

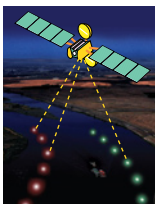
SL125/C

5-7nm Complete Marine Lantern Assembly

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



Now available with optional Comm-Synch or Radio Control



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

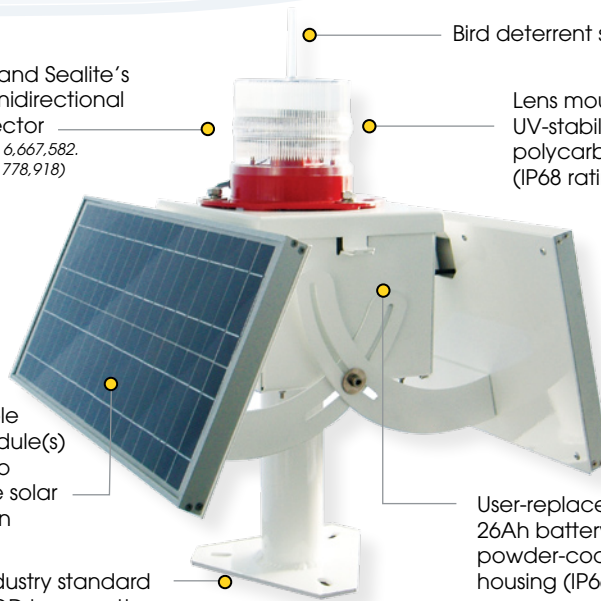
Bird deterrent spike

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

Adjustable solar module(s) angled to maximise solar collection

User-replaceable 26Ah battery in 7-stage powder-coated aluminium housing (IP66)

Large industry standard 200mm OD base pattern



The Sealite Advantage

- Complete lantern assembly
- 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
- Automatic night activation
- IP68 light head & IP66 battery housing
- Vertical light emissions to maintain visibility when passing adjacent to light

The SL125/C Complete Lantern Assembly provides a complete solution for visual navigation requirements.

The SL125/C 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 20watt solar module(s) are fitted as standard, and the unit can be readily equipped with up to two individual 40watt modules to power longer-range requirements or ancillary equipment.

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.

SL125-1/C-1	SL125 1-Tier. Complete Lantern Assembly. Single 20w Solar Module.
SL125-1/C-2	SL125 1-Tier. Complete Lantern Assembly. Dual 20w Solar Modules.
SL125-2/C-1	SL125 2-Tier. Complete Lantern Assembly. Single 20w Solar Module.
SL125-2/C-2	SL125 2-Tier. Complete Lantern Assembly. Dual 20w Solar Modules.
SL125-3/C-1	SL125 3-Tier. Complete Lantern Assembly. Single 40w Solar Module.
SL125-3/C-2	SL125 3-Tier. Complete Lantern Assembly. Dual 40w Solar Modules.
SL125-4/C-1	SL125 4-Tier. Complete Lantern Assembly. Single 40w Solar Module.
SL125-4/C-2	SL125 4-Tier. Complete Lantern Assembly. Dual 40w Solar Modules.

ORDER CODES

Eg. SL125-1/C-1-GPS.R
Denotes SL125 1-Tier Complete Lantern Assembly, Single Solar Module, GPS Synchronised. RED.



Range of SL125 light-heads to suit intensity requirements



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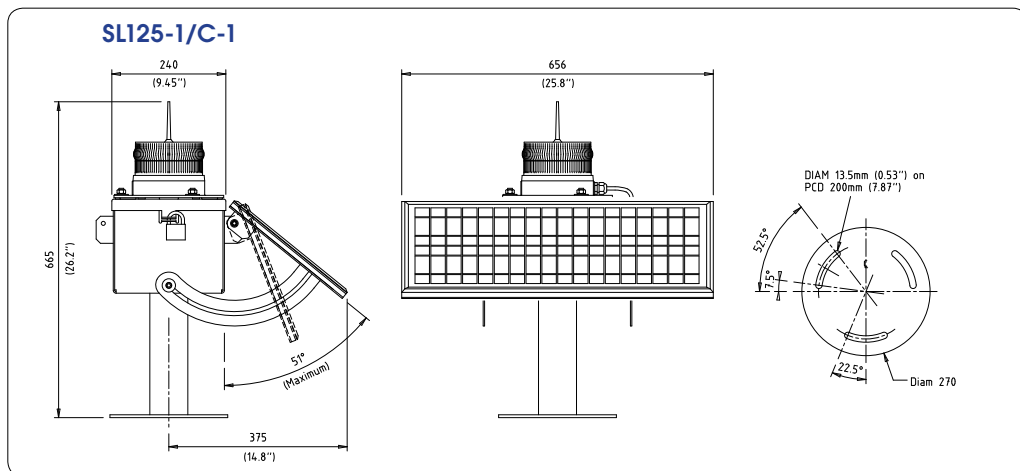
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SL125/C

5-7nm Complete Marine Lantern Assembly



SPECIFICATIONS •

Light Characteristics

Light Source	SL125 Series LED Lantern
Available Colours	Red, Green, White, Yellow, Blue
Peak Intensity (cd)	Refer to table on previous page
Visible Range (nm)	5-7
Horizontal Output (degrees)	360
Vertical Divergence (degrees)	9
Reflector Type	Omnidirectional 360° LED Reflector (US Pat. No. 6,667,582. AU Pat. No. 778,918)
Available Flash Characteristics	Up to 256 IALA recommended (user adjustable)
Intensity Adjustments	Adjustable in 25% increments
LED Life Expectancy (hours)	>100,000

Electrical Characteristics

Current Draw (mA)	Refer to table on previous page
Circuit Protection	Reverse polarity
Nominal Voltage (v)	12
Autonomy (days)	>20 (14 hour darkness, 12.5% duty cycle)
Temperature Range	-40 to 80°C

Solar Characteristics

Solar Module Type	Multicrystalline
Output (watts)	20 (SL125-1 and SL125-2 configurations) 40 (SL125-3 and SL125-4 configurations)
Solar Module Efficiency (%)	14
Charging Regulation	Microprocessor controlled

Power Supply

Battery Type	SLA (Sealed Lead Acid)
Battery Capacity (Ah)	26
Nominal Voltage (v)	12
Battery Service Life	Average 5 years

Physical Characteristics

Body Material	7-stage powder-coated aluminium
Lens Material	LEXAN® Polycarbonate - UV-stabilised
Lens Diameter (mm/inches)	150 / 5 7/8
Lens Design	External optics with interior flute design
Mounting	200mm OD base pattern
Height (mm/inches)	From 665 / 26 1/4
Width (mm/inches)	656 / 25 3/4
Mass (kg/lbs)	From 18 / 39 5/8
Product Life Expectancy	Up to 12 years

Certifications

CE	EN61000-6-3:2001. EN61000-6-1:2001. EN55022. EN61000-4-2:1995. EN61000-4-3:2002. USC specification HSCG23-05-R-E43013, including Change 1.
Quality Assurance	ISO9001:2000
Waterproof	IP68 light-head. IP66 battery compartment

Intellectual Property

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

Warranty *

Options Available

Full 3 years
• Single or dual solar module(s)
• Hard-wire or GPS synchronisation
• Remote monitoring (via GSM cell-phone- SL125/C-GSM) or control (via radio- SL125/C-RC) capabilities
• Note - remote monitoring/control will reduce visible range of lantern due to increased power consumption

CE

• Specifications subject to change or variation without notice

* Subject to standard terms and conditions



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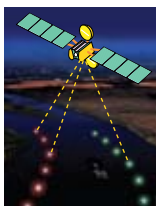
SL125

5-7nm LED Marine Lantern Series

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



Now available with optional Comm-Synch or Radio 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 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
- IP68 waterproof
- Vertical light emissions to maintain visibility when passing adjacent to light

The SL125 LED marine lantern is maintenance-free and used by many of the world's busiest ports, and largest militaries.

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 incorporates an environment-friendly spike - deterring unwelcome bird life.

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.



SL125, Brazil Installation



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SL125

5-7nm LED Marine Lantern Series



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.

Optional GPS Synchronisation (SL125-GPS)

The SL125 lantern series are also available with optional GPS synchronisation enabling users to clearly mark channels, ports, rivers and entrances, marinas, aquaculture installations and exclusion zones with independent lanterns which flash in synchronisation.

When lanterns flash in synchronisation, they can be clearly distinguished from other nav aids and confusing background lighting.

Optional RF Communication Synchronisation (SL125-CS)

The SL125 is now available with optional short-range RF communication synchronisation.

Two (2) or more lights can be synchronised to flash in unison via an internal RF module - ideal for rivers, marina entrances, channel marking and aquaculture.

Optional GSM Remote Monitoring (SL125-GSM) and AIS Integration (SL125-AIS)

The SL125 lantern series may also be fitted with GSM or AIS remote monitoring systems - enabling users to access real-time diagnostic data remotely. AIS integration also enables 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.

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.



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.

SL125-4 pylon installation, Israel

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

SL125 installed on buoy, Newcastle, Australia



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SL125

5-7nm LED Marine Lantern Series

SPECIFICATIONS

Model	Description	Peak Intensity Flashing (cd)	Colour	LEDs	Current Draw (Amps)	Voltage
SL125-1.R	1 Tier LED Marine Lantern	114	RED	36	0.42	12v
SL125-1.G	1 Tier LED Marine Lantern	93	GREEN	36	0.32	12v
SL125-1.W	1 Tier LED Marine Lantern	168	WHITE	36	0.32	12v
SL125-1.Y	1 Tier LED Marine Lantern	88	YELLOW	36	0.42	12v
SL125-2.R	2 Tier LED Marine Lantern	242	RED	72	0.84	12v
SL125-2.G	2 Tier LED Marine Lantern	182	GREEN	72	0.64	12v
SL125-2.W	2 Tier LED Marine Lantern	342	WHITE	72	0.64	12v
SL125-2.Y	2 Tier LED Marine Lantern	180	YELLOW	72	0.84	12v
SL125-3.R	3 Tier LED Marine Lantern	356	RED	108	1.28	12v
SL125-3.G	3 Tier LED Marine Lantern	275	GREEN	108	0.96	12v
SL125-3.W	3 Tier LED Marine Lantern	492	WHITE	108	0.96	12v
SL125-3.Y	3 Tier LED Marine Lantern	272	YELLOW	108	1.28	12v
SL125-4.R	4 Tier LED Marine Lantern	486	RED	144	1.70	12v
SL125-4.G	4 Tier LED Marine Lantern	360	GREEN	144	1.28	12v
SL125-4.W	4 Tier LED Marine Lantern	700	WHITE	144	1.28	12v
SL125-4.Y	4 Tier LED Marine Lantern	394	YELLOW	144	1.70	12v

* 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
25	3.6	4.3	6.7
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
85	5.2	6.5	9.6
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

AT = Atmospheric Transmissivity

When a light beam passes through the atmosphere the atmospheric transmissivity factor indicates how much light is absorbed by the atmosphere.

For example, when AT = 0.85 this means that 85% of the original light intensity is visible after 1nm. Consequently 15% of light is lost to atmospheric absorption.



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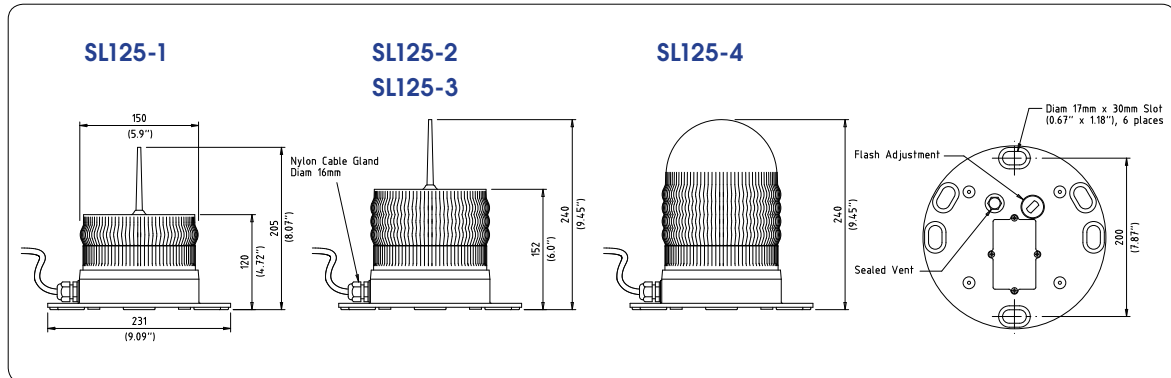
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SL125

5-7nm LED Marine Lantern Series



SPECIFICATIONS

Light Characteristics

Light Source

Available Colours
Peak Intensity (cd)
Visible Range (nm)
Horizontal Output (degrees)
Vertical Divergence (degrees)
Reflector Type
Available Flash Characteristics
Intensity Adjustments
LED Life Expectancy (hours)

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 table on previous page
5-7
360
9 (optional 3 degree divergence for extended visible range of 10nm)
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

Electrical Characteristics

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

Refer to table on previous page
Integrated
12
-40 to 80°C

Physical Characteristics

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

LEXAN® Polycarbonate - UV-stabilised
LEXAN® Polycarbonate - UV-stabilised
150 / 5⁷/₈
External optics with interior flute design
200mm OD base pattern
SL125-1: 205 / 8¹/₈
SL125-2: 240 / 9¹/₂
SL125-3: 240 / 9¹/₂
SL125-4: 240 / 9¹/₂
231 / 9¹/₈
From 1.1 / 2³/₈
Up to 12 years

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

Certifications

CE

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

Quality Assurance
Waterproof

Intellectual Property

Patents
Trademarks

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

Warranty *

Full 3 years

Options Available

- Hard-wire or GPS synchronisation
- Remote monitoring (via AIS, or GSM cell-phone- SL125-GSM) or control (via radio- SL125-RC) capabilities
- Additional cable
- *Note* - remote monitoring/control will reduce visible range of lantern due to increased power consumption

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* Subject to standard terms and conditions

CE



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