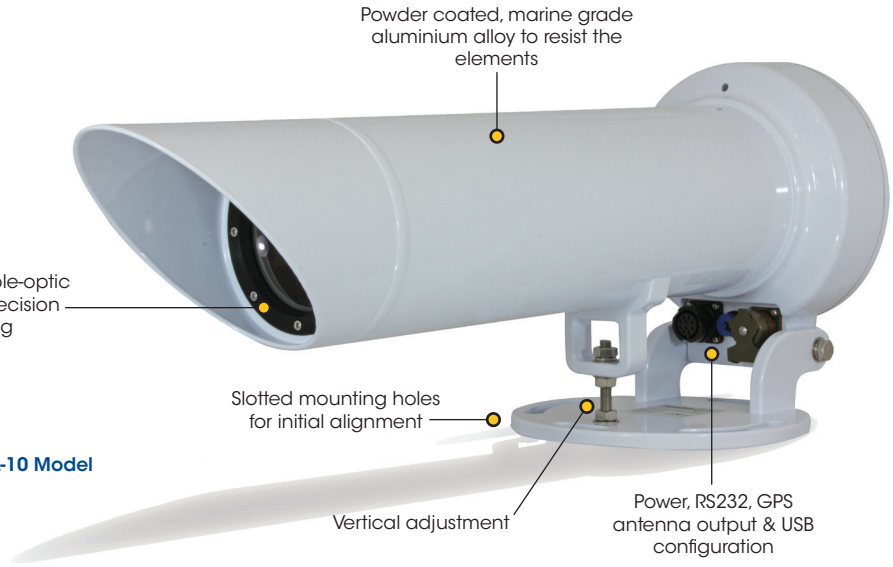
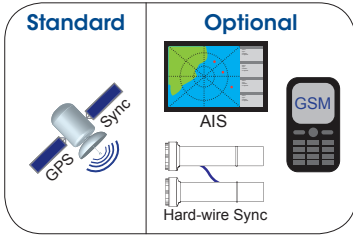


Sector Port Entry Light

SL-PEL Series

V4_2014



SL-PEL-10 Model

The Sealite Advantage

- Low power consumption - typically uses 30 watts to achieve intensities that previously required 250 watts, making solar power possible
- LEDs can be configured for automatic night dimming, eliminating the need for moving filters
- LEDs can be individually flashed, reducing the need to employ moving oscillating boundaries
- AIS & GSM ready - comes ready for interfacing with AIS or GSM monitoring facilities
- At only 30 watts, the PEL can be run on a 12-24 volt DC supply without the need for large cables
- Ultra compact design - removing the need for split assemblies and realignment on difficult access sites
- GPS enables reliable synchronisation with multiple units and other AtoNs
- Independent verification of conformity to IALA colour chromaticity co-ordinates and angles of uncertainties
- Lightweight for ease of installation

The Sealite Port Entry Light (PEL) is a low-powered, high-intensity precision sector light, suitable for day or night-time use.

High Precision, Long Range LED Optics

Providing over 120,000cd at 30watts, the Sealite PEL is extraordinarily efficient and ideal for solar power systems. The light is designed to suit high-precision sector applications and provides a measured changeover between colour sectors of typically one minute of arc.

Robust, with Ultra-Low Power Consumption

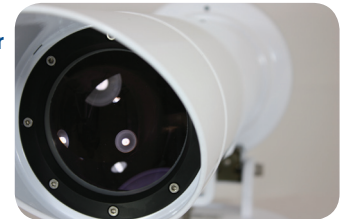
The Sealite PEL is extremely robust and of high-quality construction. The unit is built from CNC machined marine grade aluminium alloy, subject to 7-stage powder coating. The IP67 rated enclosure with anti-reflection coated achromatic lenses offers maximum resistance to weather.

AIS & GSM Ready

The Sealite PEL comes ready for interfacing with Sealite Type 1 or Type 3 AIS solutions, to allow port operators convenient remote monitoring of the unit via AIS message 6. In addition, important AIS message 21 information such as the name, type, and position of the navigation aid may be broadcast to mariners within the region.

GSM monitoring facilities also allow the light to be remotely monitored and controlled by maintenance personnel through their cellular phones or web portal.

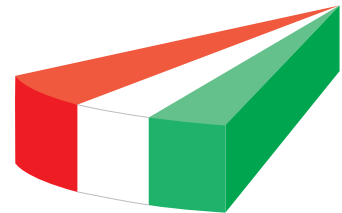
Sealite's PEL also has alarm relay contacts for remote monitoring to alert to fault conditions.



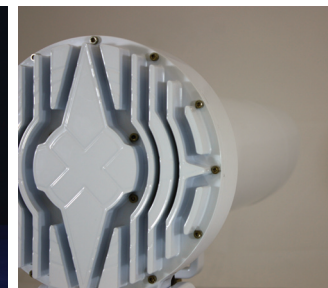
Anti-reflection coated achromatic lens to give maximum resistance to weather



Power, RS232, GPS antenna output and USB configuration



High-precision light sectoring



Sectored Port Entry Light

SL-PEL Series

GPS Synchronisation

The Sealite PEL is fitted with GPS as a standard feature, to enable reliable synchronisation when multiple units or Sealite GPS enabled lanterns are set to the same flash character. Furthermore, offset synchronisation can be achieved using multiple units with the same divisible total flash period, for better recognition.

Convenient PC Programming via USB

Up to 32 sector intensity settings may be selected by the user during programming to enable in-field adjustment to offset local background lighting. Over 256 standard & custom flash codes can also be programmed, in addition to advanced features such as multiple day/night intensity settings & switching between internal and external photo-cells. In-field programming is via a built in weather-proof port eliminating the need to open the unit and expose it to the elements.

Multiple configurations & maintenance-free

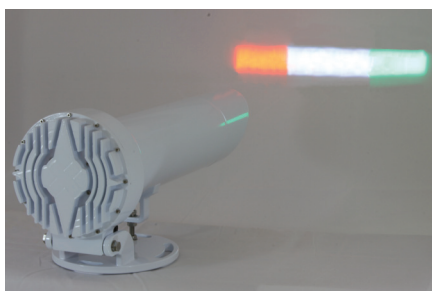
The Port Entry Light can be configured to suit many channel marking and leading line applications. Independently controlled LED drivers provide balanced colour output across colours, or the white centre sector can be increased in intensity to simulate filament/filter combinations.

The Port Entry Light does not require focussing or re-lamping while in service, and there are no moving parts.

SPECIFICATIONS* * SL-PEL-10	
10°	
Light Characteristics	
Light Source	LED
Available Colours	Red, Green, White
Typical Maximum Peak Intensity (cd)	Red - 95,000 Green - 67,000 White § - 120,000
Visible Range (NM)	White sector, nighttime: up to 20
Vertical Divergence (degrees)	@ 50% peak intensity: 1.7
Beam Width Overall (degrees)	10
Minimum Sector (degrees)	1.0
Available Flash Characteristics	User adjustable
Intensity Adjustments	Fully adjustable
LED Life Expectancy (hours)	>50,000
Electrical Characteristics	
Power (Watts)	30 Watts peak x character ratio
Nominal Voltage (VDC)	12-24
Temperature Range	-40 to 80°C
Physical Characteristics	
Body Material	Marine grade aluminium alloy, subject to 7-stage powder coating
Lens Material	Anti-reflection coated glass
Mounting	4 x 12mm slotted holes equally spaced on 200mm PCD
Length (mm/inches)	756 / 29¾
Mass (kg/lbs)	12 / 26½
Product Life Expectancy	Up to 12 years
Environmental Factors	
Driving Rain	MIL-STD-810F Method 506.4
Low Temperature	MIL-STD-810G Method 502.5
High Temperature	MIL-STD-810G Method 501.5
Humidity	MIL-STD-810F Method 507.4
Salt Fog	MIL-STD-810F Method 509.4
Shock	IEC 60068-2-29 Test Eb
Vibration	ASTM D4169-05 cl.12.3
Certifications	
CE	EN61000-6-1: 2007. EN61000-6-3: 2007.
Waterproof	IP67. AS 60529-2004 (IEC 60529:2001)
Intellectual Property	
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd
Warranty *	1 year
Options Available	<ul style="list-style-type: none"> • AIS Remote Monitoring • GSM Remote Monitoring & Control Capabilities • Hard-wire Synchronisation



* Specifications subject to change or variation without notice
 § While intensity can be balanced with coloured intensity or increased to match historical filament lantern performance
 * Subject to standard terms and conditions

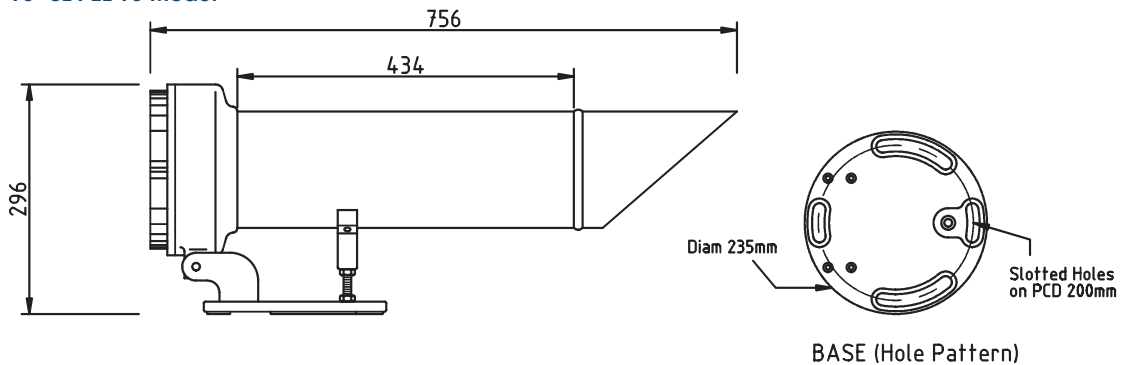


Sectored Port Entry Light

SL-PEL Series



10° SL-PEL-10 Model



Examples of PEL Beam Configurations

- Synchronised LEDs are programmable in both intensity and character
- Length of beam indicates intensity
- Beam width is one degree

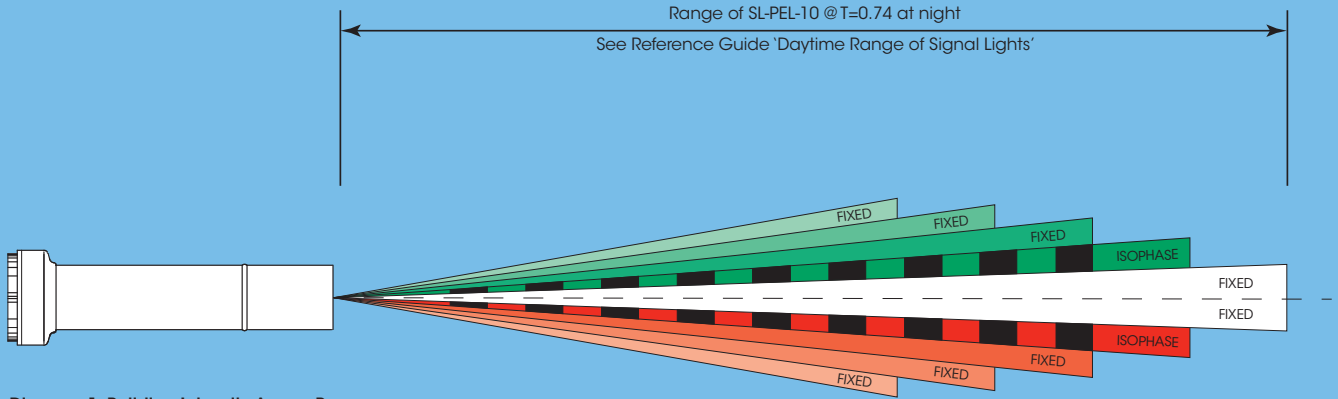


Diagram 1: Building Intensity Across Beam

- SL-PEL-10
- Boundary intensity reduction
- Automatic night dimming via PE cell (no moving filters)
- Flashing red & green boundary with no moving parts

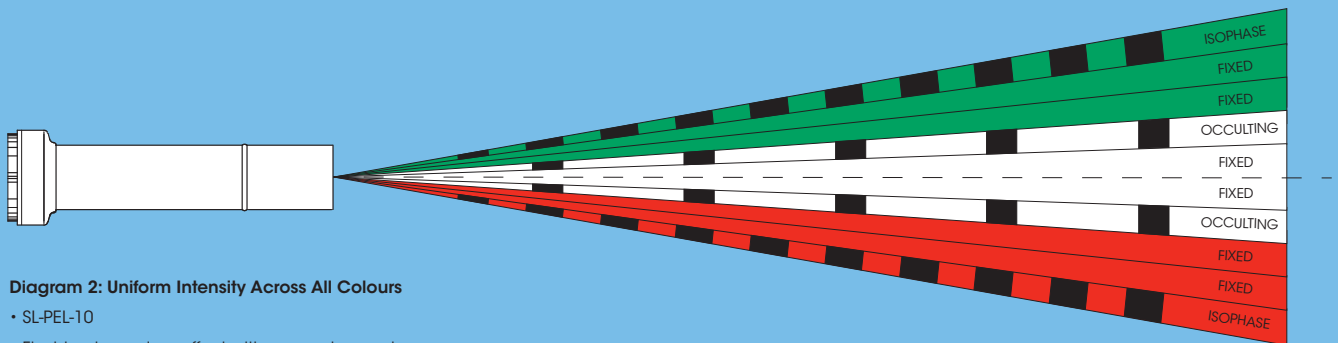


Diagram 2: Uniform Intensity Across All Colours

- SL-PEL-10
- Flashing boundary effect with no moving parts
- Full intensity across all sectors
- Automatic night dimming via PE cell (no moving filters)

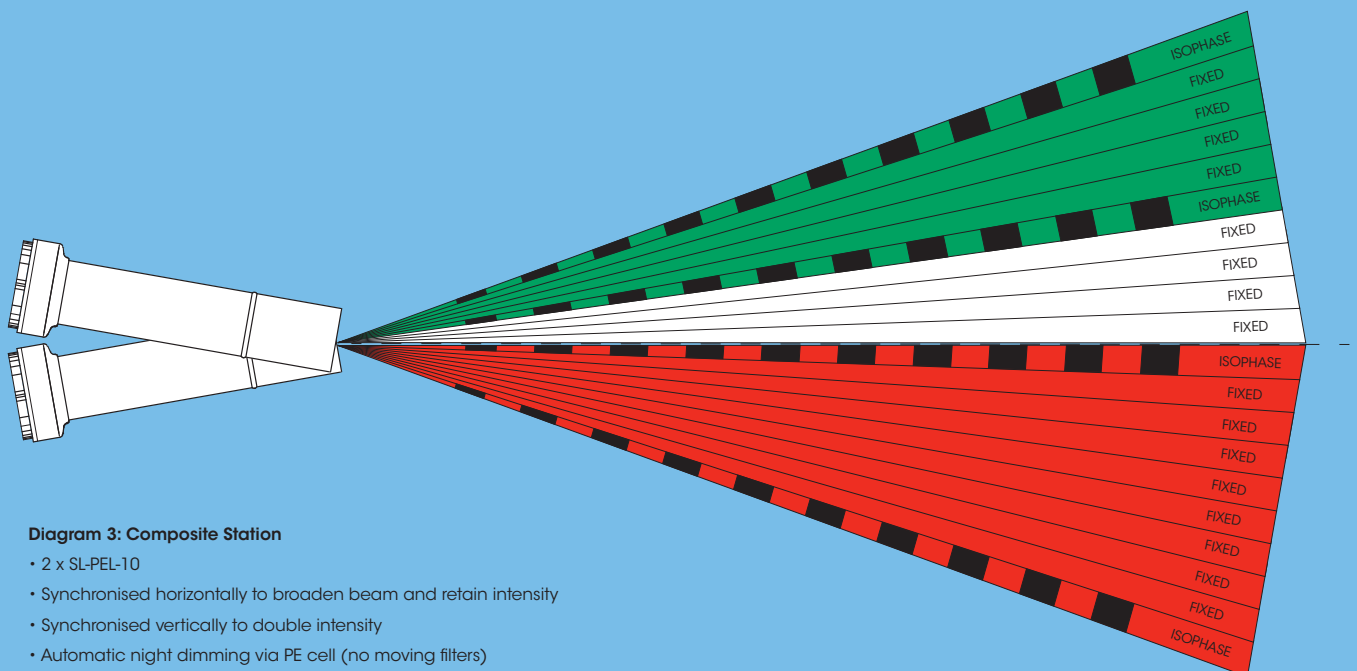


Diagram 3: Composite Station

- 2 x SL-PEL-10
- Synchronised horizontally to broaden beam and retain intensity
- Synchronised vertically to double intensity
- Automatic night dimming via PE cell (no moving filters)