



 **Serenga**<sup>®</sup>

# Serenga LED Emergency Lighting

**Thomas & Betts**



## Serenga LED Emergency Lighting

**Compact, contemporary and practical, the Serenga LED range from Emergi-Lite is the ideal emergency lighting solution for commercial and public sector use, including offices, schools, shops, light industrial and storage units.**

Serenga LED represents the latest innovation in emergency lighting technology, integrating high specification LED light sources with modular electronics for optimum flexibility in design, enhanced emergency light output, and impressive cost and energy savings over the life-time of the unit.

Serenga LED offers the complete, modern and innovative solution to the needs of emergency lighting specifiers and users. All key requirements have been considered. Open area, escape route and exit sign luminaires are readily available, all providing superb soft illumination via high brightness LEDs.

Whether you are a consultant, architect, specifier, installer, or building manager/occupier, Serenga LED offers the reliable, cost effective life safety solution to suit your needs.

The many benefits of Serenga LED include:

**Long life with energy savings:**

High quality, energy-efficient components promote a long performance life without replacement of parts, and energy savings through 20% lower power consumption than comparable fluorescent luminaires.

**Optimised light distribution and spacing:**

Serenga LED luminaires include purpose designed optical diffusers or light reflectors to provide the maximum possible light dispersal, and therefore optimal spacing between luminaires.

**Easy-fit modular design:**

Downlighters and exit signs are designed along 'first-fix' principles to permit maximum flexibility in installation and easy maintenance.

**Self-Test as standard:**

Automatic self-test included as standard provides ongoing peace of mind to building occupiers. Additional automated testing variants are available for enhanced emergency lighting control.



## Serenga Sun-Lite recessed downlighters

A range of discreet, recessed downlighters providing architects and consultants tremendous scope to include general open area, escape route, or object-specific emergency lighting into the design scheme.

Ideal for false ceilings, or wall partitions, these high performance downlighters are completely unobtrusive with the control module and electronics hidden from view in the wall or ceiling void.

Full details on the range of Serenga Sun-Lite recessed downlighters is provided over pages 4 – 7.



## Serenga Sun-Lite surface mounted downlighters

A brand new range of surface mounted downlighters for open area or escape route use, including specially designed lens and reflector arrangements to promote optimum light distribution.

Developed for use on solid ceilings, these downlighters are the ideal complement to their recessed counterparts in the design scheme.

Serenga Sun-Lite surface mounted downlighters are explained in detail over pages 8 – 11.

## Serenga Escape exit signs

A highly versatile exit sign solution with variable mounting options for enhanced design flexibility.

Contemporary in design, the Serenga Escape exit sign complements and combines well with Serenga downlighters to provide a complete, matching solution to emergency lighting provision.

The Serenga Escape exit sign system is covered in detail over pages 12 – 15.



# Serenga Sun-Lite recessed LED downlighters



## Sun-Lite recessed LED downlighters

**Serenga LED offers a range of subtle, unobtrusive, recessed downlighters with an attractive, contemporary look to meet the needs of both modern interior design and the demands of emergency lighting.**

Available in escape route, spotlight and open area variants, Serenga LED downlighters provide designers and building users with a practical, flexible solution to emergency lighting provision.

The luminaire's slim profile and hidden control module promote minimal interference with design whilst use of LED technology and a modular approach combines excellent energy and cost efficiency with minimal maintenance.

Downlighters are powered by a sophisticated electronic control module which optimises the use of power to the LEDs and, for self-contained units, the battery.

**Automatic self-test** is included as standard, where the power LEDs, battery & charger (self-contained), and supply are monitored, with visual fault reporting from two LED indicators in the disc face.

For complete flexibility, Serenga LED downlighters are available as self-contained (standard or with enhanced IR2 or Centrel testing features), or slave 230V, for use with our EMEX Central Power Supply range.



## One simple shape, three standard-specific applications

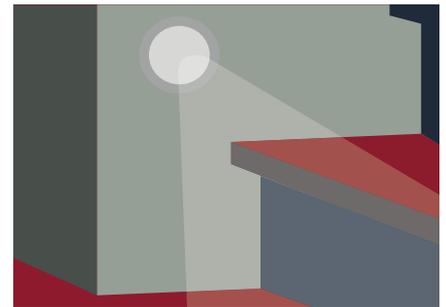
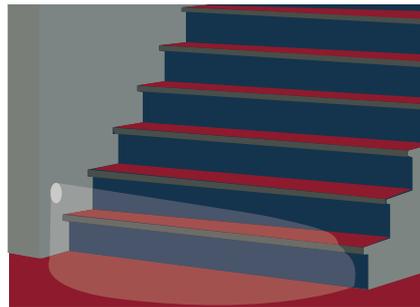
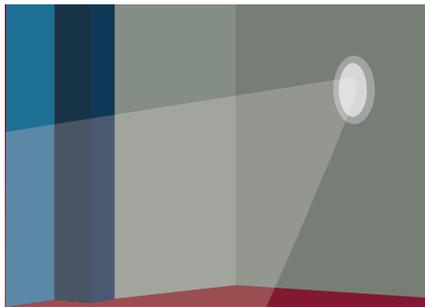
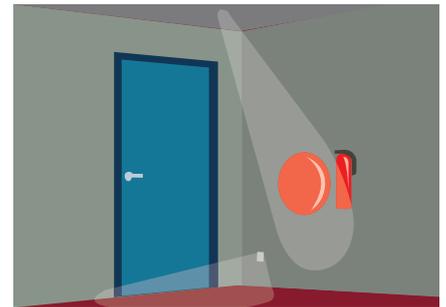
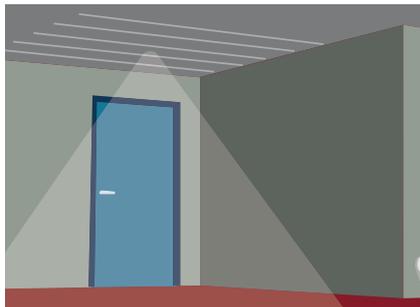
Serenga LED recessed downlighters are completely unobtrusive and can be fitted wherever emergency lighting is required, provided the ceiling or wall fabric is suitable for recessing purposes.

With a range of downlighter options, including escape route, open area and spotlight, comprehensive coverage for all emergency lighting requirements can be met.

Typical downlighter installations include department stores, hotels, restaurants, public houses, theatres, nursing homes, hospitals, libraries, museums etc.

Serenga recessed downlighters are ideal for many emergency lighting applications, including:

- Escape route lighting for corridors and walkways, and to highlight doorways/emergency exit routes in conjunction with exit signs
- Open area lighting for large open spaces over 60m<sup>2</sup>, including hotel reception areas, restaurants, shop floors etc
- Highlighting fire call points, fire extinguishers, hoses, and other points of emphasis

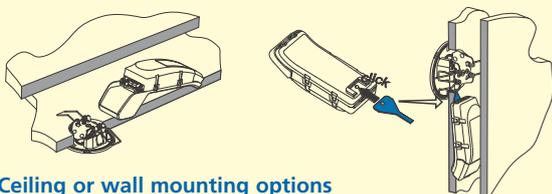


### 'Easy-fit' installation

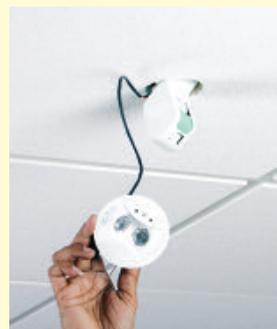
Installing downlighters is a straightforward process. The electronic control module is shaped to fit through a 68mm diameter hole cutout which then houses and holds the LED downlighter.

Serenga LED recessed downlighters are suitable for installation in both ceiling and wall voids. False ceiling or wall thickness should be between 5 – 20mm for correct setting of the LED housing. For wall mounting, Serenga LED includes a retaining clip to attach the control unit to the LED housing for suspension of the module.

Once all components are connected, simply hide the control unit in the ceiling or wall void and push-fit the downlighter into the cutout for a neat finish.



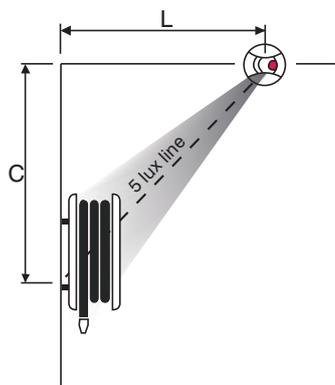
Ceiling or wall mounting options



# Serenga Sun-Lite recessed LED downlighters

## Downlighter spacing – open area, exit route and spotlight downlighters

Spacing data is calculated to achieve the requirements of BS 5266, with minimums of 0.5 lux in core open areas, 1 lux along the centre line of escape routes, and 5 lux at the centre of the target for spotlight applications.



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

Distances in metres

### SER-DS Spotlight model: to achieve 5 lux on centre of object

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

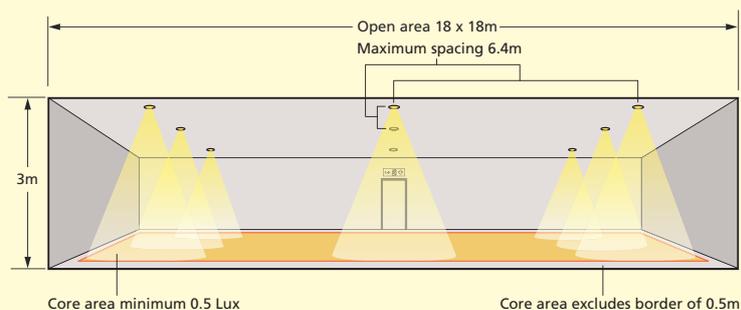
Distance in metres

## Design examples

The following illustrations provide examples of the lux levels from Serenga recessed downlighters at ceiling heights of 3, 3.5 and 4 metres for both open area and escape route applications.

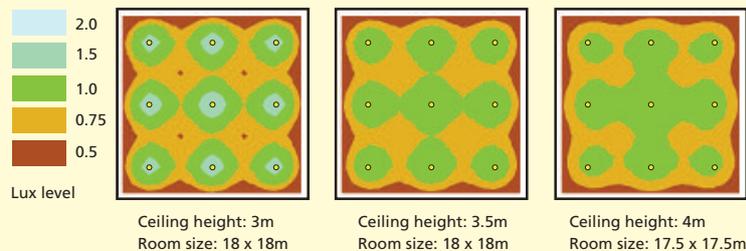
### Open area illumination

The illustration right depicts how, at 3m ceiling height, using a grid of 3 x 3 recessed downlighters can effectively illuminate an open area of up to 324m<sup>2</sup> to 0.5 lux.



### Lux levels at 3m, 3.5m & 4m

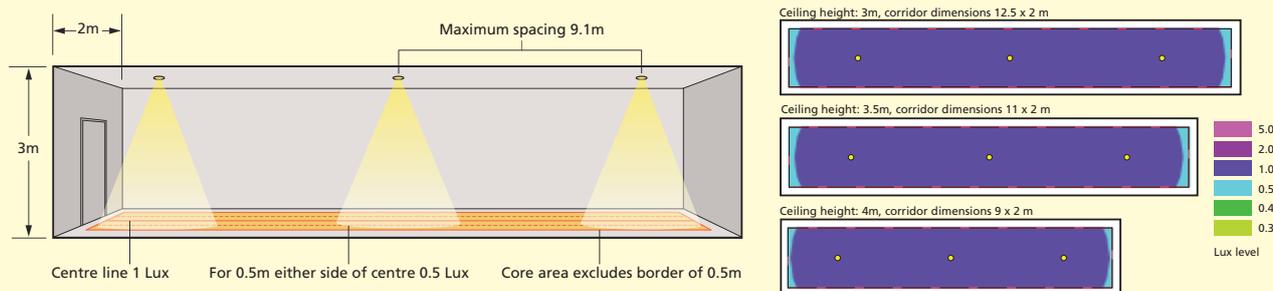
Examples are provided to give a representation of the expected lux levels at the three ceiling heights, within the stated open areas.



### Escape route illumination

The diagrams below illustrate the effective light dispersal achieved through use of Serenga LED recessed downlighters. At 3m ceiling height, with maximum spacing 9.1 metres, a series of 3 downlighters can illuminate a corridor length up to 12.5m.

Lux level diagrams are provided at 3m, 3.5m & 4m ceiling heights to give a representation of the expected illumination and uniformity (in line with BS 5266) within the corridor lengths cited.



All diagrams are for general illustration purposes only, and are not to scale. To discuss specific emergency lighting installations, please contact Emergi-Lite for information and preparation of emergency lighting schemes.

## Serenga Sun-Lite recessed downlighters – technical specification and order codes

The following tables provide the key technical information on Serenga LED recessed downlighters and the product codes for ordering.

### Technical specification

<b>Input voltage</b>	230V 50Hz
<b>Input voltage (slave)</b>	85 – 230V 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 / watt (nominal figure)
<b>Lamp life</b>	50k hours, 70% light output
<b>Power consumption</b>	1 LED: 4w/10VA, 2 LED: 3.5w/8VA*
<b>Power consumption (slave)</b>	1 LED: 3w/5VA, 2 LED: 3.5w/8VA*

\* 2 LED power consumption figures for SER-DW models. Open area figures available on request.

### Construction & installation

<b>Construction</b>	Downlighter: Polycarbonate, white or grey, optional clear clip-on IP40 cover. Module: Polyamide, white & grey
<b>Insulation class</b>	II
<b>Environment</b>	5 – 40°C
<b>Ingress class</b>	Downlighter fixture without cover: IP30, with cover: IP40
<b>Dimensions</b>	Downlighter: 92mm dia. with retaining clips to 143mm dia. (to suit 5-20mm false ceiling thickness) Control module LxWxH: 126 x 52 x 45mm max.
<b>Electronic module fit</b>	68mm hole cutout, with a minimum deck head height of 125mm
<b>Weight (kg)</b>	Downlighter: 0.07, module enclosure: 0.37 (max)
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22. ENEC certified

### Order Codes Description

#### Self-contained

<b>SER-DA-RM3</b>	Open area LED Downlighter, Self-Test
<b>SER-DS-RM3</b>	Spotlight LED Downlighter, Self-Test
<b>SER-DW-RM3</b>	Escape route LED Downlighter, Self-Test

#### Self-contained with Centrel automated testing feature

<b>CTSER-DA-RM3</b>	Open area LED Downlighter, Centrel automated testing
<b>CTSER-DS-RM3</b>	Spotlight LED Downlighter, Centrel automated testing
<b>CTSER-DW-RM3</b>	Escape route LED Downlighter, Centrel automated testing

#### Self-contained with IR2 infra-red testing feature

<b>IR2SER-DA-RM3</b>	Open area LED Downlighter, IR2 infra-red testing
<b>IR2SER-DS-RM3</b>	Spotlight LED Downlighter, IR2 infra-red testing
<b>IR2SER-DW-RM3</b>	Escape route LED Downlighter, IR2 infra-red testing

#### Slave

<b>SER-DA-R230</b>	Open area LED Downlighter, Self-Test
<b>SER-DS-R230</b>	Spotlight LED Downlighter, Self-Test
<b>SER-DW-R230</b>	Escape route LED Downlighter, Self-Test
<b>SER-DA-R230LTC</b>	Open area LED Downlighter, Self-Test, with integral LTC
<b>SER-DS-R230LTC</b>	Spotlight LED Downlighter, Self-Test, with integral LTC
<b>SER-DW-R230LTC</b>	Escape route LED Downlighter, Self-Test, with integral LTC

#### 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

For further information on the Serenga range, please contact Emergi-Lite Safety Systems.



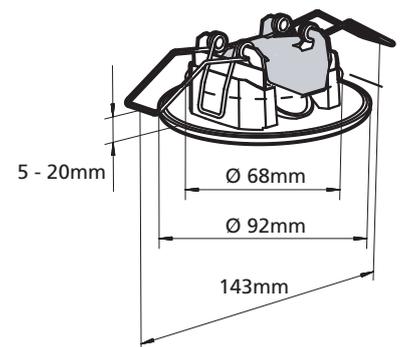
Escape route downlighter (IR2)



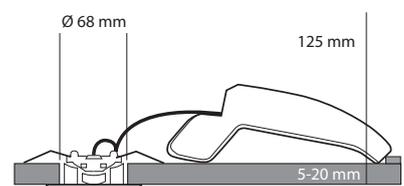
Spotlight downlighter



Open area downlighter



Downlighter dimensions



Self-contained control module in situ

# Serenga Sun-Lite surface mounted LED downlighters



## Surface mounted LED downlighters

**Introducing the exciting new range of compact, low profile, surface mounted LED downlighters which complement and enhance the Serenga family of products.**

Serenga LED surface mounted downlighters are available in either escape route or open area versions and provide an effective alternative for emergency lighting where recessed downlighters are unfeasible. The high power LED provides excellent illumination levels in areas lacking natural light, including corridors with solid ceilings, car parks, warehouses and storage facilities.

The luminaire unit houses a sophisticated control module which manages power to the lamp and battery (for self-contained versions) to ensure optimum performance.

Through use of LED technology, the unit combines high energy-efficiency with minimum maintenance, as the LED has life expectancy in excess of 5 years.

**Automatic self-test** functionality is included as standard, where the power LED, battery & charger (self-contained), and supply are monitored, with visual fault reporting from two LED indicators on the luminaire face. A press-to-test button is also incorporated for ongoing manual testing.

For ultimate flexibility, Serenga LED surface mounted downlighters are available as either self-contained, or slave 230V for use with our EMEX Central Power Supply range.

Enhanced testing options (Central addressable and IR2 infra-red resting) variants are available to order.

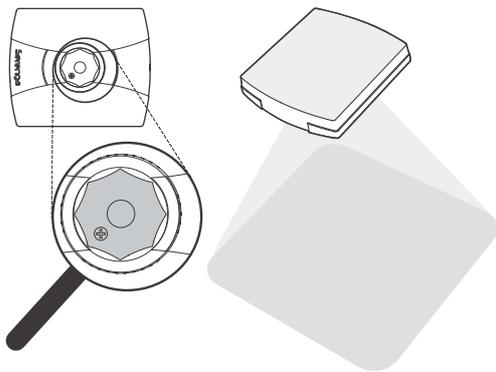


## Two reflector options for precise, effective downlight provision

Surface mounted Serenga LED downlighters are available in two variants, either for open area or exit route specific use. Utilising state-of-the-art design techniques and a thorough technical understanding of light distribution, Emergi-Lite has developed two specific lens and reflector arrangements to optimise light dispersal for each application. These purpose designed downlighters therefore provide excellent illumination in emergency conditions, in line with the requirements of the latest BS EN and international standards.

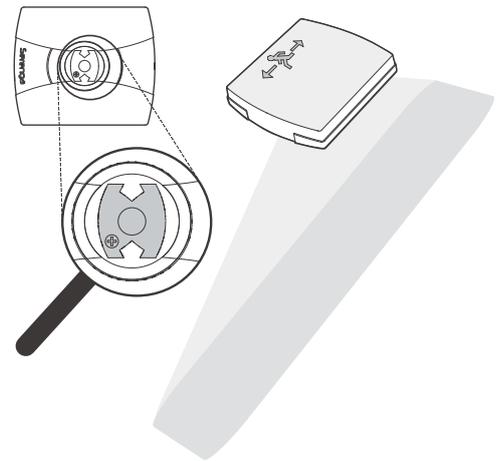
### Open area

The open area downlighter incorporates a specially designed, octagonally shaped lens housing and reflector which drives light distribution equally in all directions, as shown below:



### Escape route

Serenga LED escape route downlighters include a specially designed lens and reflector arrangement providing a long channel of light, ideal for use in corridors, as shown below.



For more information on downlighter spacing or to discuss specific scheme requirements, please contact Emergi-Lite. Spacing data and design examples continue overleaf.

### Modular first-fix installation

By exploiting LED technology, Serenga surface mounted downlighters provide a high power, high efficiency emergency lighting solution, whilst minimising impact on design and aesthetics. The low profile unit delivers outstanding levels of light dispersal, even though its casing is considerably smaller than comparable fluorescent emergency luminaires.

Serenga LED surface mounted downlighters are designed to a modular format, with the wiring connected to a base plate, and the electronics, LED and battery (self-contained units) mounted to a separate luminaire housing.

This modular approach provides installers with the opportunity to first-fix the base early in the construction process, when wiring is easily accessible, followed by connection of the electronics and LED housing at a later point. This protects the key components from risk of damage or loss during construction. Cable glands and sheaths are provided to achieve ingress protection to IP42.

The LED housing and electronics are connected simply by locating the pins in the housing to the base, clicking to fit, and securing with retaining screw.



# Serenga Sun-Lite surface mounted LED downlighters



## Downlighter spacing – open area and exit route downlighters

Spacing data is calculated to achieve the requirements of BS 5266, with minimums of 0.5 lux in core open areas, and 1 lux along the centre line of escape routes.

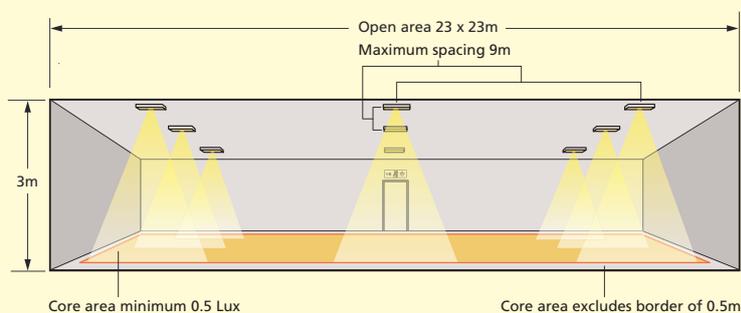
SER-SA Open area			SER-SE Escape route		
Mount height (m)	Lgt Lev (lux)	Spacing (m x m)	Mount height (m)	Lgt Lev (lux)	Spacing (m x m)
3.0	0.5	9 x 9	3.0	1.0	11.9 x 3.3
3.5	0.5	10.1 x 10.1	3.5	1.0	13.6 x 3.7
4.0	0.5	10.8 x 10.8	4.0	1.0	15.3 x 4

### Design examples

The following illustrations provide examples of the lux levels from Serenga surface mounted downlighters at ceiling heights of 3, 3.5 and 4 metres for both open area and escape route applications.

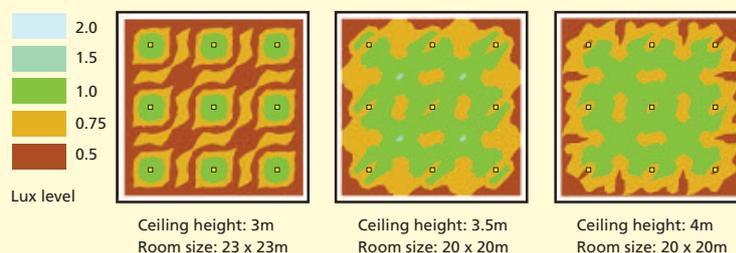
#### Open area installations

The illustration right depicts how, at 3m ceiling height, using a grid of 3 x 3 surface mounted downlighters can effectively illuminate an open area of up to 529m<sup>2</sup> to 0.5 lux.



#### Lux levels at 3m, 3.5m & 4m

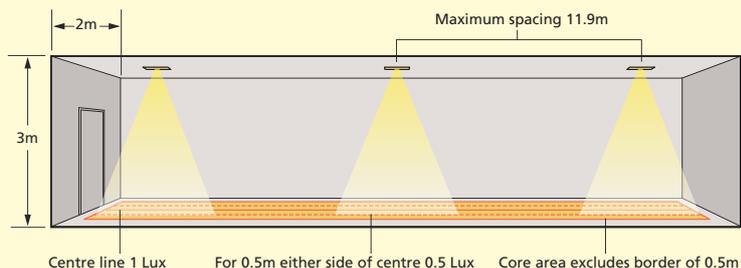
Examples are provided to give a representation of the expected lux levels at the three ceiling heights, within the stated open areas.



#### Escape route installations

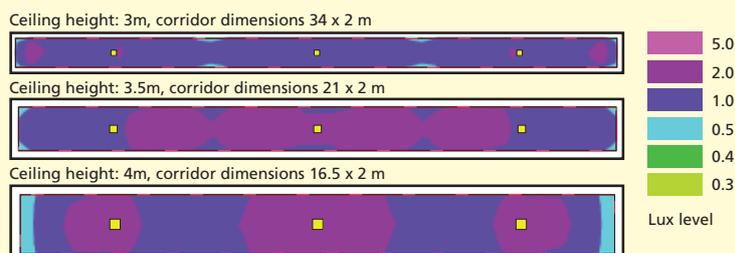
The diagram right illustrates the effective light dispersal achieved through use of Serenga LED surface mounted downlighters.

At 3m ceiling height, and with a maximum spacing of 11.9m, a series of 3 downlighters can illuminate a corridor length up to 34m.



#### Lux levels at 3m, 3.5m & 4m

Examples are provided at various ceiling heights to give a representation of the expected lux levels to achieve the required illumination (in line with BS 5266) within the corridor lengths cited.



All diagrams are for general illustration purposes only, and are not to scale. To discuss specific emergency lighting installations, please contact Emergi-Lite for information and preparation of emergency lighting schemes.

## Serenga Sun-Lite surface mounted downlighters – technical specification and order codes

The following tables provide the key technical information on Serenga LED surface mounted downlighters and the product codes for ordering.

### Technical specification

<b>Input voltage</b>	230V 50Hz
<b>Input voltage (slave)</b>	85 – 230V 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>	3w, 1 high power LED
<b>Lamp o/p (lumens)</b>	65 lumens
<b>Lamp life</b>	50k hours, 70% light output
<b>Power consumption</b>	4.1w/8.9VA
<b>Power consumption (slave)</b>	5.3w/11.0VA

### Construction & installation

<b>Construction</b>	Polycarbonate, white or grey
<b>Insulation class</b>	II
<b>Environment</b>	5 – 35°C
<b>Ingress class</b>	IP42 (with cable glands)
<b>Dimensions</b>	192 x 162 x 40mm
<b>Weight (kg)</b>	2.0kg (max)
<b>Product standard/Approvals</b>	Designed & manufactured to meet the requirements of BS EN 60598.2.22

### Order Codes Description

#### Self-contained

<b>SER-SAM3-11</b>	Open area LED Downlighter, Self-Test, white
<b>SER-SAM3-33</b>	Open area LED Downlighter, Self-Test, silver
<b>SER-SEM3-11</b>	Escape route LED Downlighter, Self-Test, white
<b>SER-SEM3-33</b>	Escape route LED Downlighter, Self-Test, silver

#### Self-contained with Centrel automated testing feature

<b>CTSER-SAM3-11</b>	Open area LED Downlighter, white, Centrel testing
<b>CTSER-SAM3-33</b>	Open area LED Downlighter, silver, Centrel testing
<b>CTSER-SEM3-11</b>	Escape route LED Downlighter, white, Centrel testing
<b>CTSER-SEM3-33</b>	Escape route LED Downlighter, silver, Centrel testing

#### Self-contained with IR2 infra-red testing feature

<b>IR2SER-SAM3-11</b>	Open area LED Downlighter, white, IR2 infra-red testing
<b>IR2SER-SAM3-33</b>	Open area LED Downlighter, silver, IR2 infra-red testing
<b>IR2SER-SEM3-11</b>	Escape route LED Downlighter, white, IR2 infra-red testing
<b>IR2SER-SEM3-33</b>	Escape route LED Downlighter, silver, IR2 infra-red testing

#### Slave

<b>SER-SA230-11</b>	Open area LED Downlighter, white
<b>SER-SA230-33</b>	Open area LED Downlighter, silver
<b>SER-SE230-11</b>	Escape route LED Downlighter, white
<b>SER-SE230-33</b>	Escape route LED Downlighter, silver
<b>SER-SA230LTC-11</b>	Open area LED Downlighter, white, with integral LTC
<b>SER-SA230LTC-33</b>	Open area LED Downlighter, silver, with integral LTC
<b>SER-SE230LTC-11</b>	Escape route LED Downlighter, white, with integral LTC
<b>SER-SE230LTC-33</b>	Escape route LED Downlighter, silver, with integral LTC

For further information on the Serenga range, please contact Emergi-Lite Safety Systems.



Open area downlighter (self-contained)



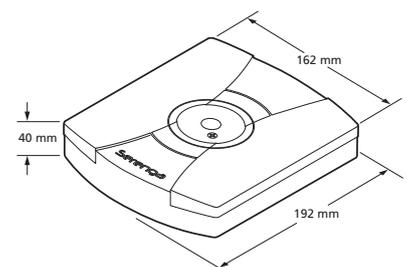
Escape route downlighter (self-contained)



Open area downlighter (IR2)



LED housing



Downlighter dimensions

# Serenga Escape LED exit signs



## Serenga Escape LED exit signs

**Serenga Escape is a high specification, practical LED based emergency exit sign system.**

**Contemporary in design, Serenga Escape is ideal for modern commercial and public sector settings, such as offices, schools, shops and hotels. Robust in construction, the system performs equally well in more demanding environments, including light industrial units and storage facilities.**

Two exit sign variants are available, a 2 LED exit sign, and an enhanced 4 LED exit sign with integral downlighters, enabling inclusion in emergency lighting scheme design. Exit signs can be supplied with a range of mounting options to cover all design requirements.

Serenga Escape benefits from modular construction principles, promoting maximum flexibility in design and installation, since all components, the control module, smart-frame and legend panel, are interchangeable.

**Automatic self-test** is included as standard, with the electronics, LEDs and battery operation (self-contained) continuously monitored. Enhanced testing versions (Central and IR2) are available, along with slave 230V exit signs for use with central power supply systems.



Serenga Escape light source frames, control module and legend panels are readily assembled to a first-fix principle. Frames and fixings are interchangeable, providing incredible flexibility in design.

Installation is an easy process, with the electronic control module and exit sign smart-frame simply clicking to fit to the first-fix base.

## Modular ease for every phase of the construction process

Serenga Escape exit signs offer tremendous scope and advantages to architects, designers, consultants, installers and maintenance providers alike.

### Design

The Serenga Escape exit sign is available with a variety of mounting options to suit the broadest possible range of applications. Designers can select the most suitable exit sign to match interior design considerations.

The Serenga modular approach permits design amendment during the scheme preparation or installation phases, since fittings, frames and legends are readily interchangeable.

### Installation

The Serenga modular principle lends itself well to straightforward, step-by-step project implementation:

- First-fix plate
- Fix electronic module and 'plug and play' LED frame during finishing

The unique SmartLocker® feature of the electronic control module makes it possible to secure the control module and light frame with the simple 'locate, click and fit' action.

### Operational life

The control circuit drives and manages the LED light source allowing long life with low energy consumption. Sympathetic electronics and the type of LED employed encourage a long lifespan.

An LED fixture of this type requires less maintenance attention in comparison to a luminaire using a standard fluorescent tube, enabling the user to enjoy improved cost benefits in material and labour over time.

### Testing and maintenance

Automatic self-test is included in the standard self-contained package. Enhanced testing versions (Centrel and IR2) are also available for easy, automated, scheduled testing.

The system continuously monitors the electronics, the power LED and battery (self-contained versions) to provide complete peace of mind that the luminaire is functioning in line with requirements.

### Renovation and recycling

At the end of a life cycle, Serenga luminaires can be dismantled with ease, allowing compliance with recycling and disposal requirements.

Thomas & Betts Ltd. (Emergi-Lite Safety Systems) is a member of the Lumicom Compliance Scheme (registration no. WEEE/DH0037UQ). Lumicom recycles de-polluted luminaires being replaced by our fittings in an environmentally sound manner. For more information on this recycling scheme, please visit [www.lumicom.co.uk](http://www.lumicom.co.uk).



Side mount exit sign



Top mount exit sign



Recessed exit sign



Suspended exit sign

# Serenga Escape LED exit signs

## Serenga Escape exit signs – technical specification

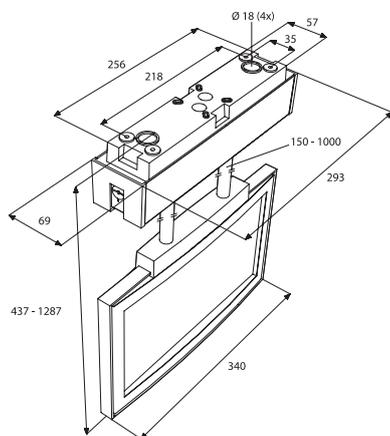
The following table provides the key technical information on Serenga Escape LED exit signs.

### Technical specification

<b>Input voltage</b>	230V 50Hz
<b>Input voltage (slave)</b>	85 – 230V 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 / watt (nominal figure)
<b>Lamp life</b>	50k hours, 70% light output
<b>Power consumption</b>	2 LED: 6w/13VA, 4 LED: 8w/16VA
<b>Power consumption (slave)</b>	2 LED: 3w/7VA, 4 LED: 6w/14VA 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 LxWxD</b>	Smart-frame: 340 x 205mm Control enclosure: 293 x 60 x 69mm
<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



## Legend foil selection

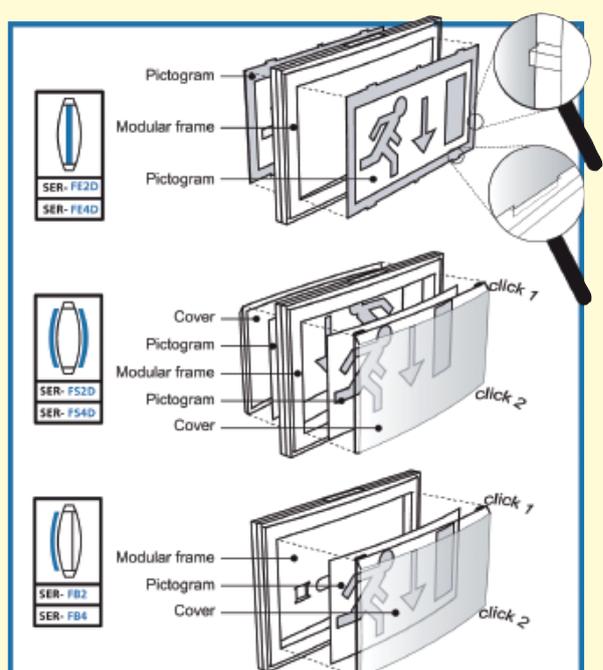
A range of legend foils is available including up, down, left and right. All are available in either curved or normal (flat) face for use with specific smart-frames, as per the following table and illustrations shown right:

Shape	Mounting	Ref
Normal (slab) face	Top, side or suspended	FE2D/4D
Curved, double sided	Top, side or suspended	FS2D/4D
Curved, single sided	Back to wall	FB2/4

Legend foils simply clip-fit into place. Two legends are required for recessed, suspended, top and side mounted smart-frames, whereas only one legend is required for the back mount smart-frame option.

Note: smart-frames are supplied with an arrow down, or arrow down plus blank legend as standard (see product ordering on facing page).

If in doubt, please contact Emergi-Lite to discuss your particular requirements.



## Serenga Escape exit signs – product ordering

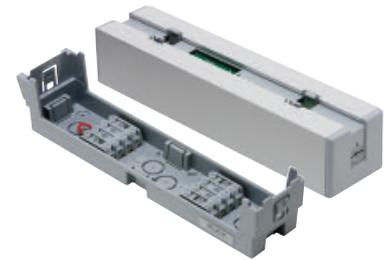
The following table provides the order codes for Serenga Escape LED exit signs.

Order control module, smart-frame, legend and mounting accessories separately as required.

### Electronic control modules

Control modules are supplied complete with first-fix seat assembly for ceiling or wall mounting, and are available as self-contained, either standard or with enhanced testing functionality (Centrel or IR2), or as slave 230V 50Hz.

Order Codes	Description
SER-M3-003	Control module & battery, self-contained, M3
SER-230-003	Control module, slave 230V 50Hz
SER-230LTC-003	Control module, slave 230V 50Hz with integral LTC
CTSER-M3-003	Control module & battery, self-contained, M3, with Centrel test function
IR2SER-M3-003	Control module & battery, self-contained, M3, with IR2 infra-red test function



Electronic control module and first-fix plate

### Smart-frames

Smart-frames are high impact grey polycarbonate with aluminium trim (4 LED versions shown)

Note:  included with each frame, plus  with FE & FS frames.

Order Codes	Description
<b>Back to wall mounting [1 x SER-SC legend required]</b>	
SER-FB2	Smart-frame 2 x 1w sign, curved blank diffuser cover
SER-FB4	Smart-frame 2 x 1w sign, 2 x 1w to floor, curved blank diffuser cover
<b>Ceiling or side edge to wall mounting [2 x SER-SC legends required]</b>	
SER-FS2D	Smart-frame 2 x 1w sign, curved blank diffuser covers
SER-FS4D	Smart-frame 2 x 1w sign, 2 x 1w to floor, curved blank diffuser covers
<b>Ceiling or side edge to wall mounting [2 x SER-SN legends required]</b>	
SER-FE2D	Smart-frame 2 x 1w sign, normal blank slab plate
SER-FE4D	Smart-frame 2 x 1w sign, 2 x 1w to floor, normal blank slab plate



Back to wall mounting, curved face SER-FB4 exit sign



Top or side mounting, curved face SER-FS4D exit sign



Top or side mounting, normal face SER-FE4D exit sign

### Mounting accessories

Order Codes	Description
SER-BZKIT	Recessing kit
SER-RKIT150	Rod suspension kit 150mm drop length
SER-RKIT300	Rod suspension kit 300mm drop length
SER-RKIT500	Rod suspension kit 500mm drop length
SER-RKIT1000	Rod suspension kit 1000mm drop length

### Legends

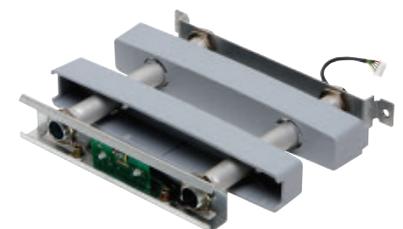
Screen printed, 'clip-fit' legends in euro pictogram format, with curved or normal face.

For curved face SER-FB or FS frames

			
SER-SC012	SER-SC010	SER-SC011	SER-SC013

For normal face SER-FE frames

			
SER-SN012	SER-SN010	SER-SN011	SER-SN013



Rod suspension kit

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