

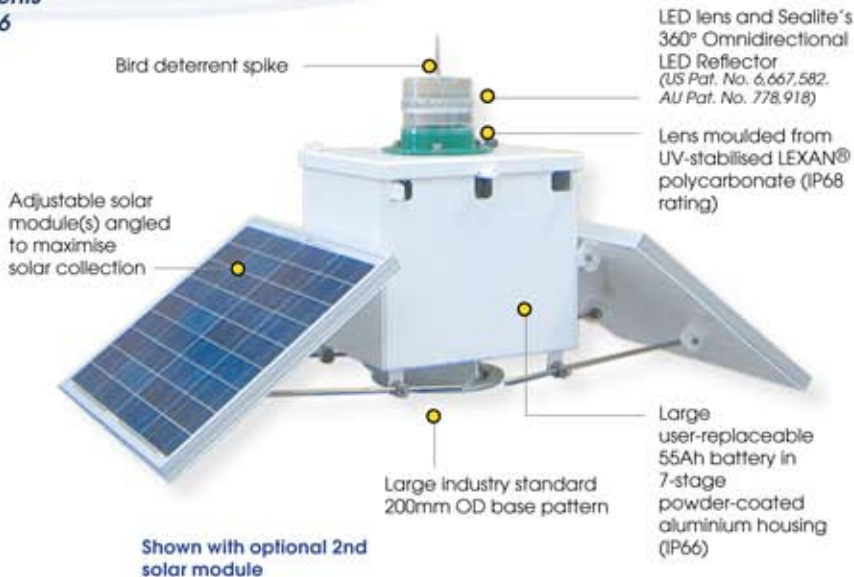
# SL125/C-Type 2

## 5-9nm+ Complete Marine Lantern Assembly

*This equipment complies with requirements of the U.S. Coast Guard in 33 CFR part 66*



Available with GPS sync, RF comm-sync, radio control or GSM control



### The Sealite Advantage

- Complete lantern assembly with large battery housing for low sunlight regions or high duty cycles
- SL125 light-head available with up to 4 tiers of ultra-high intensity LEDs (36 LEDs per tier) for increased light intensity
- 256 user-adjustable flash characteristics
- 4 adjustable intensity settings
- Impact resistant battery housing
- Vertical light emissions to maintain visibility when passing adjacent to light
- IP68 light head & IP66 battery housing



Range of SL125 light-heads to suit intensity requirements

The SL125/C-Type 2 Complete Lantern Assembly (SL125/C.T2) incorporates a larger battery housing to the standard SL125/C assembly, enabling even great autonomy particularly in lower sunlight regions.

The SL125/C.T2 offers unique flexibility, and is available in varying configurations to suit a range of installation and intensity requirements. The powder-coated 3mm aluminium housing is laser-cut, and robotically folded for guaranteed precision every time.

One or two 40watt solar module(s) are fitted to power longer-range requirements or ancillary equipment, with large 55Ah battery.

A modular design, all components of the system are replaceable in the unlikely event of damage to the unit. The battery is accessed through the top of the lantern assembly, via a robust swing-hinge.

Access to the user-adjustable flash and intensity settings is also achieved through this design.

The solar modules are extendable to 51 degrees as standard, with the option to increase in equatorial regions.

#### ORDER CODES - SL125/C

SL125-1/C-1.T2	SL125 1-Tier. Complete Lantern Assembly, Single 40w Solar Module.
SL125-1/C-2.T2	SL125 1-Tier. Complete Lantern Assembly, Dual 40w Solar Modules.
SL125-2/C-1.T2	SL125 2-Tier. Complete Lantern Assembly, Single 40w Solar Module.
SL125-2/C-2.T2	SL125 2-Tier. Complete Lantern Assembly, Dual 40w Solar Modules.
SL125-3/C-1.T2	SL125 3-Tier. Complete Lantern Assembly, Single 40w Solar Module.
SL125-3/C-2.T2	SL125 3-Tier. Complete Lantern Assembly, Dual 40w Solar Modules.
SL125-4/C-1.T2	SL125 4-Tier. Complete Lantern Assembly, Single 40w Solar Module.
SL125-4/C-2.T2	SL125 4-Tier. Complete Lantern Assembly, Dual 40w Solar Modules.

Eg. SL125-3/C.T2-2-GPS.G  
Denotes SL125 3-Tier  
Complete Type 2 Lantern Assembly, Dual Solar Modules,  
GPS Synchronisation, GREEN.



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# SL125

## 5-9nm+ LED Marine Lantern Series

*This equipment complies with requirements of the U.S. Coast Guard in 33 CFR part 66*



Available with GPS sync, RF comm-sync, radio control or GSM control

LED lens and Sealite's 360° Omnidirectional LED Reflector (US Pat. No. 6,667,582, AU Pat. No. 778,918)

Lens and base moulded from UV-stabilised LEXAN® polycarbonate (IP68 rating)

Bird deterrent spike

Automatic night activation

Large industry standard 200mm OD base pattern

The SL125 LED marine lantern is maintenance-free and used by many of the world's busiest ports and largest militaries. The lantern is available with up to 4 tiers of 36 LEDs (144 LEDs in total), for complete flexibility to suit every application.

#### SL125 Technology

The SL125 is the most advanced LED marine lantern on the market. Utilising the latest software and microcircuitry developments, the lantern boasts a huge number of features including flash-memory and the most efficient power conversion available.

The tough polycarbonate lens is specifically designed for use with LEDs, and also enables vessel operators to clearly see the light from above, when passing the AtoN.

The unit is sealed using polycarbonate bonding compounds similar to those used by major automobile manufacturing companies. This also enables a waterproof rating of IP68 - unmatched by other manufacturers.

#### Lantern Operation

The SL125 is ideal to fit on existing structures, or can be supplied as a complete unit with external solar modules and battery compartment.

The large industry-standard base, and 1 metre of included cable allows the SL125 to be readily fitted to any 12 volt power supply.

Once installed, the SL125 requires no operator intervention. The flash characters are easily adjusted on-site by the user, and the lantern will automatically begin operation at dusk - once the ambient light threshold drops sufficiently.

### The Sealite Advantage

- Available with up to 4 tiers of ultra-high intensity LEDs (36 LEDs per tier) for increased light intensity
- 256 user-adjustable flash characteristics
- 4 adjustable intensity settings
- Operates in conjunction with existing or purpose-built power supplies
- Installs in minutes & operates maintenance-free
- Vertical light emissions to maintain visibility when passing adjacent to light
- IP68 waterproof



Up to 4 tiers of 36 LEDs are available to increase the light intensity of the SL125 unit.

The SL125-2, SL125-3 and SL125-4 have 72, 108 and 144 LEDs respectively.

Each LED tier utilises the Sealite omnidirectional LED Reflector (US Pat. No. 6,667,582, AU Pat. No. 778,918) to increase the intensity and uniformity of the horizontal output.

Multiple focal points on the lens then create superior divergence specifications to suit regulations worldwide.



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SL125, Brazil installation



SL125-4 pylon installation, Israel



SL125/C lanterns mark wharf entrance, Bandar Abbas, Iran



The SL125 4-Tier lantern utilises a unique heat-dissipating domed lens to achieve maximum LED intensity output over a wider range of environmental conditions.

In addition, each LED array incorporates temperature control mechanisms to ensure maximum operational performance.

#### Optional RF Communication Synchronisation (SL125-CS)

The SL125 may be fitted with optional comm sync RF module for short range flash synchronisation - ideal for marina entrances and aquaculture applications.

#### Optional GPS Synchronisation (SL125-GPS)

For flash synchronisation of lanterns installed over longer ranges, a GPS module may be fitted.

When lanterns flash in synchronisation they can be clearly distinguished from other nav aids and confusing background lighting - ideal for rivers and channel marking.

#### Optional GSM Remote Monitoring & Control (SL125-GSM) and AIS Integration (SL125-AIS)

The SL125 lantern series may also be fitted with GSM remote monitoring and control capabilities - enabling users to access real-time diagnostics data and change lantern settings via cell-phone or PC interface.

AIS integration enables remote monitoring of the SL125 lantern as well as crucial Message 21 information to be broadcast to mariners within the region.

#### Optional Remote Radio Control (SL125-RC)

Radio control may be fitted to SL125 series products enabling users to remotely modify the setup of their lantern via handheld radio controller (SL-RC-2.4).

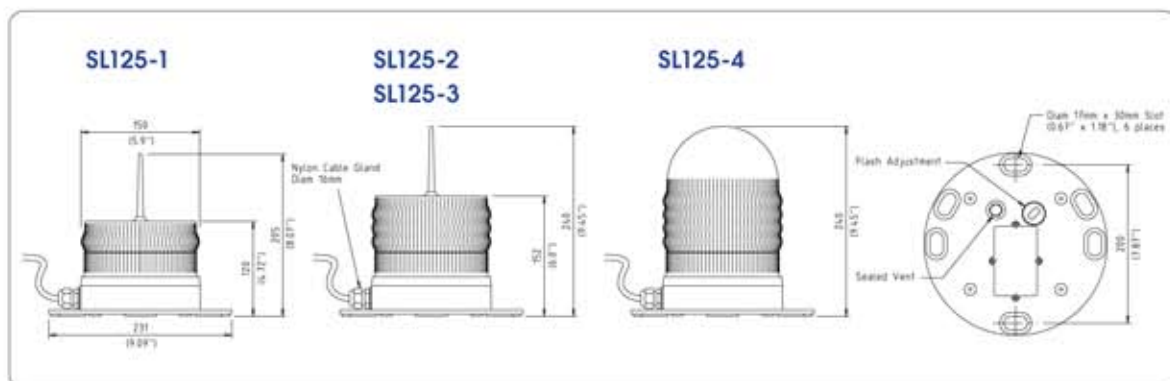
For example, the operator can remotely change between different coloured LED banks (to change the colour of the light), turn their lights ON and OFF, or change the flash setting. Perfect for remote traffic control and to designate an area of activity.



# SL125

## 5-9nm+ LED Marine Lantern Series

This equipment complies with requirements of the U.S. Coast Guard in 33 CFR part 66



### SPECIFICATIONS •

#### Light Characteristics

Light Source

Available Colours  
Maximum Available Intensity (cd)<sup>Δ</sup>  
Visible Range (nm)  
Horizontal Output (degrees)  
Vertical Divergence (degrees)

Reflector Type

Available Flash Characteristics  
Intensity Adjustments  
LED Life Expectancy (hours)

#### Electrical Characteristics

Current Draw (mA)  
Circuit Protection  
Nominal Voltage (v)  
Temperature Range

#### Physical Characteristics

Body Material  
Lens Material  
Lens Diameter (mm/inches)  
Lens Design  
Mounting  
Height (mm/inches)

Width (mm/inches)  
Mass (kg/lbs)  
Product Life Expectancy

#### Certifications

CE

Quality Assurance  
Waterproof

#### Intellectual Property

Patents  
Trademarks

#### Warranty\*

#### Options Available

SL125-1 (36 ultra-high intensity LEDs)  
SL125-2 (72 ultra-high intensity LEDs)  
SL125-3 (108 ultra-high intensity LEDs)  
SL125-4 (144 ultra-high intensity LEDs)

Red, Green, White, Yellow, Blue  
Refer to SL125 Series Specifications Table  
5-9+  
360  
9 (SL125-1, SL125-2 & SL125-3), 5 (SL125-4), (Optional 3 degree divergence for extended visible range of 10nm available)  
Omnidirectional 360° LED Reflector (US Pat. No. 6,667,582, AU Pat. No. 778,918)  
Up to 256 IALA recommended (user adjustable)  
Adjustable in 25% increments  
>100,000

Refer to Sealite Power Calculator  
Integrated  
12  
-40 to 80°C

LEXAN® Polycarbonate – UV-stabilised  
LEXAN® Polycarbonate – UV-stabilised  
150 / 5<sup>9</sup>/<sub>16</sub>  
External optics with interior flute design  
3 & 4 hole bolt pattern on 200mm OD base  
SL125-1: 205 / 8<sup>1</sup>/<sub>16</sub>  
SL125-2: 240 / 9<sup>1</sup>/<sub>2</sub>  
SL125-3: 240 / 9<sup>1</sup>/<sub>2</sub>  
SL125-4: 240 / 9<sup>1</sup>/<sub>2</sub>

231 / 9<sup>1</sup>/<sub>16</sub>  
From 1.1 / 2<sup>3</sup>/<sub>16</sub>  
Up to 12 years

EN61000-6-3:2001, EN61000-6-1:2001, EN55022,  
EN61000-4-2:1995, EN61000-4-3:2002,  
USCG specification HSCG23-05-R-E43013, including Change 1,  
ISO9001:2000  
IP68

US Pat. No. 6,667,582, AU Pat. No. 778,918  
SEALITE® is a registered trademark of Sealite Pty Ltd

Full 3 years

- GPS (SL125-GPS) or RF communication (SL125-CS synchronisation)
- AIS remote monitoring (SL125-AIS), or GSM (SL125-GSM) or RF Radio (SL125-RC) monitoring & control capabilities
- Additional cable
- Note - remote monitoring/control will reduce visible range of lantern due to increased power consumption
- 3 or 10 degree lens

CE

• Specifications subject to change or variation without notice  
\* Subject to standard terms and conditions  
Δ Intensity setting subject to solar availability

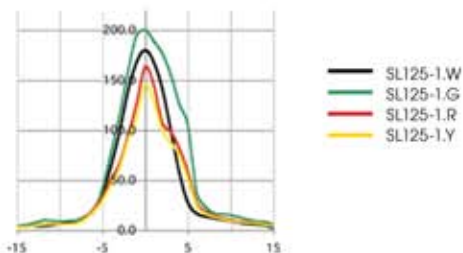


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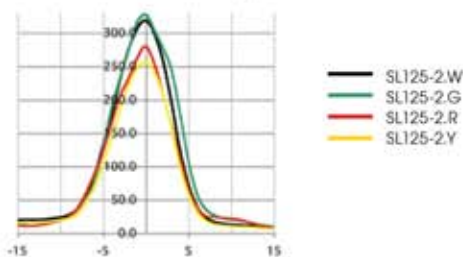
### SL125-1 Vertical Divergence



#### Candela (cd)

SL125-1	
R	163
G	200
W	180
Y	145

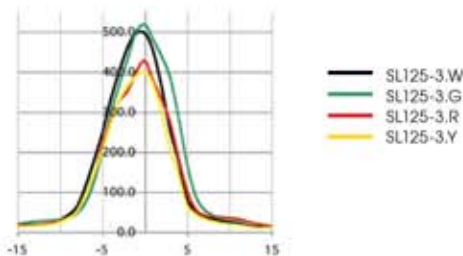
### SL125-2 Vertical Divergence



#### Candela (cd)

SL125-2	
R	280
G	328
W	319
Y	257

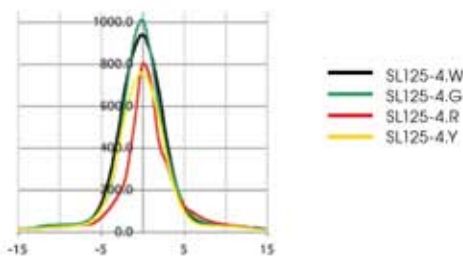
### SL125-3 Vertical Divergence



#### Candela (cd)

SL125-3	
R	427
G	518
W	496
Y	399

### SL125-4 Vertical Divergence



#### Candela (cd)

SL125-4	
R	796
G	1010
W	940
Y	760



# SL125 Series & Apollo-155

## Specifications Table

### SPECIFICATIONS

Model	Description	Angle of Divergence for Lens	Peak Intensity Flashing (cd)	Colour	Number of LEDs	Current Draw (Amps)	Voltage	Watts
SL125-1.R	1 Tier LED Marine Lantern	9°	163	Red	36	0.42	12v	5W
SL125-1.G	1 Tier LED Marine Lantern	9°	200	Green	36	0.32	12v	3.85W
SL125-1.W	1 Tier LED Marine Lantern	9°	180	White	36	0.32	12v	3.85W
SL125-1.Y	1 Tier LED Marine Lantern	9°	145	Yellow	36	0.42	12v	5W
SL125-2.R	2 Tier LED Marine Lantern	9°	280	Red	72	0.84	12v	10W
SL125-2.G	2 Tier LED Marine Lantern	9°	328	Green	72	0.64	12v	7.7W
SL125-2.W	2 Tier LED Marine Lantern	9°	319	White	72	0.64	12v	7.7W
SL125-2.Y	2 Tier LED Marine Lantern	9°	257	Yellow	72	0.84	12v	10W
SL125-3.R	3 Tier LED Marine Lantern	9°	427	Red	108	1.28	12v	15.4W
SL125-3.G	3 Tier LED Marine Lantern	9°	518	Green	108	0.96	12v	11.5W
SL125-3.W	3 Tier LED Marine Lantern	9°	496	White	108	0.96	12v	11.5W
SL125-3.Y	3 Tier LED Marine Lantern	9°	399	Yellow	108	1.28	12v	15.4W
SL125-4.R	4 Tier LED Marine Lantern	5°	798	Red	144	1.70	12v	20.4W
SL125-4.G	4 Tier LED Marine Lantern	5°	1010	Green	144	1.28	12v	15.4W
SL125-4.W	4 Tier LED Marine Lantern	5°	940	White	144	1.28	12v	15.4W
SL125-4.Y	4 Tier LED Marine Lantern	5°	760	Yellow	144	1.70	12v	20.4W
Apollo-155.R	1 Tier LED Marine Lantern	5°	880	Red	16	2.4	12v	28W
Apollo-155.G	1 Tier LED Marine Lantern	5°	1380	Green	16	2.4	12v	28W
Apollo-155.W	1 Tier LED Marine Lantern	5°	2100	White	16	2.4	12v	28W
Apollo-155.Y	1 Tier LED Marine Lantern	5°	630	Yellow	16	2.4	12v	28W

Specifications subject to change or variation without notice

Intensity (cd)	Range (nm) AT = 0.74	Range (nm) AT = 0.85	Range (km) AT = 0.74
1	1	1.1	1.9
5	2	2.3	3.7
15	3	3.5	5.6
35	4	4.8	7.4
45	4.3	5.3	8.0
55	4.6	5.7	8.5
65	4.8	6	8.9
75	5	6.2	9.3
95	5.4	6.8	10.0
110	5.5	7.1	10.2
150	6	7.8	11.1
200	6.5	8.5	12.0
270	7	9.3	13.0
360	7.5	10.1	13.9
490	8	11	14.8
640	8.5	11.8	15.7
835	9	12.6	16.7
1080	9.5	13.4	17.6
1400	10	14.2	18.5
1786	10.5	15.4	19.9
2278	11	15.9	20.4
2897	11.5	16.7	21.3
3664	12	17.6	22.2



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# Sealite Power Calculator

## Solar Installation Software Tool

Sealite has an easy to use software tool to assist with the appropriate sizing of Sealite products to the range, flash code and solar radiation levels available in worldwide geographical locations.

*Simply ask Sealite representatives for a free copy of the software.*

Simulation of the appropriateness of the selected light and settings for the required location.

1. Select Product

2. Select battery capacity

3. Select installation location

4. Select flash code and intensity

5. Select lantern options

The screenshot shows the 'Power Calculator' window with various settings tabs: Battery Settings, Solar Settings, Light Settings, and Reed Settings. A graph on the right displays 'Battery' and 'Extra Current' levels over a 24-hour cycle. The 'Flash Code' is set to '95' and 'LED Intensity' is set to '20%'. The 'Reed Draw' is set to '4 watt'.

Graphed data clearly demonstrates the average solar hours per day, battery capacity and surplus current readings over the period of a year to ensure the product is suitable for local conditions.

### Intensity assistance per product

1. Select light colour

2. Standard settings

3. Available range

The screenshot shows the 'Intensity Calculation' tab. It features a table for 'LED Colour' with columns for 'LED Peak & Effective Intensity', 'Standard', 'Standard-Down', and 'Standard-Up Double'. The 'Range' section includes 'Continuous Intensity (standard)', 'Range (standard) (mcd)', and 'Range (Standard)'. The 'Atmospheric Transparency' section has radio buttons for '0.98', '0.74', and '0.48'.



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