

RoHS

### TALEXmodule EM-ES 08/10/12 EM-LED light sources

#### Product description

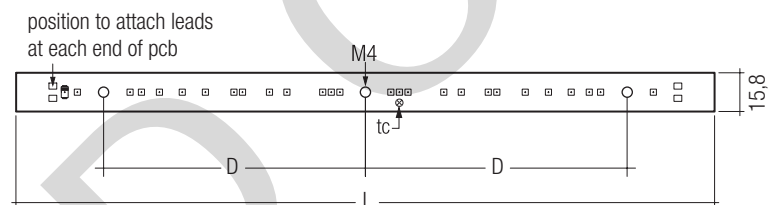
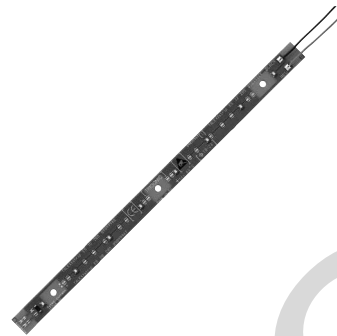
- Lighting module with 8, 10 or 12 high-power LEDs (emergency lighting strip)
- For use in escape route signs
- Compatible with EM powerLED 1 W

#### Properties

- Suitable for Tridonic EM powerLED emergency lighting units
- For permanent and standby operation
- Wide 120° distribution of light for uniform illumination
- Operation on a constant current source
- Replacement for 8 W T5 fluorescent lamp
- Several options for uniform light distribution
- Can be interconnected to create longer strips
- Low energy consumption
- Long life thanks to low operating temperature
- Provides a maintenance-free escape sign system
- Polarity reversal protection for battery
- Simple mounting/installation
- Connection: cable 300 mm

#### Note

Separate status LED required



#### Ordering data

Type	Article number	Colour	Colour temperature	Packaging, carton	Packaging, pallet	Weight per pc.
<b>8 light points per module</b>						
EM-ES 08 246	89899954	Daylight white	6,500 K	25 pc(s).	600 pc(s).	0.014 kg
EM-ES 08 285	89899947	Daylight white	6,500 K	25 pc(s).	600 pc(s).	0.016 kg
<b>10 light points per module</b>						
EM-ES 10 285	89899948	Daylight white	6,500 K	25 pc(s).	600 pc(s).	0.017 kg
<b>12 light points per module</b>						
EM-ES 12 285	89899949	Daylight white	6,500 K	25 pc(s).	600 pc(s).	0.018 kg



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#### Specific technical data

Type	Typ. luminous flux <sup>①</sup>	Max. current <sup>②</sup>	Power <sup>③</sup>	Ambient temperature ta <sup>④</sup>	tc point <sup>⑤</sup>	Total length	Hole spacing D
<b>8 light points per module</b>							
ES 08 246	80 lm	350 mA	typ. 1.1 W	-20 ... +40 °C	60 °C	246 mm	97.9 mm
ES 08 285	80 lm	350 mA	typ. 1.1 W	-20 ... +40 °C	60 °C	285 mm	106.8 mm
<b>10 light points per module</b>							
ES 10 285	80 lm	350 mA	typ. 1.1 W	-20 ... +40 °C	60 °C	285 mm	106.8 mm
<b>12 light points per module</b>							
ES 12 285	80 lm	350 mA	typ. 1.1 W	-20 ... +40 °C	60 °C	285 mm	106.8 mm

<sup>①</sup> Tolerance range for optical and electrical data: ±15 %

<sup>②</sup> Exceeding the max. operating current leads to an overload on the TALEXmodule. This may in turn result in a significant reduction in lifetime or even destruction of the TALEXmodule.

<sup>③</sup> Data for operation with 350 mA.

<sup>④</sup> If the max. temperature limits are exceeded, the life of the module will be reduced or the module may be damaged. The temperature of the TALEXmodule at the tc-point is to be measured in the thermally stable state. For tc-point see the above diagram.

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### Status indication green LED

#### Product description

- A green LED indicates that charging current is flowing into the battery



#### Ordering data

Type	Article number	Packaging, bag	Packaging, carton	Weight per pc.
LED EM green	89899605	25 pc(s).	200 pc(s).	0.017 kg
LED EM green, high brightness	89899756	25 pc(s).	200 pc(s).	0.012 kg

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### Status indication bi-colour LED

#### Product description

- Two-colour status display LED
- Green: system OK, red: fault



#### Ordering data

Type	Article number	Packaging, bag	Packaging, carton	Weight per pc.
LED EM bi-colour	89899720	25 pc(s).	200 pc(s).	0.017 kg
LED EM bi-colour, high brightness	89899753	25 pc(s).	200pc(s).	0.013 kg

**Thermal design and heat sink**  
no separate heat sink required

**Mechanical details**

Lead length of the delivered product: 300 mm  
Maximum allowed lead length: 1 m

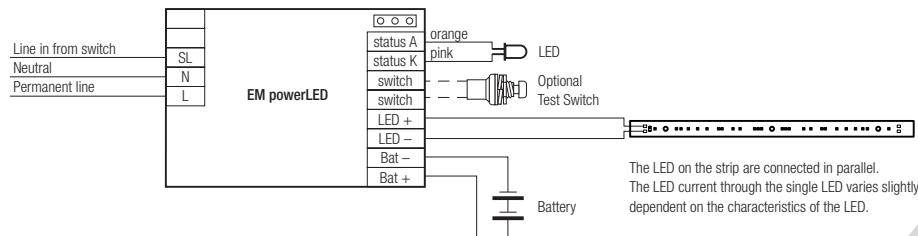
**Operating unit**

EM powerLED (see separate data sheet)

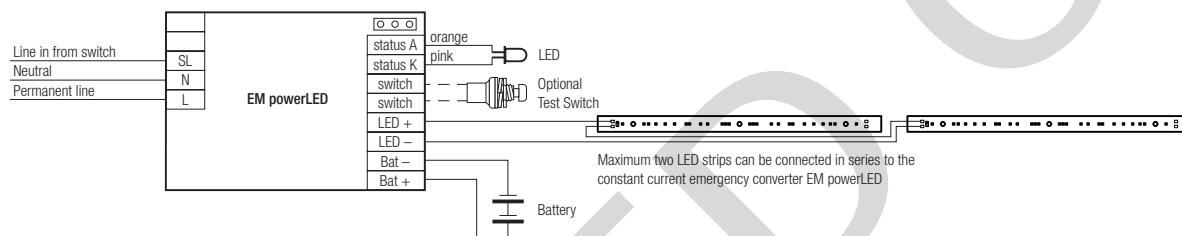
**Fixing:**

Fixing can be achieved using M4 plastic screws or M4 plastic rivets through the holes provided or alternatively by appropriate adhesive pads positioned in the fixing areas.

**Wiring example for one LED strip**



**Wiring example for two LED strips connected in series**



**Precautions in Handling**

**Safety Precautions**

The LED light output is intense enough to cause injury to human eyes if viewed directly. Precautions must be taken to avoid looking directly at the LEDs with unprotected eyes [according IEC 60825-1 (EN 60825-1)].

**EOS/ESD safety guidelines**

The device / module contains components that are sensitive to electrostatic discharge and may only be installed in the factory and on site if appropriate EOS/ESD protection measures have been taken. No special measures need be taken for devices/modules with enclosed casings (contact with the pc board not possible), just normal installation practice. Please note the requirements set out in the document EOS / ESD guidelines (Guideline\_EOS\_ESD.pdf) at: <http://www.tridonic.com/com/en/technical-docs.asp>

The TALEX modules EM-ES are delivered in an ESD protected packaging.

**Mechanical**

Avoid bending the strips or applying pressure onto any components.

**Precaution in driving**

Products are designed exclusively for forward current driving. Please avoid driving system with reverse voltage, which may cause migration which damages the product.

**Cleaning**

Chemical solvents or cleaning agents must not be used to clean the LED component.

Mechanical stress on the LED component must be avoided. It is best to use a soft brush, damp cloth or low-pressure compressed air.

**Storage**

The products should be stored away from direct light in dry location. The LEDs should be kept at 30 °C or less and 70 % RH or less. Please avoid rapid transitions in ambient temperature, especially in high humidity environments where condensation could occur.



Chemical substance may harm the LED module. Chemical reactions could lead to colour shift, reduced luminous flux or a total failure of the module caused by corrosion of electrical connections.

Materials which are used in LED applications (e.g. sealings, adhesives) must not produce dissolver gas. They must not be condensation curing based, acetate curing based or contain sulfur, chlorine or phthalate. Avoid corrosive atmosphere during usage and storage.

**Precautions for safe operation**

The operating unit must be SELV classified or else the circuit board must be insulated by the luminaire.

**Standards**

- EN 62031
- EN 62471

① For further technical information particularly with regard to the installation of TALEX modules please see separate document, "TALEX Installation\_Guide\_en\_WEB.pdf" on [www.tridonic.com](http://www.tridonic.com)