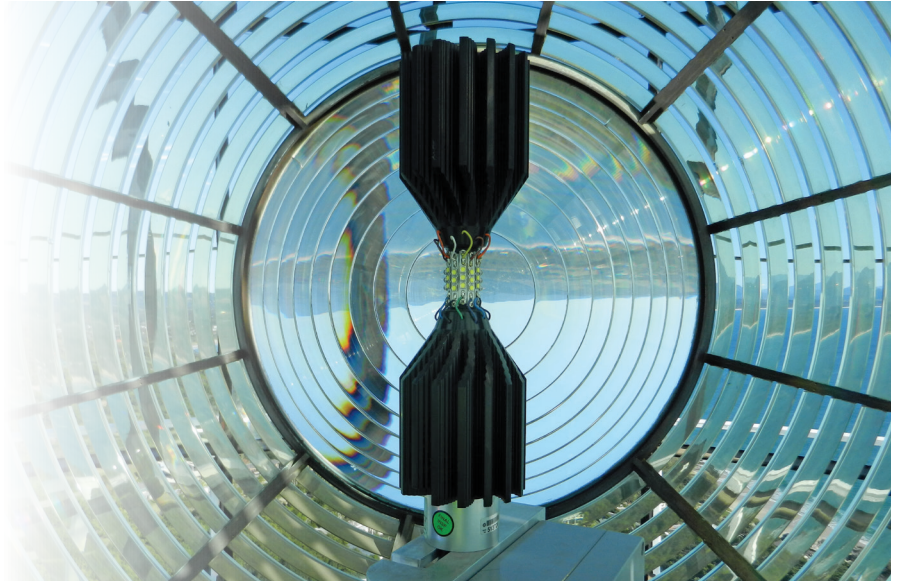


# High Output LED Light Source

SL-LED Series for rotating or fixed lenses

Originally developed by the GLA R&RNAV Directorate and manufactured under license to Trinity House.

The SL-LED Series are revolutionary solid-state light sources designed to replace traditional lamps in classical lighthouse optics. Their long life and high luminous efficiency makes huge savings in energy and maintenance possible whilst retaining the heritage value and optical efficiencies of the classical optical apparatus.



Capable of continuous or flashing operation, the SL-LED series is suitable for use in revolving or fixed optics. Their crisp, white light improves conspicuity in light polluted areas while in flashing mode instantly providing an 'eye-catching' sharp flash at full brilliance.

Low power and low voltage DC operation ensure that the SL-LED Series is well suited to battery and renewable energy power sources, such as solar photovoltaic. This further reduces running costs and the carbon footprint. The universal control provided can accommodate a wide range of power supply choices, operating modes and power levels.

## Universal LED Controller

The LED Light Source can be used in conjunction with Sealite's Universal LED Controller and PC Configuration Tool to provide a range of features including advanced monitoring capabilities to monitor conditions such as LED status, power supply and turntable rotation speed. The Controller also allows advanced programming features to be configured, including intensity settings, flash character and a selection of alarm conditions.

## Mounting Pedestal

The LED Light Source is easily mounted using Sealite's LED Pedestal. The inclusion of plug and play connectors make installation and servicing a simple task suitable for most mounting arrangements.



## Advantages

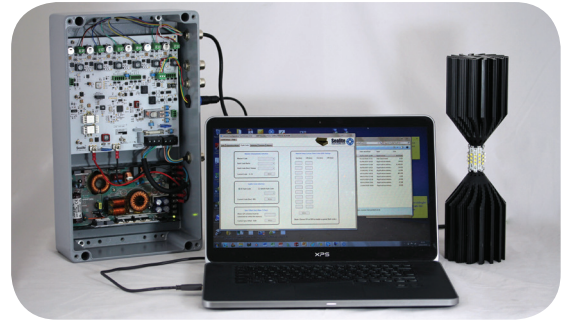
- Retains the historical heritage of the lighthouse by utilising the optical efficiency of the lens
- Typically can reduce power consumption to approximately 15-20% of the original lamp
- Individual LEDs which shine over land may be turned OFF, resulting in additional power saving. This can be achieved in both flashing and rotating applications
- Can utilise customer's existing pedestal & controls
- LEDs can be powered from one or two synchronised controllers which drive alternate LEDs for added redundancy if required
- Creates the option to change the power source of the total lighthouse to solar
- Plug & play connectors make installation & servicing simple

## Lifetime

The expected lifetime of the LEDs is approximately ten years, at which point their output is likely to be 70% of their original brightness. When compared with a lighthouse lamp with a life of 800 hours or a halogen lamp with a life of 2000 hours, these represent exceptional savings in maintenance and replacement costs.

## Consultancy Service

Sealite offers a consultative service to either survey the lighthouse on-site or prepare recommendations from customer supplied photographs and detailed lens drawing. This service enables customers to establish the range of a particular light source in the selected lens. Sealite can also provide a suitable check list form to help streamline this process.



Shown with the Universal LED Controller, the light source is easily programmable using Sealite's PC Configuration Tool

For further technical information, please visit [www.sealite.com/products/lighthouse-equipment](http://www.sealite.com/products/lighthouse-equipment)

Sealite LED Array Number	Maximum Power Rating (W)	No. of LEDs in Array	Light Source Height (mm)	Average Light Source Width (mm)	Light Source Area (cm <sup>2</sup> )	Average Horizontal Intensity (cd)	Nominal Average Luminance (cd/cm <sup>2</sup> )
SL-LED-216	240	24	10	15	1.6	3360	2100
SL-LED-324	360	36	16	25.7	4.1	3450	841

Please note:

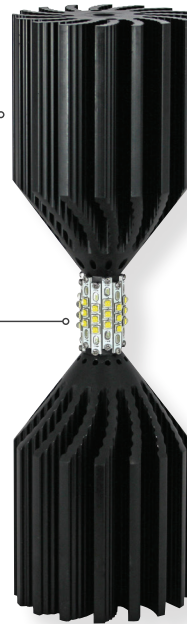
1. The quoted figures are for peak outputs when operating at 100% intensity.
2. The maximum recommended power duty cycle including flash character is 50% for low to moderate temperature environments (up to 30degrees). The system includes thermal monitoring of the light source and controller.
3. Specification's are subject to change without notice.



SL-LED-324 Model

Anodised heat sinks to maintain temperature of LEDs on steady burning duties

Overall diameter of LED array ideally matches original light source and retains flash length



Shown with pedestal



### Optional GSM Monitoring & Control

A built-in GSM module for monitoring and control is also available enabling users to access diagnostic data via cell-phone. The system can also be configured to send out alarm SMS text messages to designated cellular telephone numbers. Users can also have alarms and reports sent to designated email addresses.

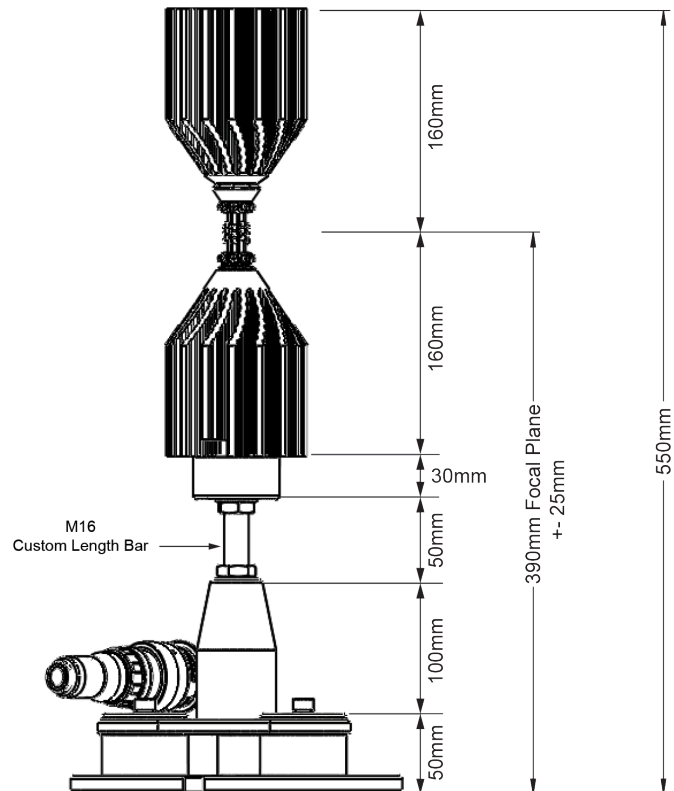
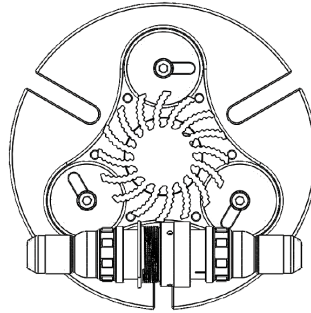
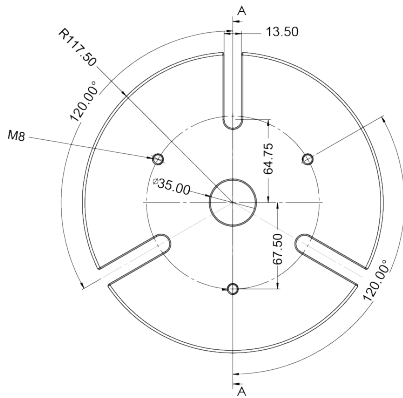
### Optional Type 1 or Type 3 AIS

The Universal LED Controller is available with a built-in, low-powered Type 1 or Type 3 AIS. The unit can be monitored both by GSM and AIS.

### Optional GPS Antenna

For flashing fixed lens applications the station can now be flashed in synchronisation with a buoy channel or breakwater by fitting an antenna if these channels are already fitted with GPS.

#### Mounting Pedestal



We believe technology improves navigation™

