Rear and end moulded locations
<b>Construction</b>	Polycarbonate, high grade plastic in white
<b>Assembly</b>	Secure clip-fit diffuser removed by prising the cover with a flat blade screwdriver at both ends in succession
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP40
<b>Dimensions lwd (mm)</b>	360 x 193 x 55
<b>Weight (kg)</b>	PL: 1.52 (NM), 1.74 (M), PLX: 1.7 (NM), 1.9 (M)
<b>Product standard/Approvals</b>	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE (PLX2311/PL2311)

Product	Mtg ht (m)	Escape route 1.0 lux min					Anti-panic, open area 0.5 lux min			
		Diagram 1	Diagram 2	Diagram 3	Diagram 4	Diagram 5	Diagram 6	Diagram 7	Diagram 8	Diagram 9
PLX2311 (170 lumen)	2.5	2.8	7.6	5.7	2.1	3.8	9.8	7.1	2.8	
	4.0	2.2	8.0	6.1	1.7	4.0	11.1	8.3	3.0	
	5.0	-	7.2	5.7	-	3.6	11.4	8.6	2.8	
PL2311 (100 lumen)	2.5	1.9	6.0	4.5	1.5	3.0	7.9	5.9	2.2	
	4.0	-	4.9	3.9	-	2.5	8.4	6.4	2.0	
	5.0	-	1.8	1.8	-	0.9	7.8	6.1	0.9	

### TO ORDER

#### STANDARD ORDER CODE

PL23111	Bulkhead, 8w NM3, white trim
PL33111	Bulkhead, 8w M3, white trim
PLX23111	Bulkhead, 8w NM3, white trim, 170 em.lumen
PLX33111	Bulkhead, 8w M3, white trim, 170 em.lumen

#### ACCESSORIES

PL/WG	Protective wire guard
PL/BPM	Pendant bracket, back mount
PL/BCM	Ceiling bracket, top mount






- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

### LEGENDS (Separate order item)

#### SELF-ADHESIVE STICKER

	RSE 2PL
	RSE 3PL
	RSE 6PL
	RSE 5PL

#### PERSPEX EDGE-LIT PANEL WITH FLOATING LEGEND

	XE02PL
	XE03PL
	XE06PL
	XE05PL
	XE036PLD



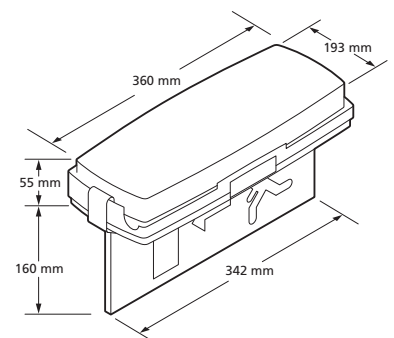
Way-Fer



Way-Fer with back-lit legend sticker



Way-Fer with edge-lit legend plate



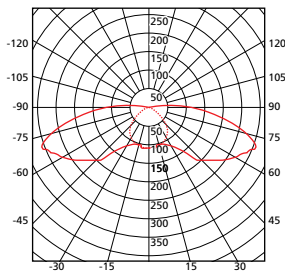
# Bulkheads – sign use



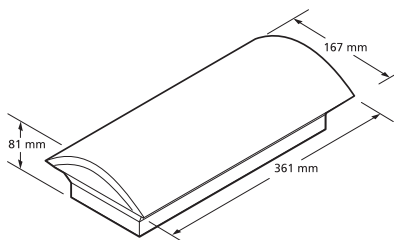
Horizon luminaire



Horizon with legend



Light distribution



## Horizon OH

A sophisticated design with shaped diffuser and contoured reflector for exceptional light distribution. Easy installation is achieved through mounting and pre-wiring the base followed by later fixing of the main luminaire body.

The Horizon luminaire can easily be converted to an exit sign via addition of a clip-on legend panel.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5
<b>Lamp o/p (lumens)</b>	170
<b>Consumption (amps)</b>	0.03 (non-maintained), 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Base – rear and side opening
<b>Construction</b>	Aluminium modular base. Plastic body in white with a clear PC broad delivery diffuser, screw-fixed to the base
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP20
<b>Dimensions (mm)</b>	Overall 361 x 167 x 81. Recess opening 292 x 115
<b>Weight (kg)</b>	1.5 (non-maintained), 1.7 (maintained)
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE

Mount height (m)	Lgt Lev Und (lux)	Escape route (min. 0.2 lux) Permanently unobstructed				Escape route (min. 1 lux) + Normal risk				Anti panic (min. 0.5 lux) open area			
		Diagram 1	Diagram 2	Diagram 3	Diagram 4	Diagram 5	Diagram 6	Diagram 7	Diagram 8	Diagram 9	Diagram 10	Diagram 11	Diagram 12
2.5	3.28	7.56	18.71	8.17	3.39	3.56	11.11	4.98	1.75	3.5	11.5	6.0	1.8
4.0	1.28	8.82	22.42	10.10	3.94	-	9.38	4.63	-	3.0	14.0	7.0	1.8
6.0	0.57	7.69	25.13	11.24	3.79	-	-	-	-	1.0	11.8	6.8	0.7

### TO ORDER

#### STANDARD ORDER CODE

<b>OH23161</b>	Bulkhead, 8w NM3, clear, IP20
<b>OH33161</b>	Bulkhead, 8w M3, clear, IP20

#### ACCESSORIES

<b>OHBZ</b>	Semi-recessed bezel kit
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● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

### LEGENDS (Separate order item)

#### CLIP-ON SCREEN PRINTED LEGEND WITH ALUMINIUM FRAME

	<b>XE02H</b>
	<b>XE03H</b>
	<b>XE06H</b>
	<b>XE05H</b>

## Silver-Lite ARV/AR

A simple, aesthetic recessed luminaire which when fitted to the ceiling is unobtrusive and complements the surroundings. The Silver-Lite is suited to installations in hotels, hospitals or prestigious premises that require a measure of refinement or for applications where there is reduced headroom.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp o/p (lumens)</b>	400 (mains lamp), 100 (emergency lamp)
<b>Consumption (amps)</b>	0.03 (non-maintained), 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Knockouts in rear and ends of back box
<b>Construction</b>	Metal recessed enclosure with wing fixings to assist false ceiling mount. Trim surround to prismatic light controller
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP20
<b>Dimensions lwd (mm)</b>	Recessed box section: 322 x 137 x 75 (hole: 322 x 140) trim cover overall: 361 x 169 x 9
<b>Weight (kg)</b>	1.7 (mains), 1.8 (non-maintained), 2.0 (maintained)
<b>Product standard/Approvals</b>	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE (ARV23/ARV33)

Clg Mtg Hts (M)	Lgt Lev Und (lux)	Escape route (min. 0.2 lux) Permanently unobstructed				Escape route (min. 1 lux) + Normal risk				Anti panic (min. 0.5 lux) open area			
		1	2	3	4	1	2	3	4	1	2	3	4
2.5	1.8	3.7	9.5	8.3	3.3	1.8	5.1	4.7	1.7	2.6	7.2	6.1	2.3
4.0	0.7	4.0	10.8	9.7	3.7	-	4.7	4.3	-	1.9	7.2	6.2	1.6
6.0	0.3	3.9	11.6	10.7	3.6	-	-	-	-	-	-	-	-

### TO ORDER

The Silver-Lite is supplied as two line items – recessed body and choice of trim. Select the type of luminaire and the choice of trim and diffuser from the tables below.

e.g. ARV 2 3 + AR011  
Non-mtn'd 8w white/prismatic

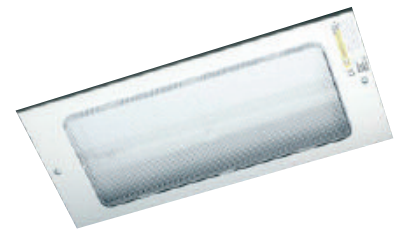
### STANDARD ORDER CODE

<b>ARV23</b>	Recessed base fitting, 8w NM3, prismatic light controller, IP20
<b>ARV33</b>	Recessed base fitting, 8w M3, prismatic light controller, IP20

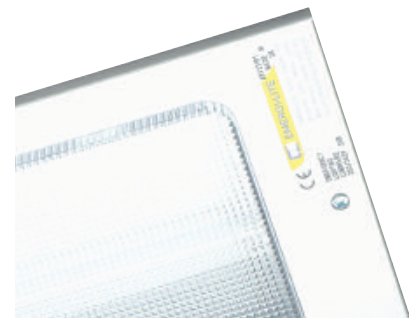
### OPTIONS

<b>AR011</b>	White trim
<b>AR041</b>	Brass trim
<b>AR051</b>	Stainless steel trim
<b>AR061</b>	Aluminium trim

- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.



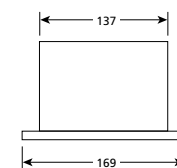
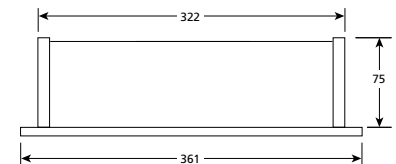
ARV Series



Detail



Available in a variety of trim options

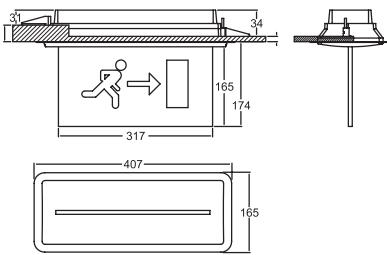




Silver-Scape recessed



Silver-Scape sign



## Silver-Scape RB

A sleek recessed emergency sign luminaire suited to escape routes in premises with false ceilings where a good measure of style is preferred.

- Fully recessed
- Light engineered diffuser for optimised spacing
- Winged installation feature for ceiling tile mount
- Versatile operation: available in self-contained, infra-red, slave and mains

### Features for the exit sign version:

- Light dispersal cover with sign panel slot
- Floating legend for direction

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp o/p (lumens)</b>	100
<b>Consumption (amps)</b>	0.03 (non-maintained), 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Rear and moulded locations, 20mm
<b>Construction</b>	Polycarbonate, high grade plastic in white, with white lip trim
<b>Mounting</b>	Wing fixings for securing in a normal ceiling tile
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP20 for indoor use
<b>Dimensions lwd (mm)</b>	Body: 407 x 165 x 65
<b>Weight (kg)</b>	1.1 (non-maintained), 1.3 (maintained) without legend
<b>Product standard/Approvals</b>	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE

Mtg ht (m)	Escape route 1.0 lux min				Anti-panic, open area 0.2 lux min			
	↔	↔	↔	↔	↔	↔	↔	↔
2.5	2.65	7.81	4.53	1.36	5.59	13.57	8.44	3.39
4.0	-	6.89	3.06	-	6.18	16.48	9.92	3.58
6.0	-	-	-	-	5.68	17.59	10.09	2.72

### TO ORDER

#### STANDARD ORDER CODE

<b>RB2311</b>	Recessed base fitting, 8w NM3, white trim
<b>RB3311</b>	Recessed base fitting, 8w M3, white trim
<b>RB00</b>	Recessed diffuser panel
<b>RE00</b>	Recessed diffuser panel with sign panel slot

- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

### LEGENDS (Separate order item)

#### SCREEN PRINTED LEGEND

	<b>XE02A31</b>
	<b>XE03A31</b>
	<b>XE06A31</b>
	<b>XE05A31</b>
	<b>XE03/6A32</b>
	<b>XE02/2A32</b>





## Cold-store Freez-Lite STF

Cold-store Freez-Lite is a specialist luminaire packaged in a crisp and attractive IP65 rated enclosure, for use in cold-store or freezer compartments. A choice of lamp source (8w or 11w fluorescent) provides good light output in an emergency for 3 hours duration. The type is rated for operation down to minus 25°C, utilising onboard temperature regulation technology.

- Self-Test included as standard
- System monitors battery operation, lamp and electronics
- System fault indicated by an amber LED
- Full duration test 24 hours after first connecting the mains
- One-minute function test runs once every seven days
- Complete test, including duration, runs once every 26 weeks

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	Green LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5 11wPL

### CONSTRUCTION & INSTALLATION

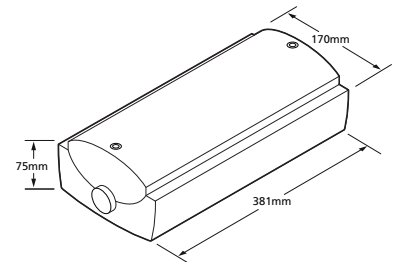
<b>Cable entry</b>	Base – rear and end positions
<b>Construction</b>	Aluminium modular base with a clear polycarbonate broad delivery diffuser, screw-fixed to the base
<b>Environment</b>	-25°C to +25°C
<b>Insulation class</b>	Class II
<b>Ingress class</b>	IP65
<b>Dimensions lwd (mm)</b>	381 x 170 x 75
<b>Weight (kg)</b>	2.0
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22



STF 8 watt



STF 11 watt



### TO ORDER





#### STANDARD ORDER CODE

<b>STF23161</b>	Bulkhead, 8w NM3, clear, IP65
<b>STF33161</b>	Bulkhead, 8w M3, clear, IP65
<b>STF26161</b>	Bulkhead, 11w NM3, clear, IP65
<b>STF36161</b>	Bulkhead, 11w M3, clear, IP65

- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

### LEGENDS (Separate order item)

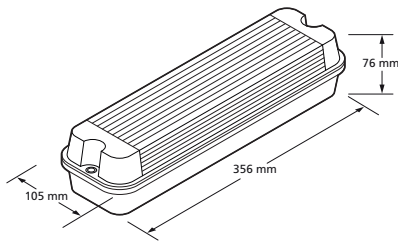
#### CLIP ON SCREEN PRINTED LEGEND WITH ALUMINIUM FRAME

	<b>XE02H</b>
	<b>XE03H</b>
	<b>XE06H</b>
	<b>XE05H</b>





Site-Lite



## Site-Lite SL

A versatile and rugged bulkhead luminaire manufactured with a yellow base, ingress rated to IP65. The clear diffuser is screw-fixed for greater integrity. This luminaire will operate from a 110-volt mains frequency supply and is ideal for construction site environments.

- Heavy duty, compact bulkhead luminaire
- Ingress rated to IP65
- Screw-fixed diffuser

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	110v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	Green LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5
<b>Lamp o/p (lumens)</b>	80 nominal

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Moulded plastic locations to both ends and rear
<b>Construction</b>	High grade plastic in yellow. Clear reeded diffuser screw-fixed to the base
<b>Environment</b>	0 – 25 °C
<b>Ingress class</b>	IP65
<b>Dimensions lwd (mm)</b>	356 x 105 x 76
<b>Weight (kg)</b>	1.2 (non-maintained), 1.4 (maintained)
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22

### TO ORDER

#### STANDARD ORDER CODE

<b>SL2312V1</b>	Bulkhead, 8w NM3, high grade plastic body with clear reeded cover, IP65
<b>SL3312V1</b>	Bulkhead, 8w M3, high grade plastic body with clear reeded cover, IP65

- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.



## Exit signs

<b>Navigator Compact VE</b>	<b>30</b>
<b>Navigator Compact double sided DVE</b>	<b>30</b>
<b>Navigator EE</b>	<b>31</b>
<b>Navigator Performa EE</b>	<b>31</b>
<b>Silver-Lite AE, AEE</b>	<b>32</b>
<b>Weatherforce DV</b>	<b>33</b>
<b>Corniche NB</b>	<b>34</b>



VE in white



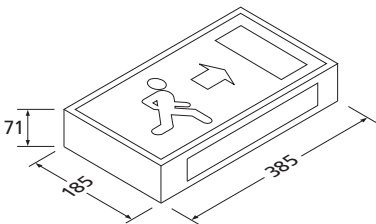
Enhanced diffuser for effective downlight provision



VE in gold



Optional image/word or language variants available to order



## Navigator Compact VE ICEL 1001 DVE

A slim and compact 8 watt emergency sign with a viewing distance of up to 30 metres when using a Eurogram style legend panel. The sign is particularly suited where there is limited wall space above a door. A generous downlight panels provide illumination at floor level. A sturdy design with clean lines that makes the fitting both easy to see and complementary to a variety of exit route applications. A double sided version in white is also available.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
Input voltage	230 – 240v 50Hz
Duration	3 hours (maintained and non-maintained)
Battery	High temperature nickel cadmium
Charger	Constant current
Charging monitor	LED
M operation	Ballast maintained
Recharge period	24 hours
Lamp	8wT5
Lamp o/p (lumens)	<del>400</del>
Consumption (amps)	0.19 (maintained)

### CONSTRUCTION & INSTALLATION

Cable entry	Via knockouts
Construction	Folded metal enclosure, standard finish in white epoxy
Environment	0 – 25°C
Ingress class	IP20
Dimensions lwd (mm)	385 x 185 x 71
Weight (kg)	2.2 (maintained)
Product standard/Approvals	Approved to BS EN 60598.2.22. VE Kitemarked, ICEL 1001 registration scheme

### TO ORDER

#### STANDARD ORDER CODE

VE3311	Exit sign, 8w M3, white, IP20
VE3317	Exit sign, 8w M3, gold trim, IP20
VE3315	Exit sign, 8w M3, stainless steel trim, IP20
DVE3311	Double sided exit sign, 8w M3, white, IP20

- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

### LEGENDS (Separate order item)

#### SCREEN PRINTED LEGEND

	XE02V31
	XE03V31
	XE06V31
	XE05V31

Note – DVE type requires 2 panels

#### ACCESSORIES

Rear trimplate for a flat back when required for ceiling mounting	VEBACK
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## Navigator/Navigator Performa EE

A larger, smart collection of signs for indoor use, available in single and double sided models. The sign is suited to all medium sized auditoria, larger hotel foyers, corridor spaces and premises with spacious and long walkways. The body size was designed to ensure worded legend panels met the 36 metre viewing distance requirement under a previous BS code. Nowadays the Eurogram panel that fits the type enables a practical maximum viewing distance of over 40 metres. The EE series has opal resin downlight panels for floor illumination whereas the double sided DE type has angled faces that give it a slim appearance.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5
<b>Lamp o/p (lumens)</b>	400 (mains), 400 (emergency lamp)
<b>Consumption (amps)</b>	0.17 (mains), 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	20mm knockouts in rear
<b>Construction</b>	Folded sheet steel, white powder coat. Opal resin downlight panels. Mains panels are channel located.
<b>Mounting</b>	Suitable for back mounting
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP20
<b>Dimensions lwd (mm)</b>	483 x 236 x 64
<b>Weight (kg)</b>	3.0 (maintained), 3.2 (combined non-maintained)
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22

### TO ORDER

#### STANDARD ORDER CODE

<b>EE3311</b>	Exit sign, 8w M3, white, IP20
<b>EE4323</b>	Exit sign, 8w CNM3, black, IP20
<b>DE3311</b>	Double sided exit sign, 8w M3, white, IP20

#### OPTIONS

<b>EE3314</b>	Exit sign, 8w M3, with brass trim, IP20
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- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

Large section exit sign boxes available to special request.

### LEGENDS (Separate order item)

#### SCREEN PRINTED LEGEND

	<b>XE02E31</b>
	<b>XE03E31</b>
	<b>XE06E31</b>
	<b>XE05E31</b>

#### LEGENDS

(Special requirement only)  
**SCREEN PRINTED LEGEND  
GREEN ON BLACK**

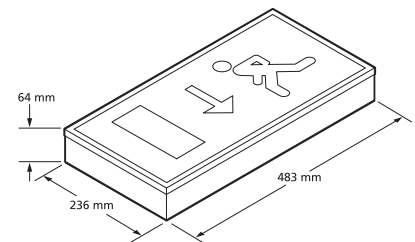
	<b>XE02E4</b>
	<b>XE03E4</b>
	<b>XE05E4</b>
	<b>XE06E4</b>



Performa – Anti-Glare – Ideal for cinema/theatre use



EE Series in white with Arabic Legend

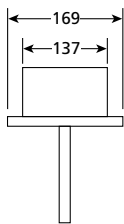
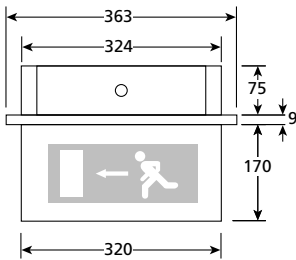




In silver



In brass



## Silver-Lite AE/AEE

A superb edition of a recessed indoor sign to fit in prestige surroundings. The Silver-Lite sign is available with trim in smooth silver aluminium, plain white or mirror finish brass. Floating Eurogram legend panels are available with enhanced light distribution.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp o/p (lumens)</b>	400 (mains lamp). 400 (emergency lamp)
<b>Consumption (amps)</b>	0.03 (non-maintained), 0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Base knockouts
<b>Construction</b>	Recessable steel enclosure. Metal trim plate – legend panel support
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP20
<b>Dimensions lwd (mm)</b>	Body 324 x 137 x 75 (hole 325 x 140), trim cover 363 x 169 x 9, panel size 320 x 175
<b>Weight (kg)</b>	1.8 (non-maintained), 2.0 (maintained) without legend
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22

### TO ORDER

### LEGENDS (Separate order item)

#### STANDARD ORDER CODE

<b>ARV23</b>	Edge-lit sign with recessed body, 8w NM3, IP20
<b>ARV33</b>	Edge-lit sign with recessed body, 8w M3, IP20

The Silver-Lite is supplied as two line items – recessed body and choice of trim/legend panel retainer. Select the type of luminaire and the choice of trim from the tables below.

e.g. ARV 2 3 + AE01  
Non-mtn'd 8w white slotted trim

#### TRIM OPTIONS

<b>AE01</b>	White slotted trim plate
<b>AE04</b>	Brass slotted trim plate
<b>AE05</b>	Stainless steel slotted trim plate
<b>AE06</b>	Brushed aluminium slotted trim plate

● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

#### SCREEN PRINTED LEGEND

	<b>XE02A31</b>
	<b>XE03A31</b>
	<b>XE06A31</b>
	<b>XE05A31</b>
	<b>XE03/6A32</b>
	<b>XE02/2A32</b>

## Weatherforce DV

A practical and robust double sided sign suited to public walkways, enclosed car parks or educational establishments.

- Ingress rated to IP65
- Screw-fixed diffuser
- Heavy duty style
- Versatile operation: available in self-contained, infra-red, slave and mains



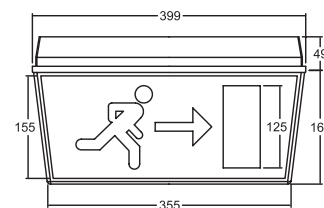
DV/XE36 Ceiling mounted

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5
<b>Lamp o/p (lumens)</b>	400 (mains). 400 (emergency lamp)
<b>Consumption (amps)</b>	0.03 (non-maintained), 0.19 (maintained)









### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Rear and moulded locations, 20mm
<b>Construction</b>	Polycarbonate, high grade plastic in white
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP65
<b>Dimensions lwd (mm)</b>	399 x 140 x 215 (base – 49, diffuser – 166)
<b>Weight (kg)</b>	1.7 (non-maintained), 2.1 (maintained)
<b>Product standards/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22



Viewing distance 31m

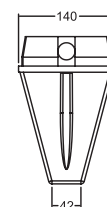
### TO ORDER

STANDARD ORDER CODE	SELF-CONTAINED RANGE
DV2311XE22	8w NM3 with euro pictogram arrow down on both sides  
DV2311XE36	8w NM3 with euro pictogram arrow left one side right the other  
DV3311XE22	8w M3 with euro pictogram arrow down on both sides  
DV3311XE36	8w M3 with euro pictogram arrow left one side right the other  

### ACCESSORIES

<b>BBZ</b>	Semi recess bezel kit in white
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- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.



DV fitting dimensions

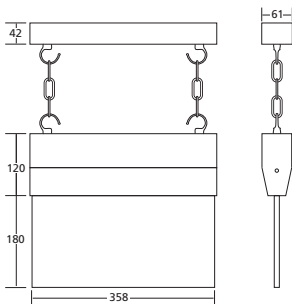




NB Series in brass



NB Series in white



## Corniche NB

Distinctive, traditionally styled edge-lit exit sign available in polished brass for prestige settings, or either white or stainless steel for light and contemporary décors.

The body is suspended by a hook and chain arrangement offering both aesthetic and practical appeal. Maintenance access to the emergency unit is achieved simply by the removal of one side body plate. The mains connector block is seated conveniently in the support pod, which can be either ceiling or wall mounted as required.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>M operation</b>	Ballast maintained
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5
<b>Lamp o/p (lumens)</b>	400 (mains). 400 (emergency lamp)
<b>Consumption (amps)</b>	0.19 (maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	BESA in support pod
<b>Wiring</b>	Mains to connector block in support pod
<b>Construction</b>	Brass – Metal frame housing with tapered side plate facades finished in a polished brass effect with black end caps. White – White epoxy finished side plates and end caps. Control gear is fitted within the luminaire housing. Support pod in matching finish
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP20
<b>Dimensions lwd (mm)</b>	358 x 120 x 61 legend panel: 358 x 180
<b>Weight (kg)</b>	2.5 (brass), 3.0 (white), 3.1 (stainless)
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22

### TO ORDER

#### STANDARD ORDER CODE

<b>NB3311</b>	Chain suspended edge-lit sign, 8w M3, white epoxy coated body, IP20
<b>NB3314</b>	Chain suspended edge-lit sign, 8w M3, polished brass effect body, IP20
<b>NB3315</b>	Chain suspended edge-lit sign, 8w M3, stainless steel body, IP20

● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

### LEGENDS (Separate order item)

#### SCREEN PRINTED LEGEND

	<b>XE02NT31</b>
	<b>XE03NT31</b>
	<b>XE06NT31</b>
	<b>XE05NT31</b>
	<b>XE03/6NT32</b>
	<b>XE02/2NT32</b>





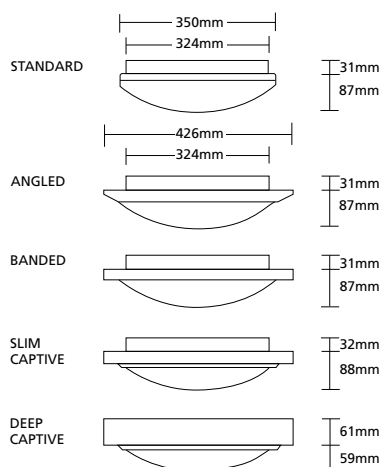
## Hy-Lite decorative luminaires

<b>Camarque CLQ</b>	<b>36 – 37</b>
<b>Opera OPC</b>	<b>38</b>
<b>Soft-Lite EXK</b>	<b>39</b>
<b>Compass PS</b>	<b>40</b>
<b>Cité-Lite AM</b>	<b>41</b>
<b>Route-Lite AP, PCW</b>	<b>42 – 43</b>
<b>Zip-Lite IPL</b>	<b>44</b>
<b>Hawkeye MTC</b>	<b>45</b>
<b>Path-Lite EWV</b>	<b>46</b>

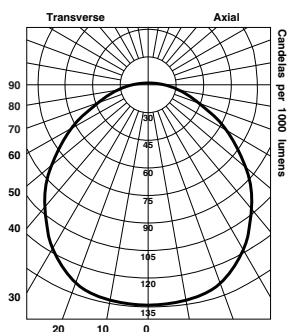
# Hy-Lite decorative luminaires



Camarque CLQ Series without trim



Dimensions



## Camarque CLQ

An aesthetic concept with technical flexibility. An attractive and simple base envelope is matched to a choice of energy efficient lamps running on high frequency control gear. The finished article can be enhanced by a variety of trim options, to construct a luminaire to suit any style of interior. All but the deep captive trim version can be semi-recessed.

Installation is easy with a first-fix terminal action between geartray and base.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel cadmium
<b>Charger and monitor</b>	Constant current for 24 hour recharge, with LED monitor
<b>M operation</b>	Switch start / High frequency control gear
<b>Lamps</b>	28w2D or 38w2D
<b>Em lamp o/p (lumens)</b>	250      370
<b>Consumption (amps)</b>	0.25      0.23

ELECTRICAL & OPERATIONAL	MAINS
<b>Mains ballast</b>	Switch start
<b>Lamps</b>	28w2D or 38w2D
<b>Lamp o/p (lumens)</b>	1,800      2,650
<b>Consumption (amps)</b>	0.2      0.25

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	20mm holes for rear entry wiring
<b>Construction</b>	Flame retardant PC base with opal PC diffuser
<b>Trims</b>	Angled and banded PC Captive steel
<b>Standard colour</b>	White
<b>Trim options</b>	White, black, silver, gold
<b>Fixing</b>	4 screw positions for surface mount or semi-recess kit
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP20, Deep captive – IP40
<b>Dimensions Ød (mm)</b>	426 x 120 max
<b>Ceiling cut out Ød (mm)</b>	330 min void depth: 60mm
<b>Weight (kg)</b>	2.1 (mains), 2.6 (non-main'd), 3.2 (maintained)
<b>Product standard/Approvals</b>	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE

CLQ Mounting height (m)	OPAL 28W2D		OPAL 38W2D	
	Spacing (m) Escape route (min. 0.2 lux)	Spacing (m) Escape route (min. 1 lux)	Spacing (m) Escape route (min. 0.2 lux)	Spacing (m) Escape route (min. 1 lux)
2.0	10.1	6.0	13.0	8.1
2.5	11.0	6.3	13.3	8.4
3.0	11.7	6.5	14.2	8.7
4.0	12.9	6.5	15.6	8.9

## Camarque CLQ options

### Base Unit

#### TO ORDER

##### STANDARD ORDER CODE

<b>CLQ28NM</b>	Hy-Lite luminaire, 28w2D NM3, white PC base, opal diffuser, IP20
<b>CLQ28M</b>	Hy-Lite luminaire, 28w2D M3, white PC base, opal diffuser, IP20
<b>CLQ28P</b>	Hy-Lite luminaire, 28w2D mains, white PC base, opal diffuser, IP20
<b>CLQ38NM</b>	Hy-Lite luminaire, 38w2D NM3, white PC base, opal diffuser, IP20
<b>CLQ38M</b>	Hy-Lite luminaire, 38w2D M3, white PC base, opal diffuser, IP20
<b>CLQ38P</b>	Hy-Lite luminaire, 38w2D mains, white PC base, opal diffuser, IP20

- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.



CLQ Series – Semi-recessed silver angled

### Separate Trim Options

#### TO ORDER

STANDARD ORDER CODE	DECORATIVE TRIM STYLE
<b>CLQ/GA</b>	Angled gold
<b>CLQ/GB</b>	Banded gold
<b>CLQ/GC</b>	Captive gold
<b>CLQ/GD</b>	Deep captive gold
<b>CLQ/SA</b>	Angled silver
<b>CLQ/SB</b>	Banded silver
<b>CLQ/SC</b>	Captive silver
<b>CLQ/SD</b>	Deep captive silver
<b>CLQ/WA</b>	Angled white
<b>CLQ/WB</b>	Banded white
<b>CLQ/WC</b>	Captive white
<b>CLQ/WD</b>	Deep captive white
<b>CLQ/BKA</b>	Angled black
<b>CLQ/BKB</b>	Banded black
<b>CLQ/BKC</b>	Captive black
<b>CLQ/BKD</b>	Deep captive black
<b>CLQ/SR</b>	Semi recessed kit (not deep captive)



CLQ Series – Surface mounted white captive



CLQ Series – Surface mounted deep black captive



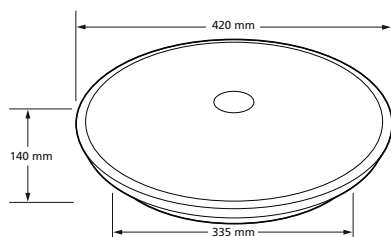
# Hy-Lite decorative luminaires



OPC Series – metal spun housing



Detail – Opal diffuser



## Opera OPC

A slim metal disc decorative luminaire, suited to hallways and stairwells, in white livery with an opal diffuser.

- Metal based luminaire
- Smooth opal disc diffuser – snap-fit
- Optional finishes in chrome or brass

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger and monitor</b>	Constant current for 24 hour recharge, with LED monitor
<b>M operation</b>	Switch start / high frequency control gear
<b>Recharge period</b>	24 hours
<b>Lamps</b>	28w2D or 38w2D
<b>Lamp o/p (lumens)</b>	250      370 non-maintained only
<b>Consumption (amps)</b>	0.25      0.25

ELECTRICAL & OPERATIONAL	MAINS
<b>Mains ballast</b>	Switch start
<b>Lamps</b>	28w2D or 38w2D
<b>Lamp o/p (lumens)</b>	1,800      2,650
<b>Consumption (amps)</b>	0.2      0.25

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Rear and moulded locations, 20mm
<b>Construction</b>	Zinc coated steel body with flame retardant opal PC diffuser
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP20
<b>Dimensions Ød (mm)</b>	420 (335 base) x 140, 370mm Ø cut out
<b>Weight (kg)</b>	3.3 (mains), 4.7 (maintained)
<b>Product standards/Approvals</b>	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE (OPC)

OPC Mounting height (m)	OPAL 28W2D		OPAL 38W2D	
	Spacing (m) Escape route (min. 0.2 lux)	Spacing (m) Escape route (min. 1 lux)	Spacing (m) Escape route (min. 0.2 lux)	Spacing (m) Escape route (min. 1 lux)
	○↔○	○↔○	○↔○	○↔○
2.0	11.1	7.0	14.0	8.2
2.5	12.3	7.6	15.3	8.8
3.0	13.4	8.0	16.8	9.2
4.0	15.1	8.4	17.5	9.5

### TO ORDER

STANDARD ORDER CODE	OPTIONS
<b>OPC28NM</b> 28w2D NM3 with white finish	<b>Suffix BR</b> Brass trim
<b>OPC28M</b> 28w2D M3 with white finish	<b>Suffix CH</b> Chrome trim
<b>OPC28P</b> 28w2D mains with white finish	<b>OPCB2370</b> Semi recess bezel kit in white
<b>OPC38NM</b> 38w2D NM3 with white finish	
<b>OPC38P</b> 38w2D mains with white finish	

- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.



## Soft-Lite EXK

EXK denotes the original Hy-Lite design that is both attractive and effective. A substantial and solid luminaire typically suited to auditoria, care homes, and hotel interiors.

A choice of energy efficient lamps is offered with a night light option to special order. Installation is straightforward with a first-fix terminal action between geartray and base.



EXK Series

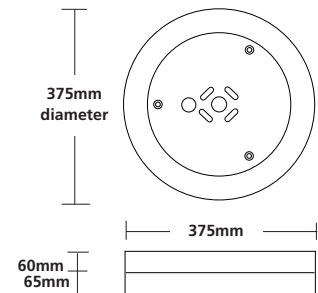
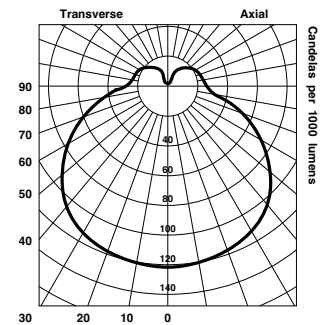
### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel cadmium
<b>Charger and monitor</b>	Constant current for 24 hour recharge, with LED monitor
<b>M operation</b>	Switch start / high frequency control gear
<b>Lamps</b>	28w2D, 38w2D, 7wPL secondary – Nite-Lite
<b>Em lamp o/p (lumens)</b>	250                      370
<b>Consumption (amps)</b>	0.25                      0.23

ELECTRICAL & OPERATIONAL	MAINS
<b>Mains ballast</b>	Switch start
<b>Lamps</b>	28w2D, 38w2D, 7wPL secondary – Nite-Lite
<b>Lamp o/p (lumens)</b>	1,800                      2,650
<b>Consumption (amps)</b>	0.2                              0.3

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	20mm BESA piercing for rear entry wiring
<b>Construction</b>	Spun zinc coated steel with flame retardant opal PC diffuser
<b>Fixing</b>	3 screw positions
<b>Environment</b>	0 – 25 °C
<b>Ingress class</b>	IP20
<b>Dimensions Ød (mm)</b>	375 x 125
<b>Weight (kg)</b>	3.0 (mains), 3.4 (non-main'd), 4.1 (maintained)
<b>Product standards/Approvals</b>	Designed and manufactured to meet the requirements of BS EN 60598.2.22



### SPACING DATA TABLE (EXK)

EXK Mounting height (m)	OPAL 28W2D		OPAL 38W2D	
	Spacing (m) Escape route (min. 0.2 lux) ○↔○	Spacing (m) Escape route (min. 1 lux) ○↔○	Spacing (m) Escape route (min. 0.2 lux) ○↔○	Spacing (m) Escape route (min. 1 lux) ○↔○
2.0	13.4	8.2	18.5	8.9
2.5	14.7	8.8	19.8	9.6
3.0	15.8	9.2	20.9	10.1
4.0	17.5	9.7	21.9	10.0

### TO ORDER

#### STANDARD ORDER CODE

<b>EXK28NM</b>	Hy-Lite luminaire, 28w2D NM3, white zinc coated steel body, opal diffuser, IP20
<b>EXK28M</b>	Hy-Lite luminaire, 28w2D M3, white zinc coated steel body, opal diffuser, IP20
<b>EXK28P</b>	Hy-Lite luminaire, 28w2D mains, white zinc coated steel body, opal diffuser, IP20
<b>EXK38NM</b>	Hy-Lite luminaire, 38w2D NM3, white zinc coated steel body, opal diffuser, IP20
<b>EXK38M</b>	Hy-Lite luminaire, 38w2D M3, white zinc coated steel body, opal diffuser, IP20
<b>EXK38P</b>	Hy-Lite luminaire, 38w2D mains, white zinc coated steel body, opal diffuser, IP20

#### OPTIONS

<b>Suffix NL</b>	Nite-Lite with 7wPL secondary lamp
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● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.



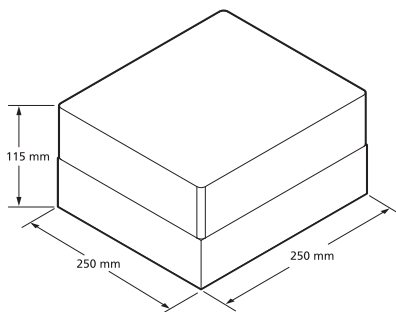
# Hy-Lite decorative luminaires



PS Series



PS Series – semi-recessed



## Compass PS

A simple decorative design. A square section luminaire for indoor use, available in emergency and matching mains versions. A complementary design for passageways and stairwells.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED		
Input voltage	230 – 240v 50Hz		
Duration	3 hours		
Battery	High temperature nickel cadmium		
Charger and monitor	Constant current for 24 hour recharge, with LED monitor		
M operation	Ballast maintained		
Lamps	16w2D	28w2D	2 x 4w
Em lamp o/p (lumens)	160	250	120
Consumption (amps)	0.23	0.25	0.34

ELECTRICAL & OPERATIONAL	MAINS	
Mains ballast	Switch start	
Lamps	16w2D	28w2D
Lamp o/p (lumens)	925	1,800
Consumption (amps)	0.2	0.2

CONSTRUCTION & INSTALLATION	
Cable entry	BESA piercing in base, 20mm knockouts in ends
Construction	Epoxy painted steel base. Snap fit opal PC diffuser
Fixing	4 screw positions
Environment	0 – 25°C
Ingress class	IP20
Dimensions lwd (mm)	250 x 250 x 115
Weight (kg)	2.6 (mains), 2.8 (M 16w2D), 3.2 (M 28w2D), 3.1 (Combined non-maintained)
Product standard/Approvals	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE (2 x 4w)

Clg Mtg Hts (M)	Lgt Lev (lux)	Escape route (min. 0.2 lux) Permanently unobstructed				Escape route (min. 1 lux) + Normal risk				Anti panic (min. 0.5 lux) open area			
		Diagram 1	Diagram 2	Diagram 3	Diagram 4	Diagram 5	Diagram 6	Diagram 7	Diagram 8	Diagram 9	Diagram 10	Diagram 11	Diagram 12
2.5	1.8	3.1	5.0	5.0	3.1	1.0	4.0	4.0	1.0	2.0	4.6	4.6	2.0
4.0	1.1	4.0	5.5	5.5	4.0	0.3	3.6	3.6	0.3	2.0	4.8	4.8	2.0
6.0	0.4	3.9	6.3	6.3	3.9	-	-	-	-	-	-	-	-

### SPACING DATA TABLE (16w)

2.5	2.0	4.1	10.0	10.0	4.1	2.0	5.9	5.9	2.0	3.0	8.0	8.0	3.0
4.0	1.1	4.4	12.0	12.0	4.4	0.8	5.6	5.6	0.8	2.0	9.0	9.0	2.0
6.0	0.4	4.4	13.0	13.0	4.4	-	-	-	-	-	-	-	-

### TO ORDER

#### STANDARD ORDER CODE

PS3511	Decorative luminaire, 16w M3, white, opal diffuser, IP20
PS3711	Decorative luminaire, 28w2D M3, white, opal diffuser, IP20
PS4B31	Decorative luminaire, 28w2D mains/2x4w CNM3, white, opal diffuser, IP20
PS1711	Decorative luminaire, 28w2D mains, white, opal diffuser, IP20

#### OPTIONS

Suffix 1	Clear prismatic diffuser
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#### ACCESSORIES

PSBZ250	Semi-recessing bezel kit
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Central

● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

## Cité-Lite AM

A practical range of heavy-duty circular or square luminaires in cast aluminum for use inside or out. The vandal resistant design is ideal for walkways, tunnels or other demanding locations. The use of an energy efficient lamp coupled to high frequency control gear in emergency mode gives excellent illumination for high specification architectural applications.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel cadmium
<b>Charger and monitor</b>	Constant current for 24 hour recharge, with LED monitor
<b>M operation</b>	High frequency control gear
<b>Lamps</b>	28w2D
<b>Em lamp o/p (lumens)</b>	250
<b>Consumption (amps)</b>	0.2

ELECTRICAL & OPERATIONAL	MAINS
<b>Mains ballast</b>	Switch start
<b>Lamps</b>	28w2D
<b>Lamp o/p (lumens)</b>	1,800
<b>Consumption (amps)</b>	0.2

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Drilling points for rear entry wiring
<b>Construction</b>	Epoxy coated cast aluminum base. Impact resistant PC diffuser with tamper resistant screws
<b>Fixing</b>	Undrilled mounting holes for screw fixing
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP65
<b>Dimensions Ød (mm) AMR</b>	345 x 130
<b>Dimensions lwd (mm) AMS</b>	310 x 310 x 140
<b>Weight (kg)</b>	4.9 (mains), 5.5 (non-main'd), 5.7 (maintained)
<b>Product standard/Approvals</b>	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE (AMS & APS) (see page 42 for round data)

AMS, APS Mounting height (m)	CLEAR PRISMATIC 28W2D		OPAL 28W2D	
	Spacing (m) Escape route (min. 0.2 lux)	Spacing (m) Escape route (min. 1 lux)	Spacing (m) Escape route (min. 0.2 lux)	Spacing (m) Escape route (min. 1 lux)
2.0	○↔○ 12.3	○↔○ 7.4	○↔○ 11.8	○↔○ 7.0
2.5	13.4	7.9	12.8	7.5
3.0	14.4	8.3	13.9	7.9
4.0	16.0	8.6	15.5	8.1

### TO ORDER

#### STANDARD ORDER CODE

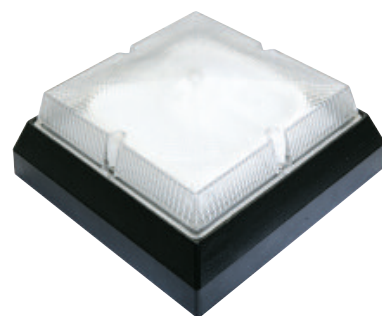
<b>AMR28NM</b>	Round decorative luminaire, 28w2D NM3, black, clear prismatic diffuser, IP65
<b>AMR28M</b>	Round decorative luminaire, 28w2D M3, black, clear prismatic diffuser, IP65
<b>AMR28P</b>	Round decorative luminaire, 28w2D mains, black, clear prismatic diffuser, IP65
<b>AMS28NM</b>	Square decorative luminaire, 28w2D NM3, black, clear prismatic diffuser, IP65
<b>AMS28M</b>	Square decorative luminaire, 28w2D M3, black, clear prismatic diffuser, IP65
<b>AMS28P</b>	Square decorative luminaire, 28w2D mains, black, clear prismatic diffuser, IP65

#### OPTIONS

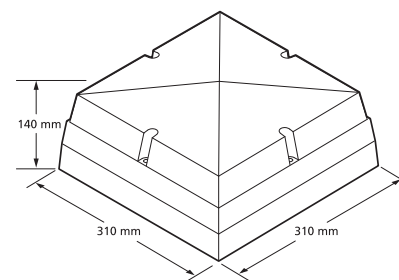
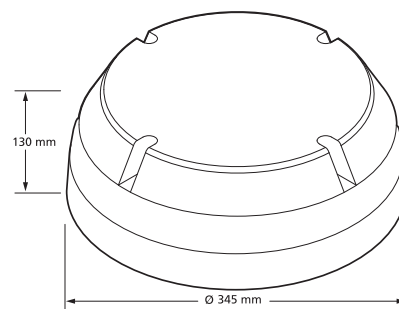
<b>Suffix W</b>	White body (to special order)
<b>Suffix FO</b>	Opal translucent diffuser



AMR (round)



AMS (square)



● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

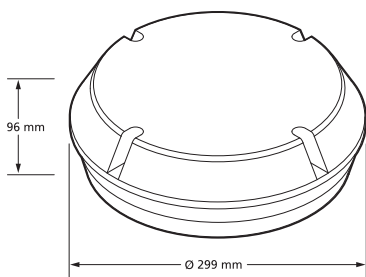
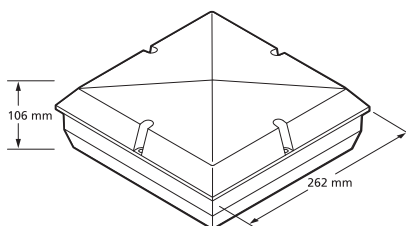
# Hy-Lite decorative luminaires



APS Bulkhead – standard diffuser



APR Bulkhead – standard diffuser



## Route-Lite AP Weatherproof IP65

Route-Lite is a range combination for general Hy-Lite use. Diffusers are screw-fixed with a gasket seal for IP65 classification, affording installation outdoors. The AP series is designed for mains and normal emergency lighting use.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
Input voltage	230 – 240v 50Hz
Duration	3 hours
Battery	High temperature nickel cadmium
Charger and monitor	Constant current for 24 hour recharge, with LED monitor
M operation	High frequency control gear
Lamps	16w2D or 28w2D
Em lamp o/p (lumens)	160 250
Consumption (amps)	0.18 0.2

ELECTRICAL & OPERATIONAL	MAINS
Mains ballast	Switch start
Lamps	16w2D or 28w2D
Lamp o/p (lumens)	925 1,800
Consumption (amps)	0.2 0.2

### CONSTRUCTION & INSTALLATION

Cable entry	Drilling points for rear entry
Construction	Flame retardant PC base and PC clear prismatic diffuser with tamper resistant screws
Standard colour	Black
Trim options	White
Fixing	Undrilled mounting holes for screw fixing
Environment	0 – 25°C
Ingress class	IP65
Dimensions Ød (mm)	APR 299 x 96
Dimensions lwd (mm)	Square section APS 262 x 262 x 106
Weight (kg)	1.9 (mains), 2.1 (non-main'd), 2.2 (maintained)
Product standard/Approvals	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE (AMR, APR) (see page 41 for square data)

AMR, APR	CLEAR PRISMATIC 28W2D		OPAL 28W2D	
Mounting height (m)	Spacing (m) Escape route (min. 0.2 lux)	Spacing (m) Escape route (min. 1 lux)	Spacing (m) Escape route (min. 0.2 lux)	Spacing (m) Escape route (min. 1 lux)
2.0	13.2	8.1	12.7	7.7
2.5	14.5	8.5	13.9	8.1
3.0	15.5	8.9	14.8	8.5
4.0	17.4	9.9	15.9	9.5

### TO ORDER

#### STANDARD ORDER CODE

APR28NM	Round decorative luminaire, 28w2D NM3, black, clear prismatic diffuser, IP65
APR28M	Round decorative luminaire, 28w2D M3, black, clear prismatic diffuser, IP65
APR28P	Round decorative luminaire, 28w2D mains, black, clear prismatic diffuser, IP65
APS28NM	Square decorative luminaire, 28w2D NM3, black, clear prismatic diffuser, IP65
APS28M	Square decorative luminaire, 28w2D M3, black, clear prismatic diffuser, IP65
APS28P	Square decorative luminaire, 28w2D mains, black, clear prismatic diffuser, IP65

#### OPTIONS

Suffix W	White body
Suffix FO	Opal translucent diffuser

# IP65

● For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.

## Route-Lite PCW Weatherproof IP65

Route-Lite is a range combination for general Hy-Lite use. Diffusers are screw-fixed with a gasket seal for IP65 classification, affording installation outdoors.

The PCW Route-Lite is available in white with either an opal or clear prismatic PC diffuser, and may be recessed through selection of a semi-recessing bezel.

This luminaire requires an IR2-TX or IR2-TESTWARE™ control device (see page 61).



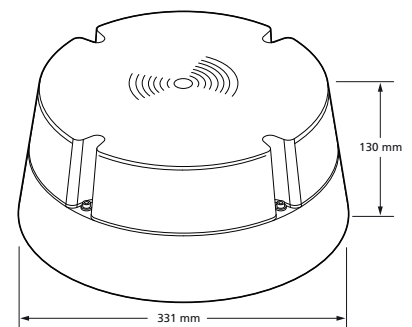
PCW bulkhead – clear prismatic

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Duration</b>	3 hours (maintained and non-maintained)
<b>Battery</b>	High temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Monitors</b>	Green and amber LEDs for charge and testing indicators
<b>M operation</b>	High frequency control gear
<b>Recharge period</b>	24 hours
<b>Lamp</b>	28w2D
<b>Em. lamp o/p (lumens)</b>	250
<b>Consumption (amps)</b>	0.25

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	Drilling points for rear entry
<b>Construction</b>	Polycarbonate body in white. Opal or clear prismatic diffuser
<b>Fixing</b>	Screw positions
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP65
<b>Dimensions Ød (mm)</b>	331 x 130 body & diffuser (body 62)
<b>Weight (kg)</b>	2.0 (non-maintained), 2.5 (maintained)
<b>Product standards/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22



### SPACING DATA TABLE (PCW)

PCW Mounting height (m)	CLEAR PRISMATIC 28W2D		OPAL 28W2D	
	Spacing (m) Escape route (min. 0.2 lux) ○↔○	Spacing (m) Escape route (min. 1 lux) ○↔○	Spacing (m) Escape route (min. 0.2 lux) ○↔○	Spacing (m) Escape route (min. 1 lux) ○↔○
2.0	13.2	8.1	12.7	7.7
2.5	14.5	8.5	13.9	8.1
3.0	15.5	8.9	14.8	8.5
4.0	17.4	9.9	15.9	9.5

### TO ORDER

#### STANDARD ORDER CODE

<b>IR2PCW2711</b>	28w2D NM3, IR2 test version, white with opal diffuser, IP65
<b>IR2PCW27111</b>	28w2D NM3, IR2 test version, white with clear prismatic diffuser, IP65
<b>IR2PCW3711</b>	28w2D M3, IR2 test version, white with opal diffuser, IP65
<b>IR2PCW37111</b>	28w2D M3, IR2 test version, white with clear prismatic diffuser, IP65

#### OPTIONS

<b>PCBZ290</b>	Semi-recess mounting bezel in white
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## Zip-Lite IPL

A surface mount long bulkhead providing an alternative for use in more demanding surroundings. Practical for emergency lighting in factory spaces, warehouses and sports complexes. An IP65 rating gives protection from moisture and dust ingress.

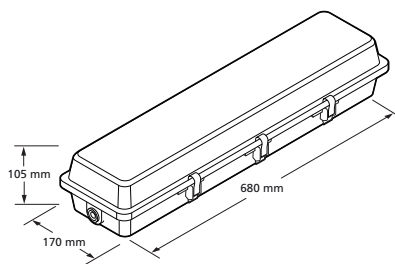
Installation is simple with a removable geartray fitted to a lightweight body. The unit is supplied with a clear diffuser, retained by six lever clips for uniform sealing. An energy efficient compact fluorescent lamp mated to high frequency control gear gives good and even illumination.



IPL Series



Detail – IPL Series – lever clips



### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel cadmium
<b>Charger and monitor</b>	Constant current for 24 hour recharge, with LED monitor
<b>M operation</b>	Switch start
<b>Lamps</b>	40wPLL
<b>Em lamp o/p (lumens)</b>	400
<b>Consumption (amps)</b>	0.3

ELECTRICAL & OPERATIONAL	MAINS
<b>Mains ballast</b>	Switch start
<b>Lamps</b>	40wPLL
<b>Lamp o/p (lumens)</b>	3,300
<b>Consumption (amps)</b>	0.25

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	20mm knockouts for side or rear entry wiring
<b>Construction</b>	Glass reinforced plastic (GRP) body. Flame retardant PC clear prismatic diffuser
<b>Fixing</b>	2 screw positions
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP65
<b>Dimensions lwd (mm)</b>	680 x 170 x 105
<b>Weight (kg)</b>	2.6 (mains), 3.5 (non-main'd), 3.8 (maintained)
<b>Product standard/Approvals</b>	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE (IPL Zip-Lite)

Mounting height (m)	CLEAR PRISMATIC 40W2L	
	Spacing (m) Escape route (min. 0.2 lux)	Spacing (m) Escape route (min. 1 lux)
	○↔○	○↔○
2.0	19.8	8.9
2.5	21.0	9.5
3.0	22.4	10.1
4.0	23.2	9.9

### TO ORDER

#### STANDARD ORDER CODE

<b>IPL40NM</b>	Bulkhead luminaire, 40wPLL NM3, grey GRP body, clear prismatic diffuser, IP65
<b>IPL40M</b>	Bulkhead luminaire, 40wPLL M3, grey GRP body, clear prismatic diffuser, IP65
<b>IPL40P</b>	Bulkhead luminaire, 40wPLL mains, grey GRP body, clear prismatic diffuser, IP65

- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.



## Hawkeye MTC

A rugged high specification 2D bulkhead rated for use in demanding environments, as well as exterior public areas. A shaped diffuser screen option can be provided to give a subtle downlight effect and reduce light glare in residential spaces.

### SPECIFICATION

ELECTRICAL & OPERATIONAL		SELF-CONTAINED
Input voltage		230 – 240v 50Hz
Duration		3 hours
Battery		High temperature nickel cadmium
Charger and monitor		Constant current for 24 hour recharge, with LED monitor
M operation		High frequency control gear
Lamps		28w2D
Em lamp o/p (lumens)		250
Consumption (amps)		0.2
ELECTRICAL & OPERATIONAL		MAINS
Mains ballast		Switch start
Lamps		28w2D
Lamp o/p (lumens)		1,800
Consumption (amps)		0.2
CONSTRUCTION & INSTALLATION		
Cable entry		Entry hole in rear
Construction		Die cast aluminum base with opal PC diffuser (screw fix retainer), standard finish in black
Fixing		Screw positions
Environment		0 – 25°C
Ingress class		IP55
Dimensions Ød (mm)		338 x 115
Weight (kg)		3.7 (mains), 4.8 (maintained)
Product standard/Approvals		Designed and manufactured to meet the requirements of BS EN 60598.2.22

### SPACING DATA TABLE (MTC)

MTC		OPAL GLASS 28W2D	
Mounting height (m)	Spacing (m)		Spacing (m)
	Escape route (min. 0.2 lux)		Escape route (min. 1 lux)
	○ ↔ ○		○ ↔ ○
2.0	10.3		5.6
2.5	11.1		5.8
3.0	11.8		5.9
4.0	12.8		5.7

### TO ORDER

STANDARD ORDER CODE	DESCRIPTION
MTC28NM	Decorative luminaire, 28W2D NM3, black body, opal diffuser
MTC28M	Decorative luminaire, 28W2D M3, black body, opal diffuser
MTC28P	Decorative luminaire, 28W2D mains, black body, opal diffuser

### OPTIONS

MTCD1	Diffuser screen (cross-hair effect)
MTCD2	Diffuser screen (eye effect)

- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.



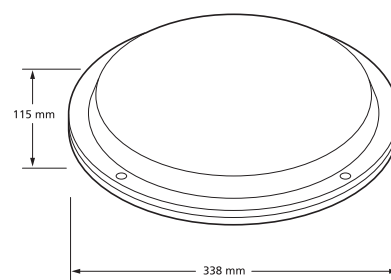
MTC Series

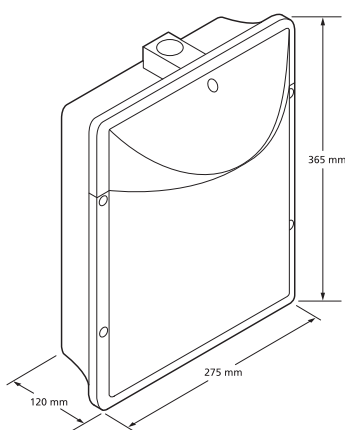


MTC Series with cross-hair diffuser screen



MTC Series with eye effect diffuser screen





## Path-Lite EWW

A rugged luminaire manufactured in diecast aluminium with a black finish. This IP65 rated unit is suitable for wall mounting in municipal areas such as covered walkways and precincts. It is offered with an energy efficient lamp for normal mains and self-contained use, with uniform light distribution from the prismatic lens cover. The cover is fitted to the body by a spring latch assembly, which is secured by a tamperproof screw for authorised maintenance access.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours
<b>Battery</b>	High temperature nickel cadmium
<b>Charger and monitor</b>	Constant current for 24 hour recharge, with LED monitor
<b>M operation</b>	Switch start / high frequency
<b>Lamps</b>	28w2D
<b>Em lamp o/p (lumens)</b>	250
<b>Consumption (amps)</b>	0.25
ELECTRICAL & OPERATIONAL	MAINS
<b>Mains ballast</b>	Switch start
<b>Lamps</b>	28w2D
<b>Lamp o/p (lumens)</b>	1,800
<b>Consumption (amps)</b>	0.2
CONSTRUCTION & INSTALLATION	
<b>Cable entry</b>	20mm knock outs & 20mm threaded side holes
<b>Construction</b>	Epoxy coated aluminum base. Impact resistant PC diffuser with tamper resistant screws
<b>Fixing</b>	3 screw positions
<b>Environment</b>	0 – 25°C
<b>Ingress class</b>	IP65
<b>Dimensions lwd (mm)</b>	365 x 275 x 120
<b>Weight (kg)</b>	4 (mains), 6 (maintained)
<b>Product standard/Approvals</b>	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### TO ORDER

#### STANDARD ORDER CODE

<b>EWV28NM</b>	Decorative luminaire, 28w2D NM3, black, clear PC diffuser, IP65
<b>EWV28M</b>	Decorative luminaire, 28w2D M3, black, clear PC diffuser, IP65
<b>EWV28P</b>	Decorative luminaire, 28w2D mains, black, clear PC diffuser, IP65

- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.



## Industrial & special assistance

<b>Range-Lite HV/HL</b>	<b>48</b>
<b>Range-Lite HL/E3</b>	<b>49</b>
<b>Hazard-Lite XP</b>	<b>50</b>
<b>Hand-Lite PHL161</b>	<b>51</b>
<b>Guide-Lite</b>	<b>52 – 53</b>
<b>Help-Lite SR10</b>	<b>54</b>



HV Series



HL551



HL1553

## Range-Lite HV/HL

### Twin beam emergency lighting

A compact member of the Range-Lite family for indoor use, in smaller warehouse and factory spaces. The standard unit can be mounted upright on a wall or stanchion. If the fitting is to be orientated in any other way an optional battery retaining clamp should be ordered for security.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (HV3 models), 1 hour (HV1 model), 1 hour (HL551)
<b>Battery</b>	HV183 – 2x 6v12Ahr, HV203 – 2 x 12v7Ahr12v sealed lead acid, 3-5 year design life
<b>Charger</b>	Temperature compensated pulse charger, short circuit, thermal & reverse polarity protection. Low voltage cut off
<b>Charging monitor</b>	LED for battery charge monitor
<b>Lamp monitor</b>	Dual filament monitor
<b>Em lamp o/p (lumens)</b>	260 (18w), 300 (20w), 900 (55w)
<b>Recharge period</b>	24 hours for full capacity

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	20mm knockouts
<b>Construction</b>	Mild steel enclosure with removable front panel. Powder coat paint finish
<b>Dimensions whd (mm)</b>	260 x 358 x 99 (470 x 320 x 135 HL, IR2 and Centrel versions)
<b>Weight (kg)</b>	7.8 (max)
<b>Lamps HV18</b>	18w HIT fully adjustable circular polycarbonate housing in white with clear polycarbonate lens
<b>Lamps HV20</b>	20w tungsten halogen – circular plastic housing in white with clear polycarbonate lens
<b>Lamps HL55</b>	55w tungsten halogen, rectangular body in black with clear lens
<b>Lamp mounting</b>	Two positions on top of the enclosure
<b>Environment</b>	0 – 25°C (indoor use)
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22

### TO ORDER

#### STANDARD ORDER CODE

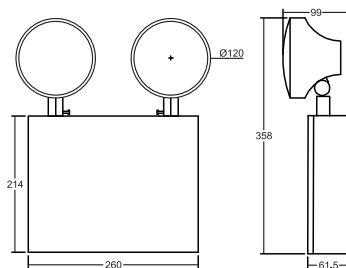
<b>HV181</b>	Twin beam emergency lighting, 2x18w NM1, powder coated steel body, clear PC lens
<b>HV183</b>	Twin beam emergency lighting, 2x18w NM3, powder coated steel body, clear PC lens
<b>HV201</b>	Twin beam emergency lighting, 2x20w NM1, powder coated steel body, clear PC lens
<b>HV203</b>	Twin beam emergency lighting, 2x20w NM3, powder coated steel body, clear PC lens
<b>HL551</b>	Twin beam emergency lighting, 2x55w NM1, powder coated steel body, clear lens
<b>HL1553</b>	Single beam emergency lighting, 1x55w NM3, steel body, clear lens

#### OPTIONS

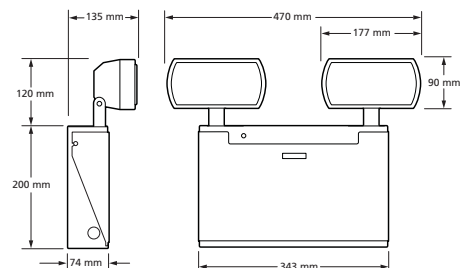
<b>SUFFIX TD</b>	Run on timer
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#### ACCESSORIES

<b>HVBC</b>	Battery retaining clamp (HV versions)
<b>HLWG</b>	Wire guard (indoor versions)



HV Series



IR2 and CT models (HL551 with rectangular lamps, other models circular lamps)



## Range-Lite HL/E3

### Twin beam emergency lighting

Twin beam Range-Lites, rated for external use with battery and electronics enclosure sealed to IP65 & the lamps mounted remotely on brackets.

### Lamp projector assembly

The lamp projector assembly allows head adjustment in the horizontal and vertical planes. The projector location on the enclosure enables head alignment to meet the anti-glare requirement. Projectors should be mounted at least 30° above the line of sight.



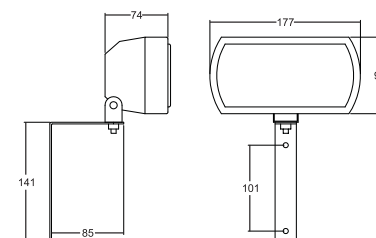
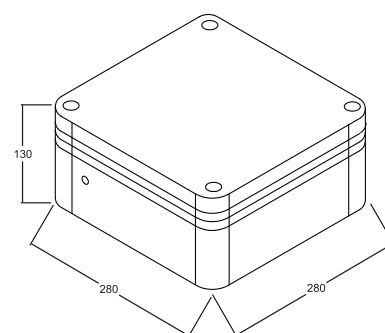
HL 203 E3

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	230 – 240v 50Hz
<b>Duration</b>	3 hours (HL203E3), 1 hour (HL201E3, HL551E3)
<b>Battery</b>	12v sealed lead acid, 3-5 year design life
<b>Charger</b>	Temperature compensated pulse charger, short circuit, thermal & reverse polarity protection. Low voltage cut off
<b>Charging monitor</b>	LED for battery charge monitor
<b>Lamp monitor</b>	Dual filament monitor
<b>Recharge period</b>	24 hours

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	20mm knockouts
<b>Construction IP65 model</b>	Polycarbonate enclosure with screw locked front panel Glanding points on sides for cable gland fixing
<b>Dimensions whd (mm) IP65 model</b>	280 x 280 x 130
<b>Weight (kg)</b>	IP65 models – 7.6 (max)
<b>Lamps – IP65 models</b>	20w or 55w halogen – rectangular case and lens in polycarbonate. Separately supplied on angle brackets, with glands for wiring to the main enclosure
<b>Environment</b>	0 – 25°C
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22



HLE3 lamp dimensions

### TO ORDER

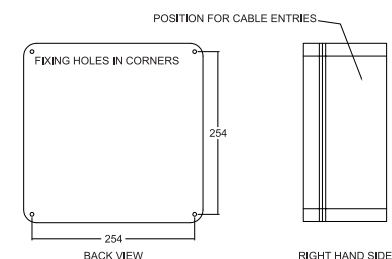
#### STANDARD ORDER CODE

<b>HL201E3</b>	Twin beam emergency lighting, 2x20w NM1, PC body, clear PC lens, IP65
<b>HL203E3</b>	Twin beam emergency lighting, 2x20w NM3, PC body, clear PC lens, IP65
<b>HL551E3</b>	Twin beam emergency lighting, 2x55w NM1, PC body, clear PC lens, IP65

#### OPTIONS

<b>SUFFIX TD</b>	Run on timer
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- For AC/AC or AC/DC slave luminaires please refer to our EMEX Central Power Supply Systems Catalogue.



LE3 Series fixings and cable entries

### SPACING DATA TABLE AT LAMP ANGLE 60° (Spacing between projectors)

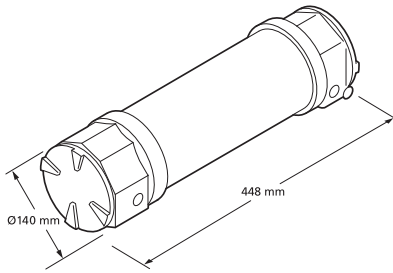
Mounting height (m)	2X18W			2x20w			2x55w		
	Escape route (min. 0.2 lux)	Escape route (min. 1 lux)	Anti panic (min. 0.5 lux)	Escape route (min. 0.2 lux)	Escape route (min. 1 lux)	Anti panic (min. 0.5 lux)	Escape route (min. 0.2 lux)	Escape route (min. 1 lux)	Anti panic (min. 0.5 lux)
4.0	28.9	20.5	22.9	30.02	21.49	23.8	-	-	-
6.0	36.9	-	-	38.41	-	29.76	47.9	34.4	37.8
8.0	43.4	-	-	45.26	-	-	56.84	-	44.7







XP Series



## Hazard-Lite XP

A compact, explosion proof and waterproof luminaire suitable for zone 1 and zone 2. Available in non-maintained and combined non-maintained models.

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
<b>Input voltage</b>	220 – 240v 50/60 Hz
<b>Duration</b>	3 hours (non-maintained and combined non-maintained)
<b>Battery</b>	4Ah high temperature nickel cadmium
<b>Charger</b>	Constant current
<b>Charging monitor</b>	LED
<b>Recharge period</b>	24 hours
<b>Lamp</b>	8wT5
<b>Lamp o/p (lumens)</b>	100
<b>Consumption (amps)</b>	0.03 (non-maintained), 0.19 (combined non-maintained)

### CONSTRUCTION & INSTALLATION

<b>Cable entry</b>	2 x M20 – ISO (1 plugged) as standard
<b>Construction</b>	Corrosion resistant light alloy body and end cap with a polycarbonate overtube. Finish in green polyurethane. Internal light reflector
<b>Mounting</b>	Hinge bracket provided
<b>Terminals</b>	4 wire and earth with loop facility. Max cable size 4mm <sup>2</sup>
<b>Environment</b>	0 – 40°C
<b>Ingress class</b>	IP66 to IEC529
<b>Dimensions Ød (mm)</b>	140 x 448
<b>Weight (kg)</b>	5.5
<b>Certification &amp; Approvals</b>	Certification Code: EEx d IIC T6; Certification Standard: EN50014-018; Certifying Authority: SIR, ATEX

### TO ORDER

#### STANDARD ORDER CODE

Non-maintained	XP2312	Combined non-maintained	XP4322
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## Information summary for guidance only

For detailed information on hazardous area requirements please consult the British Standard code, BS 5345.

### Code of Practice

BS 5345, the UK Standard for hazardous area equipment, installation and maintenance gives guidance relating to:

- 1 > The degree of protection suitable for the hazardous zone
- 2 > The gas groups of any gases or vapours
- 3 > The temperature classification of the gases or vapours

### Symbols and Meaning

**EEx d** Protection symbol  
**IIC** Gas group

**T6** Temperature class

#### 1. Protection Type and Standard References

Type of protection	Cert. code	Cert. Standard	Cert. Authority
Flameproof	EEx d IIC T6	EN50014-018	SIRA, ATEX

EExd protected fittings are suitable for zone 1 and zone 2

#### 2. Gas Group

Representative Gas	Group
Methane (Firedamp)	I
Methane above ground is Group IIA	
Propane	IIA
Ethylene	IIB
Hydrogen	IIC
Acetylene	-

Gases are grouped according to the energy required for ignition.

### Zone Classification

- Zone 0** > An explosive gas-air mixture exists continuously, or for long periods.
- Zone 1** > An explosive gas-air mixture is likely in normal circumstances.
- Zone 2** > An explosive gas-air mixture is not likely to occur in normal operation and then only for a short time.

#### 3. Temperature Rating

Temperature Class	Max. Surface Temp °C
T1	450
T2	300
T3	200
T4	135
T5	100
T6	85

The ignition temperature of the gas or vapour must be greater than the temperatures stated.

Example: Equipment marked T6 is safe for use in gases with an ignition temperature higher than 85°C. Ratings based on a maximum ambient temperature of 40°C

## Hand-Lite PHL161

A portable emergency luminaire, ideal for rail and industrial applications. Highly versatile and compact, including carry handle for extra mobility or easy wall hanging.

- Provides illumination when the mains fails or when the switch is operated
- Fluorescent lamp

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
Input voltage	230V 50Hz
Duration	1 hour
Battery	High temperature nickel cadmium
Charge monitor	Green LED
Recharge period	24 hours
Lamp	6wT5
Lamp lumens	80 lumens

### CONSTRUCTION & INSTALLATION

Construction	Polycarbonate body in white. Clear diffuser
Ingress class	IP44
Impact rating	IK07
Dimensions lwd (mm)	124 x 292 x 77
Weight (kg)	1.07

### TO ORDER

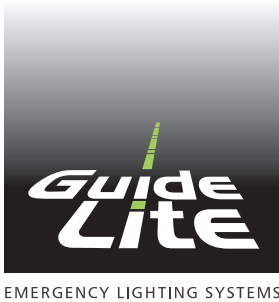
STANDARD ORDER CODE	DESCRIPTION
PHL161	6w portable emergency luminaire, clear diffuser, IP44



Hand-Lite PHL161



Carry handle for easy portability and wall hanging



## Guide-Lite low location way guidance

Guide-Lite is a low location emergency lighting system, which is complementary to emergency lighting placed at higher levels.

In many circumstances it is advantageous to have both high and low level emergency lighting for better way guidance to the final exit. Low-level lighting is especially relevant during a fire situation. Hot smoke from a fire tends to rise to form a hot layer, which builds from the ceiling down. The natural human reaction is to crouch closer to the floor where it would be cooler. Even in a familiar building layout, without light, disorientation and panic can easily takeover. In such circumstances, low-level emergency lighting comes into its own for both reassurance and guiding the way to an exit.

### The principle of Guide-Lite

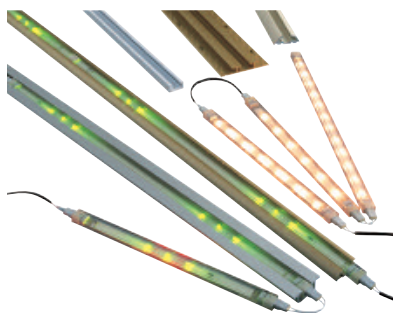
To avoid the dangers of hot smoke inhalation in a fire situation, evacuees instinctively crouch lower to the floor whilst seeking an exit. In these circumstances, Guide-Lite low location lighting complements high level emergency lighting by providing the necessary effective illumination and way guidance, further facilitating evacuation of the premises.



After 15 seconds



After 30 seconds



Guide-Lite LED range of low-level emergency lighting

### Benefits of Guide-Lite

Guide-Lite is a system that gives enhanced safety:

- The system is effective in both smoky and non-smoky situations
- It can be activated by a signal from a fire alarm system, as well as mains failure
- Evacuation time can be reduced using the system
- Evacuees are less likely to panic if they can see where they are going (independent research)
- Low location lighting is an effective means of providing illumination for evacuation
- Guide-Lite is a modular system enabling great flexibility: A kit of products can be arranged for most building layouts and styles
- Guide-Lite strip light source sections are robust and sturdy. The GBD LED version gives optimum light visibility through 180 degrees
- Fire fighters have clearer access into the building
- Better direction for a partially sighted person
- Long life and low running costs
- An LED light source has a life expectancy of over 50,000 hours, while using a fraction of the energy a fluorescent lamp will use

## Applications of Guide-Lite

In recent times legislation governing the operation of passenger vessels at sea has made it mandatory to fit low-level emergency lighting.

The type of product is certainly suited to spaces where the public or those not familiar with the surroundings are gathered or moving about. On board ship where there are many passageways and stairways looking the same the system provides an ideal solution. On dry land, although legislation does not currently call for such a system to be used, the places where the system can be applied are many and varied.

Complexes with many passageways, auditoria with staircases, buildings of multiple occupancy are all typical examples where Guide-Lite could be used, including:

- Cinemas & theatres
- Lecture theatres
- Hospitals
- Hotels
- Sheltered accommodation
- Tunnel complexes

## Emergency lighting scheme design and the Guide-Lite system

From a survey or from a set of scale drawings we can prepare a low location system scheme using the building blocks of the modular system:

- Power supply operating at 24v
- Extruded housings for the light source to be mounted on the wall or the floor
- Light source modules
- Directional signs and indicators
- Connectors, spacing sections and end caps

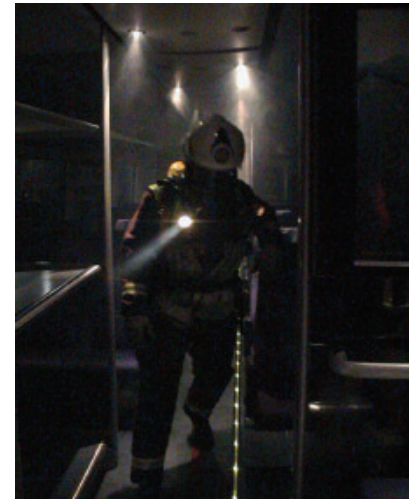
### SPECIFICATION

<b>Supply</b>	24Vdc
<b>Standard light source (GBD**)</b>	3 set LED modules set can be plugged together to produce an LED array. LEDs are housed in UV stabilised polycarbonate. Three basic lengths: 260mm, 560mm & 1160mm are available. (GBD**)
<b>Aluminium extrusions</b>	A selection of aluminium extruded housings (2.4m length) are available to take the LED modules. Formats available for mounting to: Wall, floor, skirting board, carpet edging and stair nosing. Durability: Normal foot and soft tyre
<b>High output light source</b>	12x LED module (GWDH12)
<b>Directional module</b>	10x LED module in arrow head format (SCDA/R/2)
<b>Connectors, spacers &amp; end caps</b>	Spacers, end caps in fire retardant polycarbonate. Plugs in glass reinforced polycarbonate
<b>Power supply</b>	A range of 24Vdc power supplies from 100w to 720w up to 3 hour duration, NM or M, is available. Mains input 230 – 240V 50hz

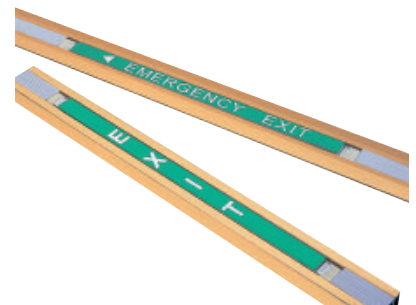
## Scheme design and product selection

If you have interest in specifying a Guide-Lite emergency lighting system, please contact our Technical Sales department. We will arrange for a field sales representative to get in touch to discuss your requirements.

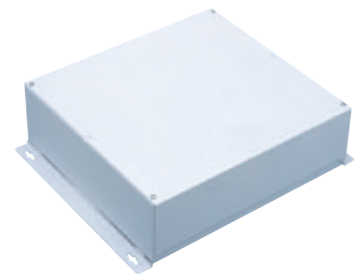
A scheme can be prepared, with quotation, full product listing and specification following a project meeting with survey or the provision of detailed drawings.



Guide-Lite low-level lighting offers significant safety advantages, providing effective way guidance for both evacuees and emergency personnel



Guide-Lite indicator modules



Guide-Lite power supply unit



Help-Lite emergency sign with alarm indicator, reset module and pull switch



HELP legend is visible when activated

## Help-Lite SR10

The Help-Lite is designed for the less able person. It is suited to disabled toilets or similar compartments in Hospitals, Care Homes, Educational Facilities, Sheltered Accommodation or similar facilities.

The SR10-65M has been engineered with an IP65 enclosure and has a state of the art battery back-up in the event of a mains failure.

- HELP legend – visible when activated
- High pitched sounder to get attention
- Pull switch activation
- Reset module with reassurance indicator
- Remote alarm indicator for warden’s office
- Operates in mains failure
- Ingress rated luminaire for outdoor fitting

### SPECIFICATION

ELECTRICAL & OPERATIONAL	SELF-CONTAINED
Input voltage	230 – 240v 50Hz
Duration	At mains failure up to 2 hours on standby battery
Lamp	8wT5
Lamp o/p (lumens)	400

### CONSTRUCTION & INSTALLATION

Cable entry	Luminaire: rear end moulded locations, 20mm
Construction	Luminaire: High-grade polycarbonate plastic body in white. Clear PC optically engineered diffuser. Remote alarm and reset units are incorporated into pattress fascias
Environment	0 – 25°C
Ingress class	IP65
Dimensions lwd (mm)	Luminaire: 343 x 98 x 73
Weight (kg)	2 (pack)

### TO ORDER

STANDARD ORDER CODE	DESCRIPTION
SR10-65M – PACK	Help-Lite pack, complete with IP65 rated luminaire, ‘HELP’ legend panel, remote alarm pattress mounted module, reset module, and emergency pull cord unit with red cord and handle pull

SPARES		OPTIONS	
SR11-ALM	Alarm unit	VRKIT	Security screw fixing kit
SR11-RES	Reset unit	XTR	Semi-recess trim bezel with fixing bracket





## Lighting conversion service

**'Self-contained' conversion products ZTK, ZTW**

**56 – 57**

**Low voltage PDX, PD6**

**58**

# Lighting conversion service

Emergi-Lite offers a specialist conversion service with a realistic turnaround, backed by the highest level of technical expertise, from strategic centres in the UK. As an emergency control gear manufacturer, we can make recommendations, supported by practical laboratory tests, to convert CE marked general mains fluorescent luminaires. Simply call our sales office or contact one of our field sales representatives for further guidance and a quotation.



Emergi-Lite manufactures conversion kits for use with either standard switch start or high frequency electronic mains control gear. Generally, a four pin fluorescent (non-amalgam filled) light fitting can be modified to emergency operation as long as suitable checks for equipment compatibility are successful. The method of modification will depend on the size of luminaire and its internal layout. New modules are available for T5 fluorescent tubes and Amalgam compact lamps.

Conversion kits are available for 4-pin fluorescent lamps, operating with switch start or high frequency control gear.

A conversion kit comprises a set of inverter/charger module, LED, specialist battery and end caps. Remote kits comprise the parts above mounted in a galvanised box (remote box) together with wire loom and conduit. For correct operation the remote kit should be fitted within 0.5m of the mains luminaire.

Separate special kits are available for ultra low profile T5 luminaires, T5 fluorescent tubes and Amalgam compact lamps. For more information or to discuss conversion of amalgam filled fluorescent lamps please contact our Technical Sales department.

## Standards and Practice

### CE Marking and Warranty

A modified luminaire must be compliant with the EMC (electro-magnetic compatibility) and LVD (low voltage) Directives, and carry a CE mark to signify the compliance.

The company modifying the general luminaire is legally responsible for the re-certification of the complete unit after modification.

**Emergi-Lite is registered under ICEL 1004 for luminaire conversion. A request to modify a fitting will be considered provided the original general lighting product carries a CE mark itself.**

### Conformity

Emergi-Lite conversion modules conform to the safety and performance requirements of EN 61347 and IEC/EN 60925. Batteries are supplied in compliance with BS EN 60598.2.22. The ZT range is fully ENEC approved & CE Marked in compliance with the EMC Directive for both mains healthy and mains failed modes.

## Battery packs

Nickel Cadmium batteries, when installed in compliance with BS EN 60598.2.22, are designed to give a minimum of 4 years service life. All batteries incorporate connectors protected by a plastic sleeving. Single end caps with single fixing are provided.

Conversion Kits	Voltage	Arrangement of 4AH cells	Weight (kg)
ZTK318 & 336	3.6V	3c	0.4
ZTK428, 440 & 458	4.8V	4c, 2c+2c	0.5
ZTK549, 554 & 570	6V	5c, 2c+3c	0.8
ZTK680 & 6100	7.2V	6c, 3c+3c	1

### TO SPECIFY A CONVERSION SERVICE:

Contact us by fax, e-mail or phone. Describe the luminaire to be converted giving the lamp wattage and details of the type of control gear. We will advise the ICEL 1004 optimum conversion and provide a reference code (C – number) for you to use when ordering.



ZTK458 Integral Conversion Kit



ZTW458 Remote Conversion Kit



ICEL 1004

## Inverter module specification

A sophisticated electronic circuit is employed with performance to EN 61347 and EN 60925. The battery charge section uses a constant current method with battery deep discharge protection. An efficient DC-AC inverter circuit is connected to the lamp circuit via a multi-pole changeover device and a delayed action relay, which disconnects the ballast line supply during testing. All electrical connections are made via either push wire or IDC terminals.

### SPECIFICATION

Mains voltage	230 – 240Vac
Mains frequency	50Hz
Mains current	30mA max
Battery	High temperature nickel cadmium
Recharge period	24 hours
Charge current	200mA nominal
Emergency duration	3 Hours
Changeover voltage	In Compliance with IEC 598 2-22
Module case temp. range	0 – 70°C (ICEL 1001 TLife 65°C)
Battery temp (Intermittent)	0 – 70°C
Battery temp (Continuous)	0 – 55°C
Inverter dimensions lwd (mm)	215 x 39 x 29
Weight of module (kg)	0.39

### STANDARD ORDER CODE

### DESCRIPTION

ZTK3	Modules using 3 x D cell NiCad
ZTK4	Modules using 4 x D cell NiCad
ZTK5	Modules using 5 x D cell NiCad
ZTK6	Modules using 6 x D cell NiCad



ZTK6 Integral Conversion Kit



IR2 conversion module with receiver patress (see pages 60 – 61 for further details on IR2)

## Conversion kit selection charts

Refer to the tables below to select the relevant kit by lamp type and wattage.

### Integral conversion kits

### Lamp Type

	T5	T-R5	T8	T12	TC-DEL	TC-TEL	TC-SEL	TC-L	TC-DD
ZTK336	4 – 13W	-	18 – 36W	-	-	-	-	-	-
ZTK318	14W	-	-	-	10 – 18W	13W	5 – 11W	18W	10 – 21W
ZTK458	-	-	58W	-	-	-	-	-	-
ZTK428	14 – 24W	22W	-	-	26W	18 – 26W	-	24W	28W
ZTK440	-	-	-	-	-	-	-	36 – 40W	-
ZTK570	-	-	70W	-	-	-	-	-	-
ZTK549	28W / 49W	40W	-	-	-	-	-	-	38W
ZTK554	39W / 54W	-	-	-	-	-	-	34W	-
ZTK6100	-	-	-	100W	-	-	-	-	-
ZTK680	80W	55 – 60W	-	-	-	32 – 42W*	-	55 – 80W	55W
ZTK635	35W	-	-	-	-	-	-	-	-

Note: \* Non amalgam types only

### Remote conversion kits

### Lamp Type

	T5	T-R5	T8	T12	TC-DEL	TC-TEL	TC-SEL	TC-L	TC-DD
ZTW336	4 – 13W	-	18 – 36W	-	-	-	-	-	-
ZTW318	14W	-	-	-	10 – 18W	13W	5 – 11W	18W	21W
ZTW458	-	-	58W	-	-	-	-	-	-
ZTW428	14 – 24W	22W	-	-	26W	18W	-	-	10 – 16W
ZTW440	-	-	-	-	-	-	-	24W	-
ZTW570	-	-	-	-	-	-	-	-	-
ZTW549	28W	40W	-	-	-	26W	-	-	28 – 38W
ZTW554	39W	-	-	-	-	-	-	34 – 40W	-
ZTW6100	-	-	70W	100W	-	-	-	-	-
ZTW680	49 – 80W	55 – 60W	-	-	-	32 – 42W*	-	55 – 80W	55W
ZTW635	35W	-	-	-	-	-	-	-	-

Note: \* Non amalgam types only

For specific guidance on which kit to use for a particular lamp size, please call our Technical Sales or Conversion Services department.

For Testing Systems (Centrel, IR2 and Self-Test) please contact Technical Sales.

### Battery spares

Ni-cad battery sets for self-contained luminaires and conversion kits are available to specific request. Please contact our sales department with the specific requirement.



PDX Series

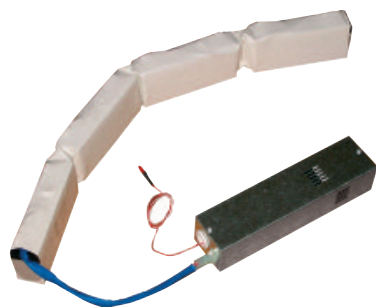
## MAXIMUM CABLE RUNS

For lamps wired to transformers designed to supply one or more lamps

Lamp load (watts)	Cable run in metres (for different wire sizes)				
	Gauge 1.0mm <sup>2</sup>	Gauge 1.5mm <sup>2</sup>	Gauge 2.5mm <sup>2</sup>	Gauge 4.0mm <sup>2</sup>	Gauge 6.0mm <sup>2</sup>
20	5.19	8.57	14.12	21.82	33.80
50	2.07	3.43	5.65	8.73	13.52
70	1.48	2.45	4.03	6.23	9.66
100	1.04	1.71	2.82	4.60	6.76
150	0.70	1.14	1.88	2.91	4.51

## Torpedo pack: PD6

A specially configured unit designed to fit through a small ceiling aperture, to operate a 12 volt lamp at reduced output.



PD650

## Low voltage PDX/PD6

The emergency power pack range is designed for use with downlight decorative low voltage lamps. The PDX is a heavy duty unit producing full light output on mains failure.

### Features:

- Low voltage cut-off device
- 100% battery capacity available 24 hours after recharge
- Extended battery storage with negligible current drain on battery and no discharge on first connection. Mains supply must be switched on and off for the battery to discharge
- Simple to install, simple to service

### Installation

PDX – It is recommended that the enclosure is fitted securely, upright or on its base, in an accessible position. Do not fit upside down.

PD6 – Designed to fit through 75mm opening in a suspended or plasterboard ceiling.

### Primary wiring

PDX – Incoming circuit must be wired with min. 1.5mm<sup>2</sup> gauge cable.

### Secondary wiring

It is crucial to choose the correct gauge of conductor from the step down transformer to the lamp. An undersized cable will give a voltage drop that will be detrimental to lamp colour/operation.

### Step down transformer

The transformer should match the rating of the lamp. To exceed the lamp voltage by 0.5v can reduce lamp life by 50%. A 5% underrated transformer would double lamp life but at the expense of lamp colour.

### Handling of lamps

Halogen bulbs should not be handled with bare fingers. Skin oil residue will contaminate the quartz surface and reduce lamp life. Allow the old lamp to cool before removing.

## SPECIFICATION

### ELECTRICAL & OPERATIONAL PDX AND PD6

Input supply	230 – 240v 50Hz, PDX: 30VA
Duration	3 hours
Maximum load	50w
Light output	PDX: Full output BLF=1, PD6: BLF=10%
Battery and recharge period	12v sealed lead acid, 3-5 year design life, 24 hour recharge
Charger and monitor	Temperature compensated pulse charge technique, LED monitor
NM operation	'Maintainable' with a user supplied external step down transformer
M operation	PDX only: Integral step down transformer
Outputs	PDX: 2 x 6mm connector, PD6: Internal connections; battery – plug and socket

### CONSTRUCTION & INSTALLATION

Cable entry	PDX: Side knockouts, PD6: End position
Construction	PDX: Folded steel enclosure finished in white powder coat, side access for easy wiring PD6: Steel inverter module with external sleeved battery pack
Environment	10 – 40°C operating, 0 – 40°C storage
Ingress class	IP20
Dimensions lwd (mm)	PDX: 318 x 230 x 110 PD6: Module – 200 x 55 x 47, flexi battery – 600 x 33 x 65, connector lead – 240
Weight (kg)	PDX: 9.8(NM), 10.8(M) – PD6: 3.44
Product standards/Approvals	Designed and manufactured to meet the requirements of BS EN 60598.2.22

### STANDARD ORDER CODE MODE OF OPERATION

PDX1250	Maintainable with user supplied remote transformer
PDXM1250	Maintained (with an Integral transformer)
PD650	Flexi-sleeve pack, maintainable, to fit through a 75mm ceiling opening





# Testing systems

<b>Infra-red testing IR2</b>	<b>60 – 61</b>
<b>Automatic addressable testing CT</b>	<b>62 – 64</b>
<b>Self-Test ST</b>	<b>65</b>
<b>Teler-Test timer TEL</b>	<b>66</b>

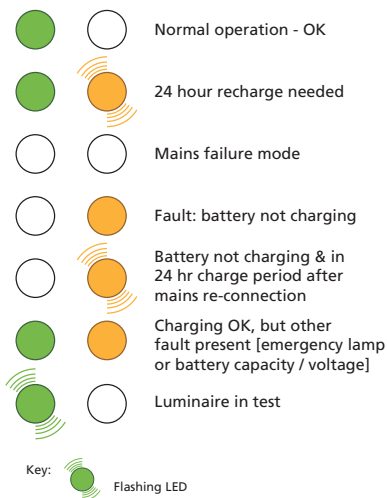




Test fittings (bi-directional handset)

## LED indicator: status

Each luminaire has a transmitter/receiver module fitted with green and amber LED indicators. The LED lit colours give the luminaire status as follows:



Download results and print test records

## Advanced infra-red emergency lighting testing system



### Infra-red testing

The IR2 infra-red system is a safe, fast and easy way of testing emergency lighting. It eliminates the need for ladders or key switches, removes the need for a costly wiring installation, is more cost effective for maintenance and offers a simple walk test process for the user to interact with the emergency lighting system.

### Flexible testing for emergency lighting

IR2 offers unprecedented flexibility including:

- Choice of automatic or manual testing
- Upload and download capability
- Rapid reporting
- Simple Self-Test as standard
- Choice of a simple tester or intelligent controller
- Data management via PC

Testing can be done using the IR2-TX, 'test-only' transmitter, or the intelligent bi-directional handset (IR2-TESTWARE™ package), which tests, interrogates and reports. Testware allows the user to view the results on small screen, or, as desired to download them to a PC to produce automated reports.

### Key benefits and features

- Easy to operate: users become familiar with the control device in a very short amount of time. Indicator interpretation is straightforward
- Effective testing: luminaire status is clearly given. The user will be able to fault find and plan maintenance efficiently
- No extra wiring: Eliminates the need for key switches
- Zero impact: the fabric of the building remains unaffected (no additional wiring, no building works and no need for redecoration)
- Promotion of safety awareness: users find the test method interesting and interactive
- Cost and time savings: reduced installation effort with less wiring and lower maintenance times allied with the ability to plan maintenance schedules better
- Regulation compliance: BS & EN standards requirements for testing emergency lighting luminaires are met by using the IR2 system
- Compatibility with existing schemes: new product developments are backwards compatible with the original Flashpoint IR system
- Proven reliability: IR2 has been proven in the field for many years. Recent hardware and software updates have maintained technical advancements

### Self-Test operation

- Self-Test is an option, which is pre-set in the factory and can be programmed from the bi-directional Testware handset
- If a test is not performed in 12 months an automatic duration Self-Test will take place. The 'Self-Test' interval can be programmed between 2 and 365 days (factory pre-set to 12 months)
- Self-Test can be inhibited
- Internal timing in the luminaire is synchronised with the mains frequency for accurate control
- LED indicators on the fitting identify faults locally. A Self-Test status report can be downloaded to the bi-directional handset

## IR2-TESTWARE™

The Testware package comprises a bi-directional handset, PCLINK software and USB interconnect cable. The hand-held unit is used for testing, interrogating and reporting the condition of IR2 fitted luminaires.

Features:

- OLED (organic LED) screen
- Large control buttons
- Menu driven process
- Luminaires are addressed individually
- The unit gives instant status report of all emergency luminaires in detail
- If needed, the information can be downloaded to a PC into a spreadsheet format for automated record keeping and assessment
- Allows maintained to non-maintained switching

### SPECIFICATION

<b>Display</b>	OLED organic light emitting diode display
<b>Controls</b>	4 button menu system "select, up, down and quit"
<b>Battery</b>	1 x 9v PP3 alkaline
<b>Memory</b>	2000 record storage – onboard memory
<b>Software &amp; access</b>	Software is flash up-gradable. Optional password entry protection
<b>Compatibility</b>	Backward compatible to Flashpoint IR (IR1)
<b>Transmission options</b>	Low power for specific luminaires. High power for global commands
<b>Connectors</b>	USB socket, USB interconnect cable for PC link
<b>Range</b>	5 – 6 metres
<b>Construction</b>	High grade plastic
<b>Dimensions lwd (mm)</b>	140 x 60 x 25

### STANDARD ORDER CODE DESCRIPTION

<b>IR2-TESTWARE™</b>	Intelligent control package; hand-held luminaire interrogator/tester, PC-LINK software, USB cable and instructions
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## IR2TX

Transmitter devices for testing only. Features:

- Initiates test sequence (tests for a 3 hour duration and automatically resets back to the normal condition)
- Status notified by green and yellow LED indicators on the luminaire
- Reset the luminaire to normal operation (to test for brief operation)

### SPECIFICATION

<b>Battery</b>	2 x AAA, 1.5v
<b>Battery life</b>	10 years standby, 6 hours continuous transmission
<b>Compatibility</b>	Backward compatible to Flashpoint IR (IR1)
<b>Construction</b>	High grade plastic
<b>Dimensions lwd (mm)</b>	60 x 35 x 15

### STANDARD ORDER CODE DESCRIPTION

<b>IR2-TX</b>	IR2 test transmitter
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## Comprehensive product range

A full range of bulkheads, exit signs and decorative luminaires are offered with IR2. IR2 conversion kits (up to 125W), twin head Range-Lites (IR2HL series) and 12V low voltage power packs (IR2PDX series) complement the luminaire set. Look for IR2 symbol on individual product pages.



IR2-TESTWARE™ and IR2TX Handsets



IR2-TESTWARE™ handset includes OLED screen



IR2 conversion module with receiver patress



A selection of IR2 fittings and accessories

## Centrel addressable emergency lighting testing system



Fire safety regulations require periodic testing and maintenance checks of emergency lighting systems, to ensure these systems remain effective and fully operational in the event of an emergency. Owner/occupiers are responsible for ensuring these tests are carried out and that full documentation is maintained for review. Naturally, such requirements carry with them cost implications, and the ongoing need to schedule and manage a regime of maintenance. Emergi-Lite's 'Centrel' addressable emergency lighting testing system has been designed to provide the complete solution to your testing needs.

'Centrel' is an addressable central testing system of extensive capability, devised to dramatically reduce the expense and burden of manual testing, maintenance and fault checking of emergency lighting systems.

'Centrel' enables the user to run manual or automatic scheduled tests on the emergency lighting system, and to record all test information electronically in the 'logbook', for future reference.

Improved testing procedures can show savings in maintenance costs and ensure correct system operation when required by emergency conditions.

System management is achieved either via a user PC, a dedicated PC or a data handling control panel, depending on the local control requirements. Networking and 'remote communication and control' are options for specific circumstances.

Control and monitoring is managed through an interface unit which is connected between the PC and the field luminaires. Each luminaire is programmed with an electronic serial number or address which is used by the interface unit for interrogation and fault diagnosis. A wide range of 'Centrel' compatible luminaires is available – look for the Centrel logo in this catalogue.

### Safety and cost awareness

Centrel promotes safety awareness through proactive automatic diagnosis of faults and maintenance requirements. A fault in an emergency lighting luminaire or module will be pinpointed and indicated by the system, with location and fault detail recorded in the log book. Specific repairs can then be scheduled, with the maintenance engineer fully aware of the type and location of the fault to repair. This enhanced information reduces the need for time-consuming checking by the engineer and ensures the correct replacement parts can be in hand before the repair is undertaken.

Centrel also helps reduce maintenance costs through improved test schedules, enabling forward planning of maintenance and giving surety of correct system operation when the emergency lighting is needed.



Easy on-screen monitoring

### The Full Service

- **System design and estimate preparation:** the correct products and design to ensure best value when protecting your buildings and personnel
- **Project planning and installation:** practical advice to electrical contractors on matters such as cable structure, system installation and set-up etc
- **Commissioning and maintenance:** experienced, fully qualified, field service engineers available to commission and maintain the system. For added peace of mind, maintenance contracts can be put in place
- **Project after-sales service:** Project files are retained by our service department. If additional fittings are needed it is a simple task to prepare a luminaire with the next sequential number, soak test in house and despatch for addition to the system

### Technical literature & advice

- **Technical Design Guide:** Providing more in-depth technical information
- **System Demonstrations:** Demonstrations arranged at your own premises or at our head office

Please call a member of our quotations team or sales engineer for more details.



A wide range of Centrel compatible luminaires is available – look out for the Centrel logo in this catalogue.

## When do you need to test?

European Standards BS 5266 Pt8 (EN 50172)

### Simplified Testing Regime

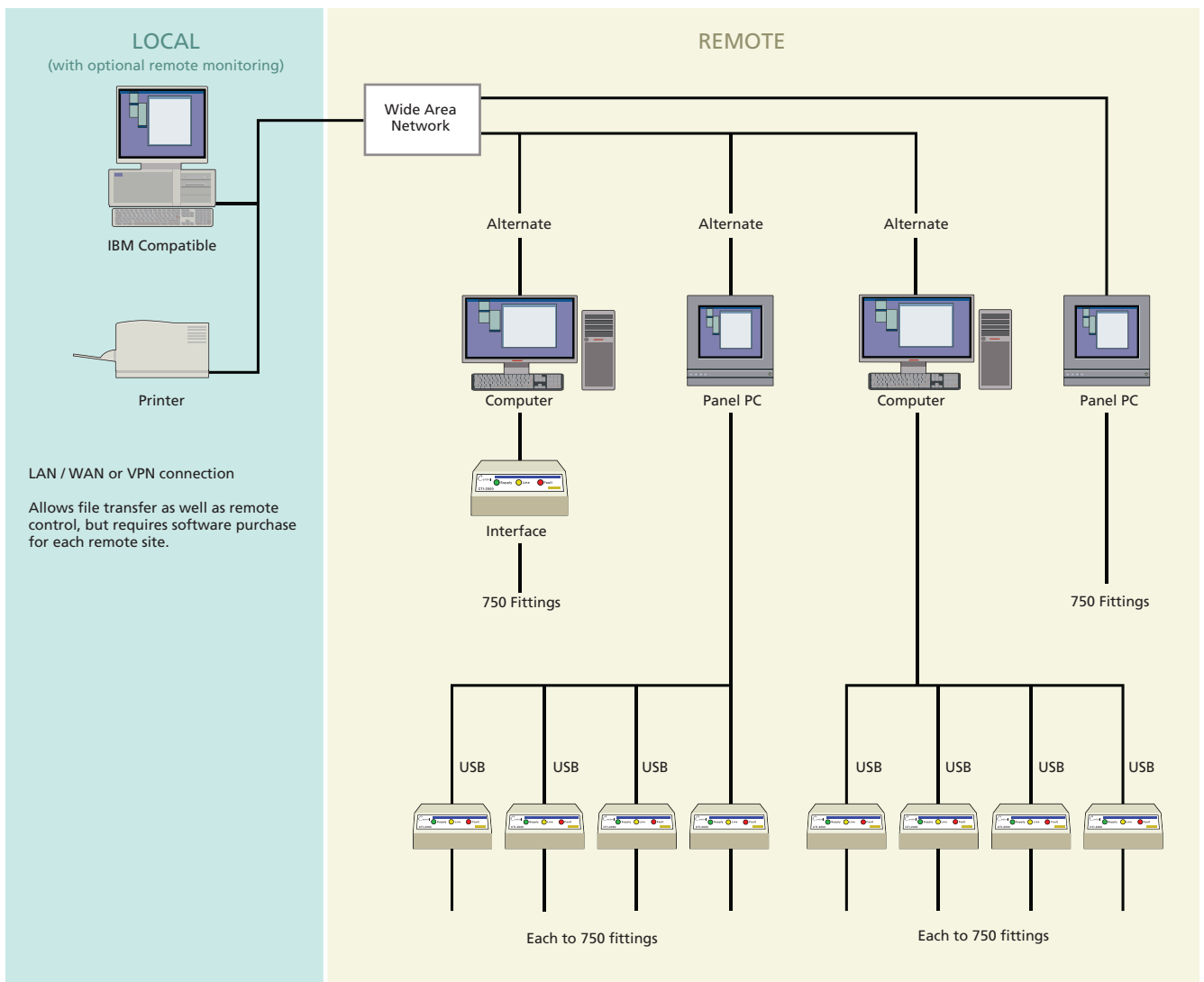
- Daily check central power supply indicators for healthy operation
- Monthly check operation
- Yearly check duration
- Always keep documented records
- Automatic test devices should meet IEC62034

## What needs to be checked & tested?

- Mains present and healthy
- Battery present
- Battery charging
- Inverter circuit in emergency operation
- Lamp functions and in circuit
- Duration

## Effective testing through Centrel

- Tests are run either manually or automatically under control of the users PC or panel
- Manual tests can be performed at any time from the main test windows screen
- Unattended tests can be performed using the schedule program so long as the computer remains switched on
- All automatic test schedules can be easily programmed for the type of test required and for the time the test is to be performed
- All results of tests are stored in the 'Logbook' for recall at a later date
- Each luminaire is programmed with an address which is used by the interface unit for interrogation and fault diagnosis



## Centrel – the system & features

**Scheduler** – All automatic test schedules can be easily programmed for the type of test required and when the test is performed.

**Log book** – All results are stored in the Log Book program for viewing and printing when required.

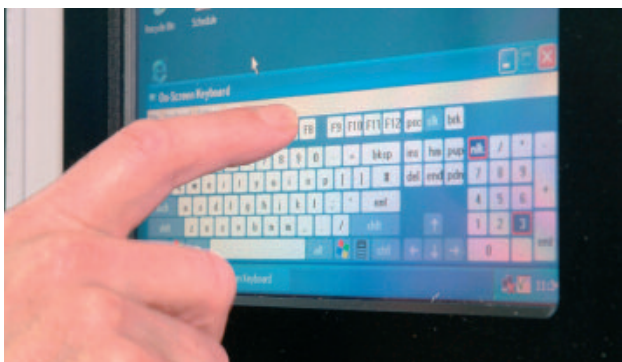
**'Centrel' main program** – Manual tests can be performed at any time from the main test windows screen.

## Configurations

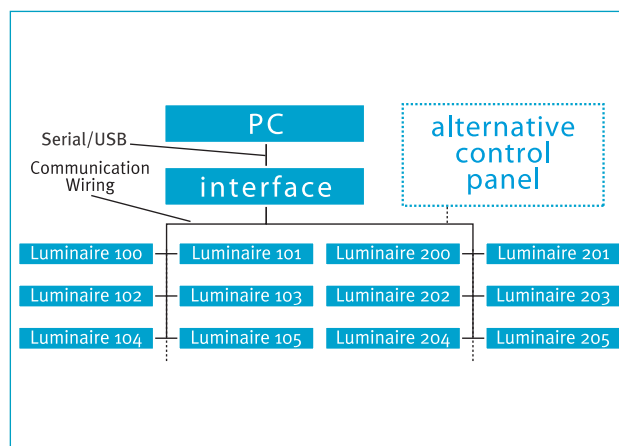
- **750 addresses per interface** – a maximum of 4 interfaces per PC
- **Panel PC** – For prestigious applications a state of the art powerful and attractive wall mounted panel PC is available
- **PC Remote Control and Monitoring** – Via networking solutions to allow remote testing and report retrieval from a central PC based system
- **CTP750 Control Panel**  
750 addresses LCD display and optional panel mounted printer  
Further access code for user and set up facilities  
Automatic schedule and manual testing facilities  
Attractive plastic enclosure with hinged door for easy and secure access  
Alarm indication feature to show existence of faults  
Ability to download results to a PC

## How the system measures and monitors

Each luminaire is microprocessor controlled, monitoring critical points within the luminaire circuit such as mains voltage, battery voltage, current and inverter lamp current.



CTP750 Control Panel



Typical system architecture

## Installations

A simple wiring topology is required. Cable requirements are a two core twisted unscreened data cable to connect the fittings to the 'Centrel' interface unit.

Please telephone for more information on numbers of fittings, suitable cables and total cable lengths.

## Comprehensive product range

Full range of Centrel luminaires including bulkheads, exits and decoratives is available.

Conversion kits for 5W to 125W. Twin-spot and 12V powerpack versions.

Look for Centrel symbol on individual product pages.

To order Centrel addressable luminaires, add the prefix CT to the luminaire product code, for example:

CT B 3 3 1 1

- **Conversion of mains fluorescent luminaires to emergency operation**  
We can offer a CT conversion solution for most mains fluorescent luminaires up to 125 watts
- **Low voltage emergency lighting**  
A new compact CTPDX pack is available for 12 volt lamps



## Self-Test ST

Current regulations stipulate periodic mandatory testing of an emergency lighting system to ensure the correct operation of the system in the event of a mains failure, together with compilation of all corresponding documentation. The Regulatory Reform (Fire Safety) Order 2005 and Fire (Scotland) Act 2005 place responsibility for the testing of emergency lighting systems firmly with the owner or occupier of the building.

Manual testing and the compilation of records can prove expensive, time-consuming, and disruptive to commercial activities. Emergi-Lite Self-Test offers an easy and cost effective solution for regular testing of emergency lighting, without requiring programming or complex set-up procedures. It provides continuous monitoring of the mains and battery status, together with a regular testing regime designed to meet mandatory requirements.

### Key features of Self-Test

- Simple and dependable automatic testing
- Easy installation
- Tests the battery, charger and lamp
- Each luminaire works independently in the event of an emergency
- Available in a variety of luminaire types
- Visual fault identification
- Runs tests in background mode
- Ability to stagger luminaire testing

Self-Test is available for most Emergi-Lite luminaires.

### Automatic compliance to prescribed intervals

An Emergi-Lite Self-Test automatically runs a commissioning routine when the mains is switched on initially. An onboard clock/calendar microprocessor ensures the appropriate tests are carried out at the allocated time-period. Test functions include continuous monitoring, monthly, annual and staggered periodic testing plus a push-button test.



STVE with green LED for luminaire operating correctly



STVE with orange LED for luminaire fault



STXW showing orange fault LED

### TO ORDER

#### STANDARD ORDER CODE

STARV23111	Silver-Lite 8w NM3
STARV33111	Silver-Lite 8w M3
STCLQ28M	Camarque M3
STDV3311XE22	Weatherforce sign, double-sided M3
STDV3311XE36	Weatherforce sign, double-sided M3
STNB3311	Corniche M3
STRB2311	Silver-Scape NM3
STRB3311	Silver-Scape M3
STV2311(1)	Weatherforce 8w NM3 opal (clear prismatic)
STV3311(1)	Weatherforce 8w M3 opal (clear prismatic)
STVE3311	Navigator Compact 8w M3
STXW23111	Day-Lite 8w NM3, IP65
STXW33111	Day-Lite 8w M3, IP65
STXXW	Ex-cel, IP65, Maintained and non-maintained

#### ST CONVERSIONS

STK & STW	A full suite of kits for all lamp sizes
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Please contact our conversion sales department for STK & STW conversion kits and conversion service.





Teler-Test Timer



TEL 1



TEL 2/4/8

## Teler-Test timer TEL

A range of key/manual push switch operated electronic test timing devices for emergency lighting control. This system is designed for simple manual control and observation, where automatic testing and reporting is not required. The unit allows a test to be manually performed in compliance with BS 5266 and European standards.

The test device is permanently wired to the supply of the emergency luminaire or circuit. A key switch turn or manual push switch will interrupt the supply for a pre-programmed time; this automatically resets at the end of the period.

TEST PERIOD	BS 5266 & EN 50172	TEST
10 minutes	Monthly test	Functional
3 hours	Annual	Full duration

The TEL1 unit is a simple pattress sized device for a single circuit. Emergi-Lite offers timer panels up to 8 channels. The operator simply has to select the channel number, and select the test period by pressing the appropriate push switch. During or on completion of the test it will be necessary to check all luminaires on the test channel and view lamps and charge indicators. The panel has a hinged cover with a lock to prevent unauthorised use.

SPECIFICATION	TEL1	TEL2	TEL4	TEL8
<b>Voltage rating</b>	230 – 240Vac 50Hz			
<b>No. channels</b>	1	2	4	8
<b>Output rating (for fluorescent lighting load)</b>	6A inductive (1.4kw)	3A each inductive (0.7kw per ch)	3A each inductive (0.7kw per ch)	3A each inductive (0.7kw per ch)
<b>Connection detail</b>	Live, Neutral, Live output	Live, neutral, earth. For each channel:- N/O, N/C and COM for live in and live out of each circuit		
<b>Enclosure</b>	Wall plate	High grade plastic in grey finish, lockable hinged front lid		
<b>Dimensions (hwd) mm</b>	86 x 86 x 20	200 x 190 x 110		



## Central power supply systems



Double cabinet



Power inverter and charger module

## Central power supply systems

The Emergi-Lite central power supply systems division offers a wide choice of reliable, high-quality emergency lighting systems, manufactured to meet the system design and operational requirements of the discerning user.

A central power supply system solution can be provided where it is the preferred choice or where self-contained lighting is unsuitable; this is typically in environments of extreme temperature or where high light levels are specified. In addition a testing solution can be offered from the 'Centrel' family for sites where centralised testing and maintenance is needed.

### Ranges

#### EMEX Power – AC/AC static inverter range 220/230Vac 50/60Hz

EMEX power is an advanced range for emergency lighting applications. It is available with a wide choice of batteries with a design life up to 25 years when operated according to the recommendations of the battery manufacturer. A static inverter functions at mains voltage during both normal and emergency conditions. Mains luminaires fitted with an electronic starter will work at full brightness in these circumstances. EMEX Power is compatible with the 'Centrel' addressable emergency lighting testing system.

#### Static inverter control devices – SI/230 range

A purpose built changeover relay module to operate fluorescent and incandescent lighting with a static inverter system is available.

#### EMEX Test

An optional innovative test facility is available for both the central power system and the emergency lighting luminaires linked to it.

#### EMEX Power – AC/DC central power supply systems: 110 volt

Available as 110 volt systems operating in either maintained or non-maintained mode.

This range of equipment is suitable for use in both medium and large buildings requiring centralised control and maintenance, together with long battery design life. An extensive range of continuously rated Emergi-Lite slave luminaires and directional signs can be used with these systems, to provide both attractive and functional emergency luminaires for most applications.

#### Compact power AC/DC central power supply systems

Light and medium duty 24 volt or 50 volt for smaller premises or replacement work. A full range of options is available to suit site and customer requirements.

### Battery replacement

A licensed waste disposal company must carry out the disposal of any old batteries. Emergi-Lite can offer, through its Service Division, the removal and disposal of old batteries from site, together with the supply and installation of the new battery followed by system re-commissioning.

The most popular battery type and probably the most cost effective over its service life is the valve regulated lead acid unit, commonly described as the sealed lead acid battery. In many cases it is cost effective to replace old 'wet' cell battery systems with new valve regulated battery systems that could also provide space savings.

### Servicing and planned maintenance

It is a mandatory requirement of the buildings occupier under BS 5266 that regular servicing and testing is carried out to the emergency lighting system. Emergi-Lite's national service team will be pleased to provide a competitive quotation for both planned maintenance and service requirements on all existing systems regardless of origin.

Full information on central power supply systems, slave luminaires and control devices will be available in our Emex Central Power Supply Systems Catalogue.





## Reference & design

Emergency lighting is a vital and effective way of helping people to escape from a building. It also highlights and identifies fire equipment and permits safety operations. Emergi-Lite offers expert assistance in Fire Alarm and Emergency Lighting scheme design to the latest standards, as a supplementary service to that provided by qualified consulting engineers and local fire authorities. Information on products and services is available in separate publications.

### Other Emergi-Lite Catalogues:

- EMEX Central Power Supply Systems Catalogue
- Fire Product Catalogue
- Fire Authoritative Guide
- Short Form Product Catalogue & Price Guide

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### Reference & design

69 – 71

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### Legend reference

72

69



## Requirements and Standards

The requirement for emergency lighting originates from the Fire Precautions Act 1971 and is further enforced by the Fire Precautions (Workplace) Regulations 1997 (Amended 1999). The Regulatory Reform (Fire Safety) Order, FSO came into force in October 2006 and replaces all previous fire safety legislation. The key considerations taken from the Fire Safety Order are:

- The FSO creates one simple fire safety legislative control for all workplaces/non-domestic premises
- Control is fire risk assessment based, with the responsibility for fire safety resting with the 'responsible person' for the premises
- All persons inside the building/in the vicinity who might be affected by a fire must be protected
- Employees will be required to act upon the fire risk assessment, make remedial arrangements accordingly and maintain the fire precautions
- Failure to comply with the rules would be a breach of law, with the consequence of enforcement or prohibition notices being served

A risk assessment is a legal requirement and where a site has 5 or more employees the risk assessment must be documented. Fire certificates under the Fire Precautions Act 1971 are now no longer valid.

Guidance documents on the new Fire Safety legislation have been published and the appropriate ones must be consulted as part of the overall fire risk assessment.

British Standard Codes of Practice for the emergency lighting of premises, BS 5266 Parts 1, 7 and 8, sets the guidelines for installation of emergency lighting. When designing a system the emergency lighting luminaires should conform to BS EN 60598.2.22.

Other important legislation and Regulations such as The Buildings Regulations also have a requirement for emergency lighting and must be considered as part of the design and specification. Internally illuminated exit signs should also comply with the product standard. The format of the legends should comply with the Health and Safety "Safety Signs and Signals" Regulations 1996, or the European Signs Directive.

Using products certified to the product standard and marked with the approval of the national test house gives the installer more confidence and less risk in the work he performs. However, CE marking alone does not necessarily imply a product will work in an emergency situation. Certified and approved emergency lighting therefore has an enhanced level of safety compared to general lighting. The Industry Committee for Emergency Lighting (ICEL) has a certification and registration scheme (ICEL 1001) for luminaires and conversion modules.

This scheme goes further than the BS EN product standard, by introducing additional requirements for performance, battery life, component life and fire retardancy. In using ICEL registered product, the competent person or installer can be further assured that the product is safe and will work in an emergency for many years.

## General Requirements for Emergency Lighting

### BS 5266 Parts 1, 7 and 8

If emergency lighting is required it should

- Indicate the escape routes clearly with exit signs so there is no doubt which is the way out
- Illuminate open areas used in an escape route so that obstacles can be avoided
- Ensure other fire safety equipment such as fire alarm call-points and fire-fighting equipment can be readily located
- Provide illumination for high risk areas to allow the processes to be shut down safely

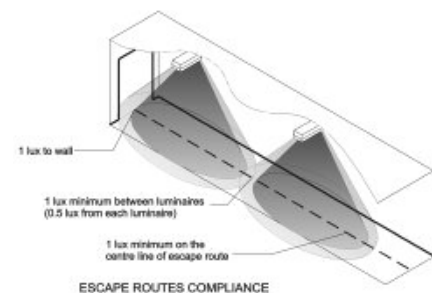
### Exit Signs

Any point on an escape route or leading to it must have an exit sign so that direction of travel is in no doubt. BS 5499 format pictograms and European format pictograms are acceptable within the UK Signs and Signal Regulations. Text only signs are obsolete and must be replaced. Exit sign boards can be used, providing that an adjacent emergency luminaire illuminates the board adequately. A more effective way of emphasising the way out is to use internally illuminated exit signs, such as Emergi-Lite's Endurance, Serenga, Navigator, Silver-Lite or Corniche Ranges.

### Escape Routes

It is essential that people can move safely along an escape route in an emergency.

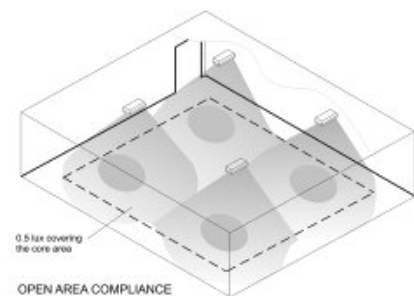
There are often minor hazards such as steps that should be illuminated. Inevitably objects may be abandoned on the escape route and the lighting should be sufficient for people to see these and avoid them. (Escape routes 1 lux min. Permanently unobstructed 0.2 lux min).



### Open Areas (Anti Panic)

When an escape route leads through an open area, then illumination of 0.5 lux minimum should be provided. This also applies to

areas with undefined escape routes, in halls or areas greater than 60m<sup>2</sup>.



## High Risk Areas

This refers to areas normally associated with moving machinery, moving vehicles, flammable materials or control rooms for potentially dangerous processes and other areas concerned with high risk where hazards may continue after the failure of normal lighting supplies. Illuminance levels in high risk task areas should be maintained at 10% (or over) of the normal lighting level or 15 lux shall be provided within 0.5 seconds of normal supply failure to allow for safe egress and/or termination of processes.

## Points of Emphasis

The following places have been identified at which emergency luminaires should be located:

1. Near stairs
2. Near changes of level
3. Near changes of direction
4. Near the intersection of a corridor
5. Near an exit door
6. Near each piece of fire-fighting equipment or manual call point
7. Near each First Aid point

## Additional Areas

Certain areas not part of the escape route still require illumination if people may be located there and/or where measures are required to ensure the safety of persons or processes within the building. This includes kitchens, first aid/operating rooms, lifts, refuge areas, escalators, moving walkways, toilets larger than 8 sq m, toilets smaller than 8 sq m without borrowed light, disabled toilets, small lobbies, motor and plant rooms and pedestrian routes within covered car parks.

## Stand-by Lighting

If stand-by lighting is used as emergency lighting it should conform to all the requirements of emergency lighting.

## Mounting Heights

Emergency luminaires should be mounted at least 2m above the floor. There is no upper limit but luminaires should be fitted below smoke level if there is a significant risk of floor illumination being affected. In high-risk smoke areas low-level wayfinding to BS 5266 Part 2 should be installed in addition to overhead emergency lighting.

## Luminaire Failure and System Integrity

Emergency escape illumination in a compartment shall be provided by two or more luminaires to counter the possibility of an emergency luminaire failure.

## Testing and Maintenance

As required by the fire legislation the safety systems within a building must be tested and maintained to ensure correct working order. Consequently, a proper testing and maintenance regime must be put in place.

## Emergency Lighting Systems

A varied range of emergency lighting is available to suit different budgets, decors, building requirements, colours and specifications.

## Types of Emergency Lighting

- Self-contained. Each luminaire contains a battery and electronic circuitry to charge batteries and operate the lamp.
- Slave. Luminaires powered from a central system.
- Conversions. Almost any mains fluorescent luminaire can be converted for emergency use. Emergi-Lite has 3 specialist conversion centres and is registered to ICEL 1004 at head office in Leeds.

## Categories of Emergency Lighting

- Non-maintained (NM). Luminaires operate when the mains fail.
- Maintained (M). Luminaires operate when the mains fail, but can also be operated if required using a switch when the mains are healthy.
- Combined. The luminaire contains more than one lamp, one of which is mains operated, the other is for emergency use only. When the mains is healthy one or more lamps operate, but should the mains fail the emergency lamp operates.
- Combined Maintained. Similar to combined, but when the mains are healthy both lamps operate, when the mains fail only one lamp operates.

## Testing and Maintenance of Emergency Lighting

Regular testing and maintenance should be done by a "competent person" (trained, with appropriate skills and experience).

## Self-Test Products

A luminaire such as Emergi-Lite's Endurance will do weekly operation checks and conduct its own full duration test after 1 year. The luminaire will indicate a fault if any of the functions are operating incorrectly. A press to test is also incorporated.

## IR2 Testing by Infra-Red controller

Testing systems are available that can initiate a test to verify the correct operation required in the monthly test and for the annual test. Luminaires such as Emergi-Lite's IR2 can combine bi-directional IR manual testing and reporting with programmable automatic Self-Test options.

## Fully Automatic Testing

Achieved using 'Centrel' addressable type systems. Each luminaire is given an address, a central control unit then communicates to each emergency luminaire via an extra two core data cable and produces a full report on the results.

## Legend reference table

	Format	Self Assembly	Single sided						
			Down	Left	Right	Up	Down	Left/Right	Up
<b>Endurance EM</b>	Screen printed	-	ESS012	ESS010	ESS011	ESS013	EDS021	EDS020	EDS022
<b>Serenga SER</b>	Screen printed (curved)	-	SER-SC012	SER-SC010	SER-SC011	SER-SC013	-	-	-
	Screen printed (normal)	-	SER-SN012	SER-SN010	SER-SN011	SER-SN013	-	-	-
<b>Day-Lite XW</b>	Self-adhesive sticker	-	RSE2X	RSE3X	RSE6X	RSE5X	-	-	-
<b>Day-Lite Ex-cel XXW</b>	Self-adhesive sticker	-	RSE2X	RSE3X	RSE6X	RSE5X	-	-	-
<b>Weatherforce V8/B8</b>	Self-adhesive sticker	RSE120	RSE2120	RSE3120	RSE6120	RSE5120	-	-	-
<b>Weatherforce WA/VA</b>	Self-adhesive sticker	RSE120	RSE2120	RSE3120	RSE6120	RSE5120	-	-	-
<b>Fine-Lite EV</b>	Self-adhesive sticker	-	RSE2S	RSE3S	RSE6S	RSE5S	-	-	-
<b>Way-Fer PL/PLX</b>	Self-adhesive sticker	-	RSE2PL	RSE3PL	RSE6PL	RSE5PL	-	-	-
	Perspex screen printed	-	XE02PL	XE03PL	XE06PL	XE05PL	-	XE036PLD	-
<b>Horizon OH</b>	Screen printed (curved)	-	XE02H	XE03H	XE06H	XE05H	-	-	-
<b>Freez-Lite STF</b>	Screen printed (curved)	-	XE02H	XE03H	XE06H	XE05H	-	-	-
<b>Navigator VE/DVE</b>	Screen printed	-	XE02V31	XE03V31	XE06V31	XE05V31	-	-	-
<b>Navigator Performa EE</b>	Screen printed (white)	-	XE02E31	XE03E31	XE06E31	XE05E31	-	-	-
	Screen printed (black)	-	XE02E4	XE03E4	XE06E4	XE05E4	-	-	-
<b>Silver-Lite AE/AEE</b>	Screen printed	-	XE02A31	XE03A31	XE06A31	XE05A31	XE02/2A32	XE03/6A32	-
<b>Silver-Scape RB</b>	Screen printed	-	XE02A31	XE03A31	XE06A31	XE05A31	XE02/2A32	XE03/6A32	-
<b>Weatherforce DV</b>	Double sided fitted	-	-	-	-	-	XE22	XE36	-
<b>Corniche NB</b>	Screen printed	-	XE02NT31	XE03NT31	XE06NT31	XE05NT31	XE02/2NT32	XE03/6NT32	-



### Photo-luminescent signs

Emergi-Lite is able to offer photo-luminescent rigid sign panels from our XEPL range, which are supplementary to normal battery powered systems. For further details please contact Technical Sales for a product data sheet.





Home to many well known brands and with over 100 years experience, Thomas & Betts provides a truly world-class level of quality, service and support. The electrical division in Europe provides the following key products:

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An impressive range of high quality products to fasten, install, insulate, protect and connect electrical cables, with the confidence to achieve a highly professional result.

### **Ty-Rap® Ty-Fast® Ty-Met™ Ty-Grip™**

Premium cable ties for the most demanding applications, including the Ty-Rap® cable ties with a steel locking barb and the Ty-Met™ self-locking stainless steel ties.

### **Shrink-Kon®**

A wide variety of multi-purpose heat shrink tubing for use in insulation, protection, identification and strain relief.

### **Shield-Kon® Sta-Kon® Dragon Tooth® Color-Keyed®**

A broad range of solderless termination systems for a variety of applications, including power cables, shielded cables and magnet wire.

### **Shureseal™ Shureflex™**

A range of liquidtight flexible conduits & fittings for the protection of electrical cables in industrial applications, in metallic and non-metallic versions (including Nylon conduits & fittings).

### **Rezi-Kon™**

A new range of cast resin joints for splicing and branching low voltage cables, in applications like street, leisure and airfield lighting, utility & home connections.

### **E-Klips®**

A range of spring steel fasteners for quick, easy and reliable fixing of services to steelwork.

## Earthing & Lightning protection solutions

With Furse, T&B is leading in the design, manufacture and supply of earthing and lightning protection systems.



Through its range of products, Furse can provide complete and innovative solutions for lightning protection, surge protection and earthing applications.

## Emergency lighting & fire detection systems

Throughout Europe T&B is well represented on the emergency lighting and fire detection markets with various leading brands providing dedicated solutions for safe evacuation of buildings and sites.



Emergi-Lite Safety Systems is the provider of advanced emergency lighting and fire detection systems, with field project support at the design stage through to commissioning and maintenance.



The emergency lighting engineers, providing innovation and the latest technology to the OEM lighting industry.



Kaufel, formerly known as NIFE, is a strong brand in emergency lighting products and safety power supply systems, among which product brands are Sentara, Venter and Twister.



Kaufel supplies a complete range of dedicated emergency lighting luminaires and central battery and testing systems with product brands like Brio, Ellitt and Sesam.



VanLien provides a wide range of emergency lighting solutions, ranging from luminaires to central battery systems with product brands like Optilux, Aqualux and Serenga.

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FOR THE MANAGEMENT OF EMERGENCY  
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EQUIPMENT AND THE MODIFICATION OF  
MAINS LUMINAIRES FOR EMERGENCY  
LIGHTING APPLICATIONS  
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