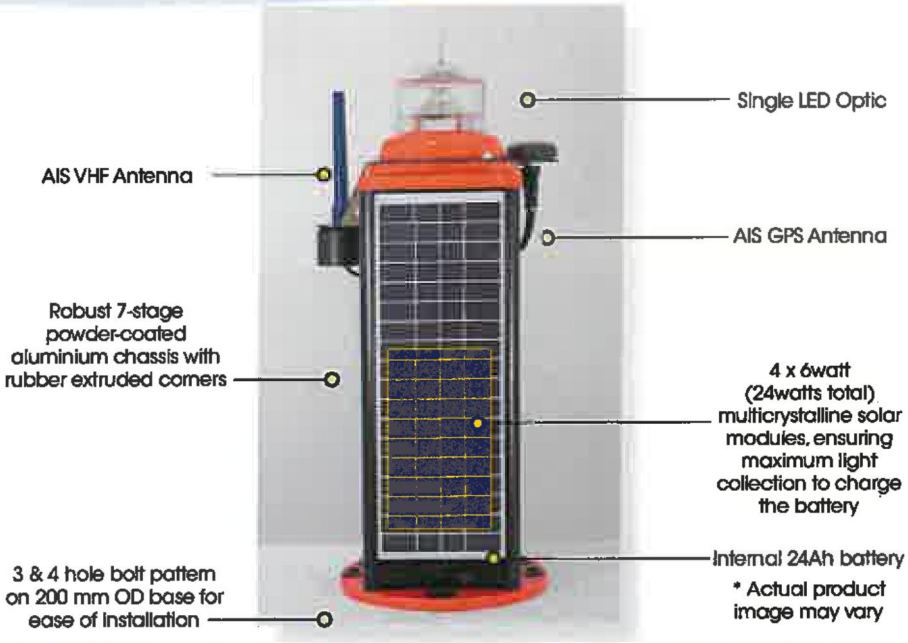
SL-C415 CUSTOM

3-5nm+ Solar Marine Lantern

ORIGINAL

Next Generation

Single LED Optic ...
Brighter, more efficient



The Sealite Advantage

- **Remote programmable**
- **Fitted with on-board GPS as standard for synchronised flashing**
- **Single, high powered LED for superior light output**
- **Simplicity of design ensures ease of maintenance in the field**
- **Heavy-duty aluminium construction**
- **All components user-replaceable in the unlikely event of damage**
- **200mm bolt pattern for immediate installation on existing structures**
- **User-replaceable battery**
- **256 IALA flash patterns**
- **IP68 waterproof**
- **3 year standard warranty**

The SL-C415 is a robust, completely self-contained 3-5nm+ Solar LED Lantern specifically designed to withstand the tough marine environment, providing years of reliable, low-maintenance service. The 3 & 4 hole bolt pattern base fits directly onto existing 200mm bolt pattern industry standard mounts for ease of installation.

The SL-C415 uses the Sealite single-LED optic, and provides the highest power to light output ratio of any light in its class, making it brighter and more efficient. The light will provide up to 176cd (white) or up to 6nm visible range, in a small self-contained package.

The SL-C415 has a large power supply consisting of four 6watt panels (24 watt total) making this model perfect for use in lower sunlight areas or where more demanding duty cycles are required. The four (4) premium-grade solar modules are integrated into the assembly, and mounted to collect sunlight at all angles.

The base and top of the SL-C415 are made from cast aluminium, subject to 7-stage powder-coating in high visibility IALA colours for daytime recognition, with UV-stabilised rubber corners and gaskets providing a superior IP68 waterproof rating – the best in the industry. The SL-C415 has a handle incorporated into the chassis for safe lifting.

The tough, polycarbonate lens is specifically designed for use with LEDs and incorporates an environment-friendly spike – deterring unwelcome bird life. The lens design also ensures that vessel operators clearly see the light from above when passing the AtoN.

The SL-C415 comes with standard rotary switches for convenient in-field changes of flash characters and intensity selection. In addition, the unit may be provided with an IR programmer for added functionality. Programmable features include; flash code adjustment, battery diagnostics and lux adjustment.

GPS Synchronisation as standard

Sealite has utilised the latest advancements in GPS technology to develop an internal synchronisation system that is incorporated into the SL-C415 lantern. Using overhead satellites, lights set to the same flash pattern will flash in unison.

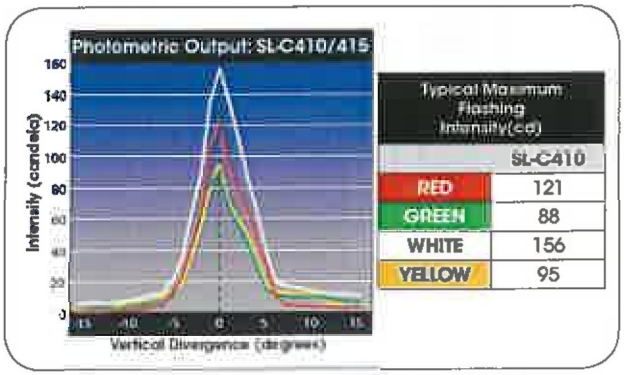
When lanterns flash in synchronisation they can be clearly distinguished from other navaids and confusing background lighting – ideal for rivers, marina entrances, channel marking and aquaculture.

Optional GSM Monitoring & Control System

The SL-C415 may also be fitted with GSM Cell-Phone Monitoring and Control – enabling users to access real-time diagnostics data and change lantern settings 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 AIS Remote Monitoring

AIS integration enables remote monitoring of the SL-125 lantern as well as crucial message 21 information to be broadcast to mariners within the region. AIS is available in type 1 and type 3



Typical Maximum Flashing Intensity(cd)	SL-C410
RED	121
GREEN	88
WHITE	156
YELLOW	95

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SL-C415

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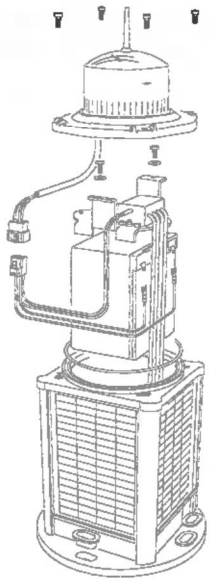
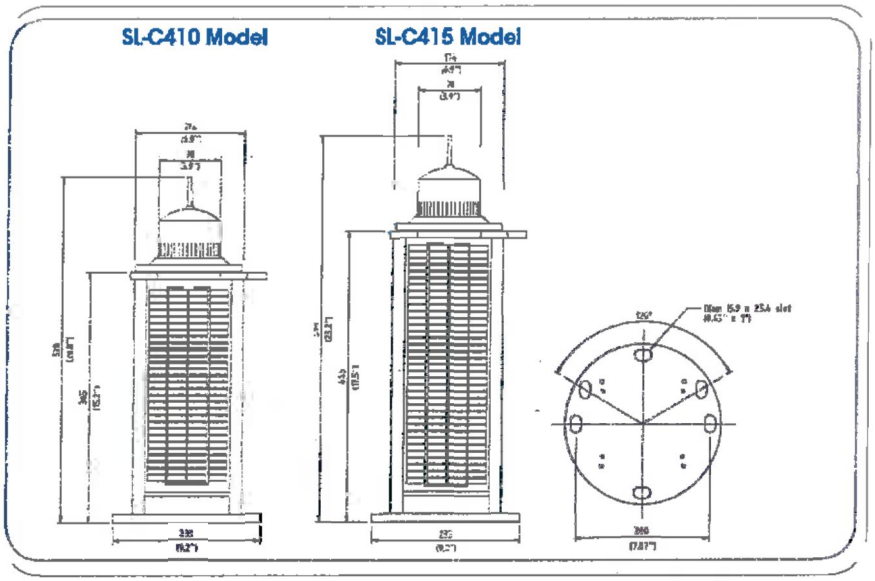


Convenient
user-replaceable battery



SPECIFICATIONS *	SL-C415
Light Characteristics	
Light Source	1 LED
Available Colours	Red, Green, White, Yellow, Blue
Intensity (cd)†	Red - 121 Green - 88 White - 156 Yellow - 95
Visible Range (nm)	3–5+
Horizontal Output (degrees)	360
Vertical Divergence (degrees)	7
Available Flash Characteristics	Up to 256 IALA recommended (user adjustable)
Intensity Adjustments	Multiple Intensity settings
LED Life Expectancy (hours)	>100,000
Electrical Characteristics	
Circuit Protection	Integrated
Nominal Voltage (v)	12
Autonomy (nights)	>110 (14 hour darkness, 12.5% duty cycle)
Temperature Range	-40 to 80°C
Solar Characteristics	
Solar Module Type	Multicrystalline
Output (watts)	24 (4 x 6watt)
Charging Regulation	Microprocessor controlled
Power Supply	
Battery Type	SLA (Sealed Lead Acid)
Battery Capacity (Ah)	24
Nominal Voltage (v)	12
Physical Characteristics	
Body Material	7-stage powder-coated aluminium chassis with UV-stabilised rubber corners & gaskets
Lens Material	LEXAN® Polycarbonate – UV-stabilised
Lens Diameter (mm/inches)	98 / 3⅞
Lens Design	Sinlge LED Optic
Mounting	3 & 4 hole 200mm bolt pattern
Height (mm/inches)	590 / 23 ¼
Width (mm/Inches)	233 / 9⅛
Mass (kg/lbs)	14.6 / 32 ¼
Product Life Expectancy	Up to 12 years
Certifications	
CE	EN61000-6-3:1997, EN61000-6-1:1997
IALA	Signal colours compliant to IALA E-200-1
Quality Assurance	ISO9001:2008
Waterproof	IP68
Intellectual Property	
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd
Warranty *	3 years
Options Available	• 50mm pole mount adapter plate • Remote Controller • GSM Monitoring & Control System# • External ON/OFF Switch • External Battery Charging Port • GPS Synchronisation: enable/disable • AIS Type 1 / Type 3 , AIS Remote Monitoring

* Specifications subject to change or variation without notice
* Subject to standard terms and conditions
† Intensity setting subject to solar availability
# Contact Sealite for solar sizing information to ensure suitability in your region

CE

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ORIGINAL

SL-C415

3-5nm+ Solar Marine Lantern
Optional Built-in AIS module Specifications

Physical Specification

Dimensions	110 x 55 x 14mm (D x W x H)

Electrical Specification

Power supply	12 to 24VDC
Power consumption Type 1 AtoN (FATDMA)	Less than 0.09Ah/day (with 3 minute position reporting rate)
Power consumption Type 3 AtoN (RATDMA)	Less than 0.8 Ah/day (with 3 minute position reporting rate)

Standard Interface

USB (for configuration)	✔
Two IEC61162-1 (NMEA0183) ports at 38400 baud	✔
5 configurable logic level IO lines	✔
SPI port	✔

VHF Transceiver

Transmitter	x 1
Receiver	x 2
Frequency	156.025 to 162.025 MHz in 25KHz steps
Output power	1W, 2W, 5W or 12.5W
Channel bandwidth / step	25KHz 25KHz GMSK (AIS, transmit and receive)
Bit rate	9600 b/s (GMSK)
Receiver sensitivity	<-110dBm at 20% PER
Adjacent channel selectivity	70dB
Spurious response rejection	70dB

AtoN Functions

Type 1 and Type 3 options available	✔
Supports configuration by VDL command	✔
Chaining option available	✔
Customisable sensor interfacing (via separate PCB)	✔
Virtual AtoN support	✔

GPS Receiver & Antenna

50 channels	✔
IEC 61108-1 compliant	✔
Glonass Option	✔

Standards Compliance

AIS Standards	IEC62320-2 Edition 1 IEC standard, AIS Aids to Navigation ITU-R M.1371-4 Universal AIS Technical Characteristics
Environmental standard	IEC60945 Edition 4
Serial data interface standards	IEC61162-1 IEC61162-2 Edition 2
GPS performance standard	IEC61108-1 (relevant sections)

Environmental

Operating temperature	-25°C to +55°C

Packaging

Each module is individually packaged in an ESD bag and boxed in batches of 100 units.

Box Size	29 x 41 x 20 inches (D x W x H)
Box Weight	6.4kg

All packaging can be fully customised to your specifications. The box contains the following:

Dimensions