

# 1-5NM Stand Alone Marine Lanterns

SL-07 Series – SL-07LB & SL-07



The SL-07 series are LED marine lanterns designed to offer superior visibility and operate in conjunction with existing or purpose-built power supplies.

With a variable range of 1 to 5NM, a maintenance-free light source and 310 user adjustable flash codes, the SL-07 series of LED lanterns is an ideal choice for operators seeking to fit a short-range marine lantern to existing or independently designed power sources.

The lanterns feature the Sealite Single LED Optic which boasts exceptional power to light output efficiency. The tough outer polycarbonate lens 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.

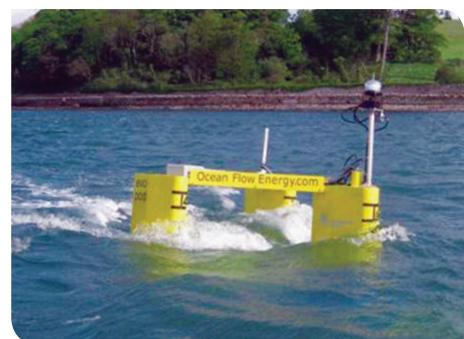
The SL-07 series comes with standard rotary switches for convenient in-field changes of flash characters and intensity selection. In addition, the unit may be provided with an IR programmer for added functionality. Programmable features include; flash code adjustment, battery diagnostics, lux adjustment and hibernation mode.

For ease of installation, the SL-07 series lanterns are available with either 4 x 6mm mounting holes (SL-07) or 3 & 4 hole 200mm bolt pattern base (SL-07LB).

## 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-07 series lanterns. 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.



SL-07 model available with optional 4 x 6mm mounting holes

## The Sealite Advantage

- IR programmable
- Fitted with on-board GPS as standard for synchronised flashing
- 1-5 nautical mile range
- 310 user-adjustable flash characteristics
- Multiple intensity settings
- Operates in conjunction with existing or purpose-built power supplies
- IP68 waterproof
- Optional solar powered configurations available



Shown with optional solar power supplies

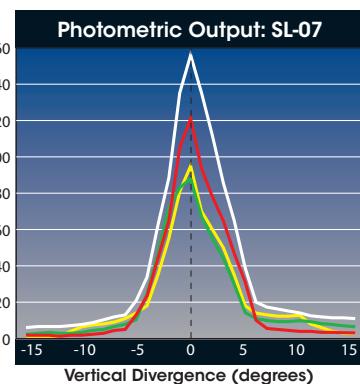
## Technical Specifications.\*

SL-07LB		SL-07
<b>Light Characteristics</b>		
Light Source	LED	LED
Available Colours	Red, Green, White, Yellow, Blue	Red, Green, White, Yellow, Blue
Typical Maximum Flashing Intensity (cd) <sup>†</sup>	Red - 121 Green - 88 White - 156 Yellow - 95	Red - 121 Green - 88 White - 156 Yellow - 95
Visible Range (NM)	AT @ 0.74: 1-5 AT @ 0.85: 1.1-6.3	AT @ 0.74: 1-5 AT @ 0.85: 1.1-6.3
Horizontal Output (degrees)	360	360
Vertical Divergence (degrees)	7	7
Available Flash Characteristics	Up to 310 IALA recommended (user adjustable)	Up to 310 IALA recommended (user adjustable)
Intensity Adjustments	Adjustable in 25% increments	Adjustable in 25% increments
LED Life Expectancy (hours)	>100,000	>100,000
<b>Electrical Characteristics</b>		
Power Consumption	Variable up to 2 watts	Variable up to 2 watts
Circuit Protection	Integrated	Integrated
Nominal Voltage (V)	12	12
Temperature Range	-40 to 80°C	-40 to 80°C
<b>Physical Characteristics</b>		
Body Material	LEXAN® Polycarbonate – UV-stabilised	LEXAN® Polycarbonate – UV-stabilised
Lens Material	LEXAN® Polycarbonate – UV-stabilised	LEXAN® Polycarbonate – UV-stabilised
Lens Diameter (mm/inches)	98 / 3 <sup>7/8</sup>	98 / 3 <sup>7/8</sup>
Lens Design	Single LED Optic	Single LED Optic
Mounting	3 & 4 hole 200mm bolt pattern	4 x 6mm mounting holes
Height (mm/inches)	181 / 7 <sup>1/8</sup>	141 / 5 <sup>1/2</sup>
Width (mm/inches)	231 / 9 <sup>1/8</sup>	136 / 5 <sup>3/8</sup>
Mass (kg/lbs)	1.1 / 2 <sup>3/8</sup>	0.4 / 7/8
Product Life Expectancy	12 years plus <sup>^</sup>	12 years plus <sup>^</sup>
<b>Certifications</b>		
CE	EN61000-6-3:1997. EN61000-6-1:1997	EN61000-6-3:1997. EN61000-6-1:1997
IALA	Signal colours compliant to IALA E-200-1	Signal colours compliant to IALA E-200-1
Quality Assurance	ISO 9001:2015	ISO 9001:2015
Waterproof	IP68	IP68
<b>Intellectual Property</b>		
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd	
<b>Warranty*</b>		
3-year warranty		
<b>Options Available</b>		
<ul style="list-style-type: none"> <li>Power supplies/systems</li> <li>50mm pole mount adapter plate</li> <li>Additional cable</li> <li>IR Programmer</li> <li>Variety of solar/battery configurations</li> </ul>		

\* Specifications subject to change or variation without notice  
\* Refer to the Sealite website under the warranty section

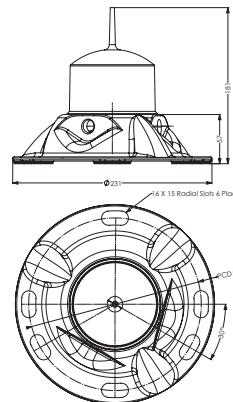


## Photometric Output

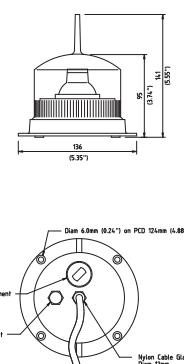


Typical Maximum Intensity (cd)	
	SL-07
RED	121
GREEN	88
WHITE	156
YELLOW	95

SL-07LB Model



SL-07 Model



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# 5-9NM+ Stand Alone Marine Lanterns

## SL-125 Series

Optional



GPS Sync



GSM Monitoring



RS232/422/485 Port



AIS



Hard-wire Sync

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

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)



The SL-125 LED marine lantern is maintenance-free and used by many of the world's busiest ports. The lantern is available with up to 4 tiers of 36 LEDs (144 LEDs in total), for complete flexibility to suit varying applications.

### Lantern Operation

The SL-125 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 SL-125 to be readily fitted to any 12 volt power supply.

Once installed, the SL-125 requires no operator intervention. The flash characters are easily adjusted onsite by the user, and the lantern will automatically begin operation at dusk – once the ambient light threshold drops sufficiently.

### Up to 4 tiers of 36 LEDs are available to increase the light intensity of the SL-125 unit.

The SL-125-2, SL-125-3 and SL-125-4 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

For flash synchronisation of lanterns a GPS module may be fitted.

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

### Optional GSM Monitoring & Control

The SL-C125 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.

### 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.



### The Sealite Advantage

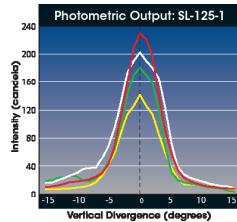
- Available with up to 4 tiers of ultra-high intensity LEDs for increased light intensity
- 256 user-adjustable flash characteristics
- Multiple intensity settings
- Operates in conjunction with existing or purpose-built power supplies
- Installs in minutes & operates maintenance-free
- Vertical light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

## Technical Specifications.\*

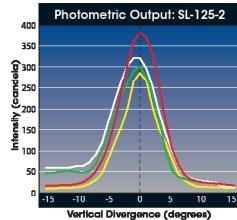
SL-125 Series	
<b>Light Characteristics</b>	
Light Source	SL-125-1: 36 ultra-high intensity LEDs SL-125-2: 72 ultra-high intensity LEDs SL-125-3: 108 ultra-high intensity LEDs SL-125-4: 144 ultra-high intensity LEDs
Available Colours	Red, Green, White, Yellow, Blue
Typical Maximum Intensity (cd) <sup>†</sup>	Refer to Typical Maximum Intensity Tables for SL-125 lanterns
Visible Range (nm)	AT @ 0.74: 5–9+ AT @ 0.85: 6.3–12.5+
Horizontal Output (degrees)	360°
Vertical Divergence (degrees)	9 (SL-125-1, SL-125-2 & SL-125-3) 7 (SL-125-4)
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
<b>Electrical Characteristics</b>	
Current Draw (mA)	Refer to Sealite Power Calculator
Circuit Protection	Integrated
Nominal Voltage (V)	12
Temperature Range	-40 to 80°C
<b>Physical Characteristics</b>	
Body Material	LEXAN® Polycarbonate – UV-stabilised
Lens Material	LEXAN® Polycarbonate – UV-stabilised
Lens Diameter (mm/inches)	150 / 5 <sup>7/8</sup>
Lens Design	External optics with interior flute design
Mounting	3 & 4 hole 200mm bolt pattern
Height (mm/inches)	SL-125-1: 205 / 8 <sup>1/8</sup> SL-125-2: 240 / 9 <sup>1/2</sup> SL-125-3: 240 / 9 <sup>1/2</sup> SL-125-4: 240 / 9 <sup>1/2</sup>
Width (mm/inches)	665 / 26
Mass (kg/lbs)	From 1.1 / 2 <sup>3/8</sup>
Product Life Expectancy	12 years plus
<b>Certifications</b>	
CE	EN61000-6-3:2007, A1:2011, AC:2012
IALA	Signal colours compliant to IALA E-200-1
Quality Assurance	ISO 9001:2015
Waterproof	IP68
<b>Intellectual Property</b>	
Patents	US Pat. No. 6,667,582. AU Pat. No. 778,918
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd
<b>Warranty*</b>	
3-year warranty	
<b>Options Available</b>	
<ul style="list-style-type: none"> <li>GPS Synchronisation</li> <li>Hard-wire Synchronisation</li> <li>AIS Remote Monitoring</li> <li>GSM Monitoring &amp; Control System</li> <li>Additional cable</li> <li>10 degree lens (SL-125-1)</li> <li>IR Remote</li> </ul>	

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

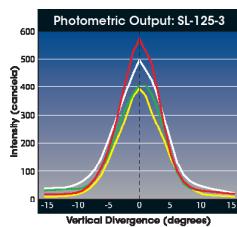
## Photometric Output



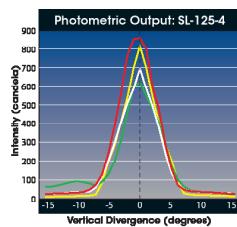
Typical Maximum Intensity (cd)	SL-125-1
RED	230
GREEN	180
WHITE	202
YELLOW	141



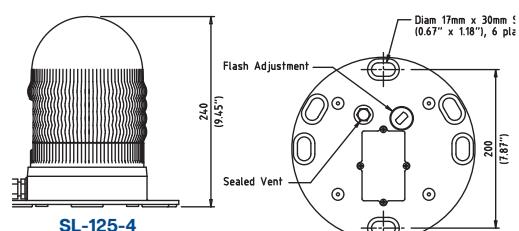
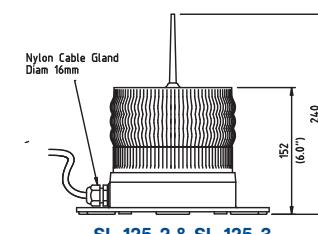
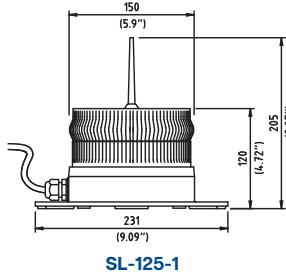
Typical Maximum Intensity (cd)	SL-125-2
RED	383
GREEN	301
WHITE	321
YELLOW	285



Typical Maximum Intensity (cd)	SL-125-3
RED	573
GREEN	405
WHITE	496
YELLOW	392



Typical Maximum Intensity (cd)	SL-125-4
RED	860
GREEN	623
WHITE	696
YELLOW	815



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# 6–13NM Marine Lanterns

SL-155 Series – SL-155-2.5D, SL-155-5D & SL-155-10D

Standard	Optional
IR Programmer	GPS Sync
PC Configuration Tool	GSM Monitoring
	RS232/422/485 Port
	AIS
	Hard-wire Sync

The SL-155 Series are 6–13NM medium range marine lanterns, available in 2.5, 5, or 10 degree vertical distributions.

A Wreck Light lantern to meet IALA recommendation 0-133 for temporary marking of danger or hazards is also available.



## Small Form Factor

The single tier SL-155 with multiple intensity adjustments, high levels of efficiency, and minimal wind loading, offers significant advantages over other lens stack assemblies.

## Advanced PC or IR Programming

Sealite's convenient PC Configuration Tool or IR programmer allows a host of features to be user set including;

- Multiple intensity settings
- 310 flash settings including custom character
- Automatic effective intensity adjustment
- Adjustable on/off lux levels
- Low battery threshold
- GPS synchronisation offset
- Alarm conditions



LED lens



IR Remote Programmer



5 degree/10 degree model with integrated AIS

## Optional GPS Synchronisation

For flash synchronisation of lanterns a GPS module may be fitted.

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

## Optional GSM Monitoring & Control

The SL-155 lanterns may also be fitted with a GSM Cell-Phone Monitoring and Control System – 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 Type 1 or Type 3 AIS - Integrated or External

The SL-155 lanterns (5 & 10 degree models) are available with a class-leading integrated, low-powered Type 1 or Type 3 AIS.

When fitted, the AIS is encapsulated within the body of the SL-155 to maintain the weatherproof integrity and come standard with GPS.

All 3 models can also be ordered with an external Type 1 or Type 3 AIS transponder if required, along with various solar power options.

## Reliable

- Over 10,000cd luminous intensity white
- Compact single tier lantern up to 13NM visible range
- PC or IR Programmer for setup, diagnostic & testing
- Internal or external photocell options
- Advanced remote monitoring features
- Wide operating voltage range 10 – 30VDC
- Internal data-logging for long term retention of key operational parameters & alarm conditions
- Hardwire synchronisation supporting RS485, RS422
- General purpose input & output

## Technical Specifications\*

	5° & 10° Models (SL-155-5D & SL-155-10D)	2.5° Model (SL-155-2.5D)
<b>Light Characteristics</b>		
<b>Light Source</b>	High efficiency LEDs	High efficiency LEDs
<b>Available Colours</b>	Red, Green, White, Yellow	Red, Green, White, Yellow
<b>Maximum Luminous Intensity (cd)†</b>	<p><b>5 degree model:</b> Red - 2,765 Green - 2,796 White - 4,611 Yellow - 2,778</p> <p><b>10 degree model:</b> Red - 2,368 Green - 2,213 White - 3,910 Yellow - 2,041</p>	<p><b>2.5 degree model:</b> Red - 6,357 Green - 6,052 White - 10,505 Yellow - 5,414</p>
<b>Visible Range (NM)</b>	AT @ 0.74: 6–13 AT @ 0.85: 7.8–19.2	AT @ 0.74: 6–13 AT @ 0.85: 7.8–19.2
<b>Horizontal Output (degrees)</b>	0 - 360	0 - 360
<b>Vertical Divergence (degrees)</b>	5 or 10	2.5
<b>Available Flash Characteristics</b>	Up to 310 including 256 IALA recommended, & 1 custom	Up to 310 including 256 IALA recommended, & 1 custom
<b>Intensity Adjustments</b>	User adjustable	User adjustable
<b>LED Life Expectancy (hours)</b>	>100,000	>100,000
<b>Electrical Characteristics</b>		
<b>Average Power (W)</b>	Variable up to 18	Variable up to 22
<b>Circuit Protection</b>	Polarity protected	Polarity protected
<b>Nominal Voltage (VDC)</b>	12–24	12–24
<b>Temperature Range</b>	-40 to 80°C	-40 to 80°C
<b>Physical Characteristics</b>		
<b>Body Material</b>	Marine grade two-part epoxy coating	Marine grade two-part epoxy coating
<b>Lens Material</b>	UV-stabilised acrylic	UV-stabilised acrylic
<b>Lens Diameter (mm/inches)</b>	171 / 6½	224 / 8½
<b>Lens Design</b>	Multiple LED optic	Multiple LED optic
<b>Mounting</b>	3 & 4 hole 200mm bolt pattern	3 & 4 hole 200mm bolt pattern
<b>Height (mm/inches)</b>	217 / 8½	231 / 9½
<b>Width (mm/inches)</b>	230 / 9	230 / 9
<b>Mass (kg/lbs)</b>	5 / 11	5.5 / 12½
<b>Product Life Expectancy</b>	Up to 12 years	Up to 12 years
<b>Environmental Standards</b>		
<b>Shock</b>	MIL-STD-202G Test Condition H, Method 213B 30G vertical and 35G horizontal shock	MIL-STD-202G Test Condition H, Method 213B 30G vertical and 35G horizontal shock
<b>Vibration</b>	MIL-STD-202G, Test Condition B, Method 204D 5G in all axes	MIL-STD-202G, Test Condition B, Method 204D 5G in all axes
<b>Immersion</b>	MIL-STD-202G, Method 104A	MIL-STD-202G, Method 104A
<b>Ice Loading</b>	Rated to withstand 22kg/m <sup>2</sup>	Rated to withstand 22kg/m <sup>2</sup>
<b>Humidity</b>	0 – 100%, condensing	0 – 100%, condensing
<b>Waterproof</b>	IP68	IP68
<b>Certifications</b>		
<b>CE &amp; Electrical</b>	<p>FCC Part 15 Rules &amp; ICES-003.</p> <p>EN61000-6-1: 2007 (IEC61000-6-1:2005) Part 6-1 Immunity.</p> <p>EN61000-6-3: 2007 (IEC61000-6-3: 2006) Electromagnetic compatibility (EMC) - Part 6-3 Emission.</p> <p>IEC61000-4-2: 2008 Ed 2 Part 4-2 Electrostatic discharge immunity test Level 4.</p> <p>IEC61000-4-3: 2010 Ed 3.2 Part 4-3. Radiated, radio-frequency, electromagnetic field immunity.</p> <p>IEC61000-4-6: 2008 Ed3. , Electromagnetic compatibility (EMC) - Part 4-6 Immunity.</p>	<p>FCC Part 15 Rules &amp; ICES-003.</p> <p>EN61000-6-1: 2007 (IEC61000-6-1:2005) Part 6-1 Immunity.</p> <p>EN61000-6-3: 2007 (IEC61000-6-3: 2006) Electromagnetic compatibility (EMC) - Part 6-3 Emission.</p> <p>IEC61000-4-2: 2008 Ed 2 Part 4-2 Electrostatic discharge immunity test Level 4.</p> <p>IEC61000-4-3: 2010 Ed 3.2 Part 4-3. Radiated, radio-frequency, electromagnetic field immunity.</p> <p>IEC61000-4-6: 2008 Ed3. , Electromagnetic compatibility (EMC) - Part 4-6 Immunity.</p>
<b>IALA</b>	Signal colours compliant to IALA E-200-1	Signal colours compliant to IALA E-200-1
<b>Quality Assurance</b>	Emergency Wreck Marking Recommendation 0-133	Emergency Wreck Marking Recommendation 0-133
<b>ISO9001:2015</b>	ISO9001:2015	ISO9001:2015
<b>Intellectual Property</b>		
<b>Trademarks</b>	SEALITE® is a registered trademark of Sealite Pty Ltd	SEALITE® is a registered trademark of Sealite Pty Ltd
<b>Warranty *</b>	3 years	3 years
<b>Options Available</b>	<ul style="list-style-type: none"> <li>GPS Synchronisation</li> <li>AIS Type 1 or Type 3</li> <li>GSM Monitoring &amp; Control System</li> <li>RS232/422/485 Communication Port</li> <li>General purpose input &amp; output</li> <li>Variety of solar/battery configurations</li> <li>Serial programming cable</li> <li>Hard-wire Synchronisation</li> </ul>	<ul style="list-style-type: none"> <li>GPS Synchronisation</li> <li>AIS Type 1 or Type 3</li> <li>GSM Monitoring &amp; Control System</li> <li>RS232/422/485 Communication Port</li> <li>General purpose input &amp; output</li> <li>Variety of solar/battery configurations</li> <li>Serial programming cable</li> <li>Hard-wire Synchronisation</li> </ul>

+ Intensity setting may vary in accordance with manufacturing tolerances (+/-10%)

† Standard terms and conditions

\* Subject to standard terms and conditions

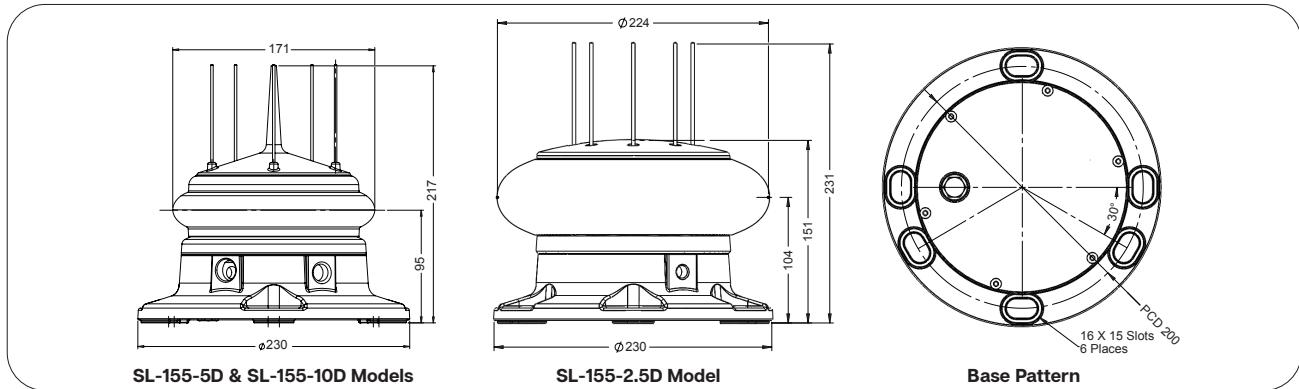
\* Specifications subject to change or variation without notice

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CE

CE. Specifications subject to change or variation without notice

## Technical Illustration



## Optical Performance

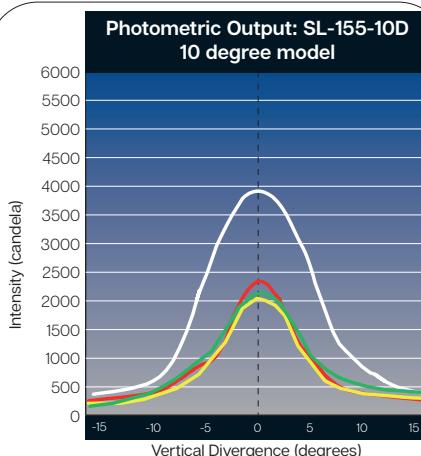
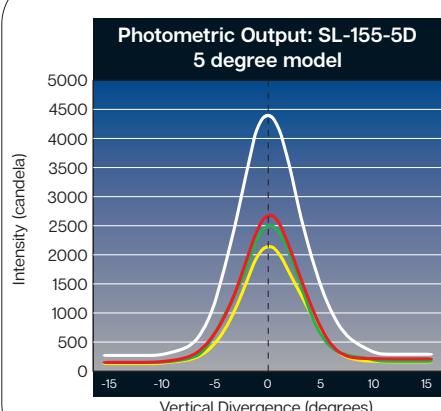
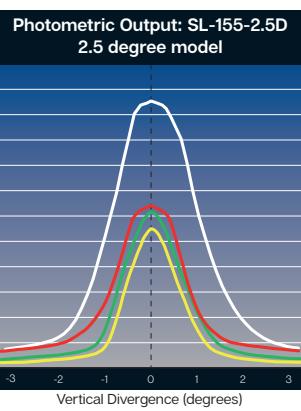
### Maximum luminous intensity (cd)

	RED	GREEN	WHITE	YELLOW
2.5deg	6,357	6,052	10,505	5,414
5deg	2,765	2,796	4,611	2,778
10deg	2,368	2,213	3,910	2,041

## Emergency Wreck Mark - Optical Performance

### Effective intensity (cd)

	YELLOW	BLUE
10deg	37	44
Average night-time power consumption		
10deg	0.170AH	



• Specifications subject to change or variation without notice  
\* Refer to the Sealite website under the warranty section  
+ Intensity setting subject to solar availability  
\* Subject to standard terms and conditions

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# 13–21NM Long Range Lantern

SL-300 Series – SL-300-1D5-1 & SL-300-1D5-2

Standard	IR Programmer	PC Configuration Tool	Optional
			 GPS Sync  GSM Monitoring  RS232/422/485 Port  AIS

The SL-300-1D5 series are 13 to 21NM long range marine lanterns with 1.5 degree vertical distribution, suitable for a range of day and night applications.



## High Intensity, Small Form Factor

The SL-300-1D5 series offers multiple intensity adjustments to over 90,000cd luminous intensity in a single tier (over 180,000cd in a 2-tier configuration). The small form factor provides minimal wind loading and convenient handling – delivering significant advantages over traditional larger lens stack assemblies.

## High Efficiency

The long range lanterns produce a class-leading intensity to power ratio, making them highly efficient and suitable for solar power solutions.

## Advanced PC or IR Programming

Sealite's convenient PC Configuration Tool or IR programmer allows a host of features to be user set including;

- Multiple intensity settings
- 310 flash settings including custom character
- Automatic effective intensity adjustment
- Adjustable on/off lux levels
- Low battery threshold
- GPS synchronisation offset
- Alarm conditions

## Optional GPS Synchronisation

For flash synchronisation of lanterns a GPS module may be fitted.

## Optional GSM Monitoring & Control

The SL-300-1D5 series may be fitted with a GSM module for monitoring and control – enabling users to access real-time diagnostic data and change lantern settings via cell-phone.



Precision upper heat sink



Shown with optional GPS antenna



## The Sealite Advantage

- Over 90,000cd luminous intensity white - single tier
- Over 180,000cd luminous intensity white - two tier
- Compact lantern up to 21NM visible range
- PC or IR Programmer for setup, diagnostic & testing
- Internal or external photocell options
- User configurable day/night lux levels
- Advanced remote monitoring features
- Wide operating voltage range 21–58VDC
- Internal data-logging for long term retention of key operational parameters & alarm conditions
- General purpose inputs (two) & outputs (two)

## Technical Specifications.\*

SL-300 Series	1.5° Single Tier Model SL-300-1D5-1	1.5° Two Tier Model SL-300-1D5-2
<b>Light Characteristics</b>		
Light Source	High efficiency LEDs	
Available Colours	White. Other colours available on request.	
Typical Maximum Intensity (cd) <sup>†</sup>	White - 94,400	White - 188,800
Visible Range (NM)	AT @ 0.74: 13–19 AT @ 0.85: 19.2–29.5	AT @ 0.74: 19–21 AT @ 0.85: 29.6–33
Horizontal Output (degrees)	360	
Vertical Divergence (degrees)	>1.5	
Available Flash Characteristics	Up to 310 including 256 IALA recommended, & 1 custom	
Intensity Adjustments	User adjustable	
LED Life Expectancy (hours)	>100,000	
<b>Electrical Characteristics</b>		
Voltage Range (V)	24–48V DC	
Nominal Voltage (V)	24V DC	
Peak Power (W)	384	768
Average Power (W)	132	264
<b>Physical Characteristics</b>		
Body Material	Marine grade two part epoxy coating to resist the elements	
Lens Material	UV-stabilised acrylic	
Lens Diameter (mm/inches)	373 / 14½	
Lens Design	Multiple LED optic	
Mounting	3 & 4 hole 200mm bolt pattern	
Height (mm/inches)	302 / 12	496 / 19½
Width (mm/inches)	373 / 14½	373 / 14½
Mass (kg/lbs)	18.5 / 40%	38.5 / 85
Product Life Expectancy	Up to 12 years	
<b>Environmental Standards</b>		
Shock	MIL-STD-202-213 Test condition H	
Vibration	MIL-STD-202-204 Test Condition B (5g)	
Ice Loading	Rated to withstand 22kg/m <sup>2</sup>	
Temperature Range	-40 to 60°C	
Wind Exposure	Rated to withstand 140 knots	
Humidity	0 – 100%, condensing	
Driving Rain	at 45° from vertical	
<b>Certifications</b>		
Immunity	EN 61000-6-1: 2007 (IEC61000-6-1: 2005).	
Emission	EN 61000-6-4: 2007 (IEC 61000-6-4: 2006) + A1: 2001.	
FCC Part 15 Rules	IFCC Part 15 Subpart B.	
IALA	Signal colours compliant to IALA E-200-1	
Quality Assurance	ISO 9001:2015	
Waterproof	IP68	
<b>Intellectual Property</b>		
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd	
<b>Warranty*</b>		
	3-year warranty	
<b>Options Available</b>		
		<ul style="list-style-type: none"> <li>GPS Synchronisation</li> <li>AIS Type 1 or Type 3</li> <li>GSM Monitoring &amp; Control System <ul style="list-style-type: none"> <li>RS232/422/485 Port</li> <li>General purpose inputs (2) &amp; outputs (2)</li> <li>Variety of solar/battery configurations <ul style="list-style-type: none"> <li>Bird deterrent spikes</li> <li>Serial programming cable</li> </ul> </li> </ul> </li> </ul>

\*AIS option will be with external Type 1 or Type 3 AIS transponder

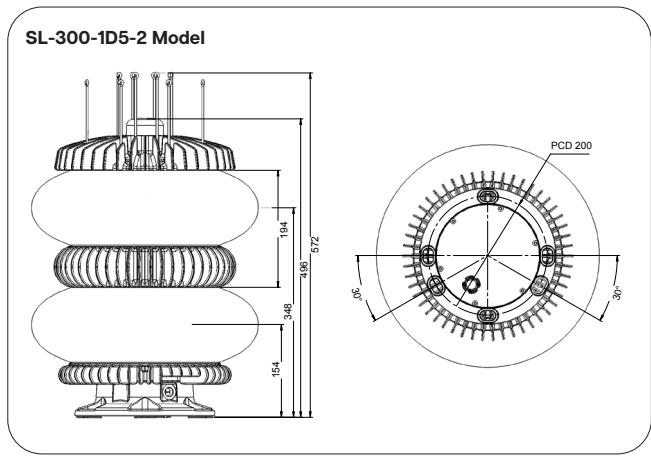
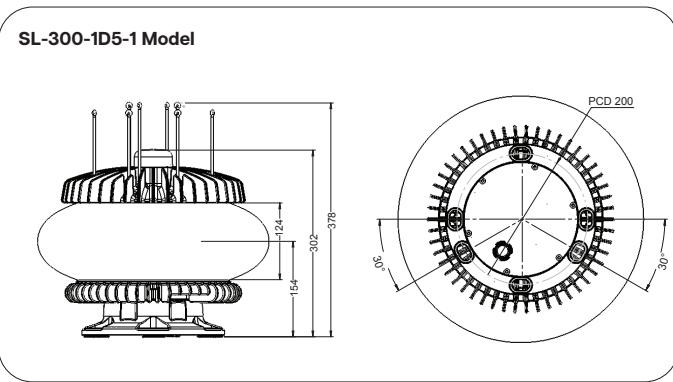
\*Refer to the Sealite website under the warranty section

<sup>†</sup> Intensity setting subject to solar availability

\* Subject to standard terms and conditions

^ Refer to the Sealite website under the warranty section

## Technical Illustrations



### HOW TO ORDER

#### 13–21NM Long Range Lantern

SL-300-1D5-[tiers]-[colour]-[?]-[?]

**Product No.:** \_\_\_\_\_

**Model:** \_\_\_\_\_  
1D5 = 1.5° Divergence

**Tiers:** \_\_\_\_\_  
1 = Single tier  
2 = Two tier

**Colour:** \_\_\_\_\_  
W = White  
(other colours available on request)

**Monitoring & Control:**

GSM = GSM  
GPS = GPS Synchronisation  
AIS1 = AIS Type 1  
AIS3 = AIS Type 3  
[blank] = No monitoring & control

**RS Communications Port:** \_\_\_\_\_

RS = RS communications port  
[blank] = No RS communications port

Note: Please contact your Sealite representative for optional power supply solutions

### HOW TO ORDER

#### Solar Power Supply

SL-PS-110-140-01

**Product No.:** \_\_\_\_\_

**Battery Capacity:** \_\_\_\_\_  
110 = 110 Ah

**Solar Output:** \_\_\_\_\_  
140 = 140 watts

**Mount Type:** \_\_\_\_\_  
01 = post mount



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# 13–19NM Long Range Lantern

SL-300 Series – SL-300-2D5-1 & SL-300-2D5-2

Standard	IR Programmer	PC Configuration Tool	Optional	GPS Sync	GSM Monitoring	RS232/422/485 Port	AIS
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The SL-300-2D5 Series are 13 to 19NM long range marine lanterns with 2.5 degree vertical distribution, suitable for a range of applications.



## High Intensity, Small Form Factor

The SL-300-2D5 series offers multiple intensity adjustments to over 46,000cd luminous intensity in a single tier (over 93,000cd in a 2-tier configuration). The small form factor provides minimal wind loading and convenient handling – delivering significant advantages over traditional larger lens stack assemblies.

## Advanced Thermal Management

The SL-300-2D5 Series features precision lower, mid and upper heat sinking. The custom designed heat sinks are interconnected, and designed to maintain an appropriate LED temperature across a wide range of duty cycles, enabling the lanterns to run efficiently whilst maintaining a compact size.

## Advanced PC or IR Programming

Sealite's convenient PC Configuration Tool or IR programmer allows a host of features to be user set including;

- Multiple intensity settings
- 310 flash settings including custom character
- Automatic effective intensity adjustment
- Adjustable on/off lux levels
- Low battery threshold
- GPS synchronisation offset
- Alarm conditions

## Optional GPS Synchronisation

For flash synchronisation of lanterns a GPS module may be fitted.

## Optional GSM Monitoring & Control

The SL-300-2D5 Series may also be fitted with a GSM module for monitoring and control – enabling users to access real-time diagnostic data and change lantern settings via cell-phone.



Precision upper heat sink



Shown with optional GPS antenna

## The Sealite Advantage

- Over 46,000cd luminous intensity white - single tier
- Over 93,000cd luminous intensity white - two tier
- Compact two tier lantern up to 19NM visible range
- PC or IR Programmer for setup, diagnostic & testing
- Internal or external photocell options
- User configurable day/night lux levels
- Advanced remote monitoring features
- Wide operating voltage range 21–58VDC

- Internal data-logging for long term retention of key operational parameters & alarm conditions
- General purpose inputs (two) & outputs (two)

## Technical Specifications.\*

SL-300 Series	2.5° Single Tier Model	2.5° Two Tier Model
	SL-300-2D5-1	SL-300-2D5-2
<b>Light Characteristics</b>		
Light Source	High efficiency LEDs	
Available Colours	White. Other colours available on request	
Typical Maximum Intensity (cd) <sup>†</sup>	White - 46,700 cd Red - 21,000 cd Green - 18,000 cd	White - 93,400 cd Red - 42,000 cd Green - 36,000 cd
Visible Range (NM)	AT @ 0.74: 13–17.5 AT @ 0.85: 19.2–26.9	AT @ 0.74: 18–19 AT @ 0.85: 27.8–29.6
Horizontal Output (degrees)	0° - 360°	
Vertical Divergence (degrees)	>2.5	
Available Flash Characteristics	Up to 310 including 256 IALA recommended, & 1 custom	
Intensity Adjustments	User adjustable	
LED Life Expectancy (hours)	>100,000	
<b>Electrical Characteristics</b>		
Voltage Range (V)	24-48V DC	
Nominal Voltage (V)	24V DC	
Peak Power (W)	384	768
Average Power (W)	132	264
<b>Physical Characteristics</b>		
Body Material	Marine grade two part epoxy coating to resist the elements	
Lens Material	UV-stabilised acrylic	
Lens Diameter (mm/inches)	298 / 11½	
Lens Design	Multiple LED optic	
Mounting	3 & 4 hole 200mm bolt pattern	
Height (mm/inches)	216 / 8½	342 / 13½
Width (mm/inches)	298 / 11½	298 / 11½
Mass (kg/lbs)	8.8 / 19½	18 / 39¾
Product Life Expectancy	Up to 12 years	
<b>Environmental Standards</b>		
Shock	MIL-STD-202-213 Test condition H	
Vibration	MIL-STD-202-204 Test Condition B (5g)	
Ice Loading	Rated to withstand 22kg/m <sup>2</sup>	
Temperature Range	-40 to 80°C	
Wind Exposure	Rated to withstand 140 knots	
Humidity	0 - 100%, condensing	
Driving Rain	at 45° from vertical	
<b>Certifications</b>		
Immunity	EN 61000-6-1: 2007 (IEC61000-6-1: 2005).	
Emission	EN 61000-6-4: 2007 (IEC 61000-6-4: 2006) + A1: 2001	
FCC Part 15 Rules	IFCC Part 15 Subpart B	
IALA	Signal colours compliant to IALA E-200-1	
Quality Assurance	ISO 9001:2015	
Waterproof	IP68	
<b>Intellectual Property</b>		
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd	
<b>Warranty*</b>	3-year warranty	
<b>Options Available</b>		
	<ul style="list-style-type: none"> <li>GPS Synchronisation</li> <li>AIS Type 1 or Type 3</li> <li>GSM Monitoring &amp; Control System</li> <li>RS232/422/485 Port</li> <li>General purpose inputs (2) &amp; outputs (2)</li> <li>Variety of solar/battery configurations <ul style="list-style-type: none"> <li>Bird deterrent spikes</li> <li>Serial programming cable</li> </ul> </li> </ul>	

\*AIS option will be with external Type 1 or Type 3 AIS transponder

\*Refer to the Sealite website under the warranty section

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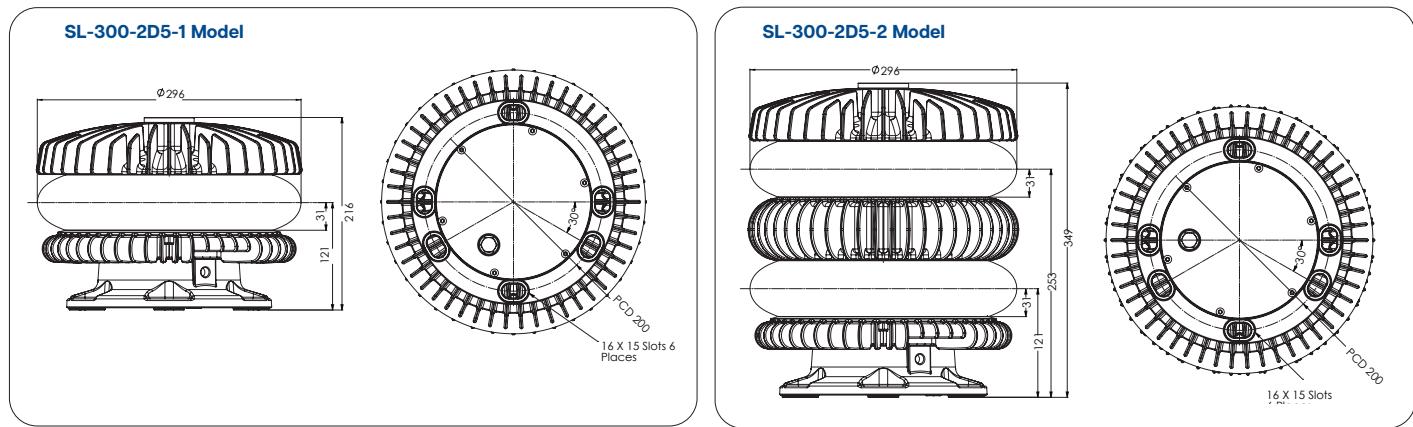
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## Technical Illustrations



### HOW TO ORDER

#### 13–19NM Long Range Lantern

Product No.: SL-300-2D5-[tiers]-[colour]-[?]-[?]

Model: 2D5 = 2.5° Divergence

Tiers: 1 = Single tier  
2 = Two tier

Colour: W = White  
(other colours available on request)

Monitoring & Control: GSM = GSM  
GPS = GPS Synchronisation  
AIS1 = AIS Type 1  
AIS3 = AIS Type 3  
[blank] = No monitoring & control

RS Communications Port: RS = RS communications port  
[blank] = No RS communications port

Note: Please contact your Sealite representative for optional power supply solutions

### HOW TO ORDER

#### Solar Power Supply

Product No.: SL-PS-110-140-01

Battery Capacity: 110 = 110 Ah

Solar Output: 140 = 140 watts

Mount Type: O1 = post mount

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# 5-9NM Marine Lantern

SL-510-SA



The SL-510-SA **stand-alone marine lantern** can be remotely monitored and maintained via Bluetooth® or Iridium® satellite technology.

## Intensity Range (5-9NM)

High intensity capabilities of up to 1100 candela in white utilising leading technology LEDs for a visible range of 5-9NM.

## Enhanced Optics

The optics and lens design ensures that vessel operators can clearly see the light from above when passing the AtoN.

## OLED Screen With Touchpad

The conveniently located OLED (Organic Light-Emitting Diode) screen with touchpad allows maintenance personnel to check the diagnostics of the lantern with the touch of a button.

## Bluetooth® Connectivity

Integrated Bluetooth® technology using the exclusive SealitePro® app allows for convenient in-field setup, configuration and maintenance from a location up to 50 metres away using your phone or tablet.



## Satellite Communications

The SL-510-SA is available with an optional integrated Iridium® Satellite module enabling two-way monitoring and control using the Iridium® Low Earth Orbit satellite network. Accessible via the Star2M® portal, the global Iridium® network offers genuine, pole-to-pole coverage and is the perfect communication partner for Sealite and our aids to navigation solutions.

## AIS Connectivity

Externally fitted. Available with type 1 or type 3 and operating on the international VHF Marine Mobile Band for AtoN operational status and positioning information.



## Features

- Satellite communications.
- GSM communication.
- AIS Type 1 and Type 3 connectivity
- Enhanced optics.
- GPS synchronisation.
- OLED screen with touchpad in lens.
- Bluetooth® connectivity.
- Polycarbonate base and top.
- Environmentally friendly bird spike.

## High Performance

- Flexibility to install with various external solar panels sizes and battery capacities.
- 200mm bolt pattern for immediate installation.

## Optional

- Satellite communications.
- AIS
- GSM communications
- IR programmable.

## Cost Effective

- Low maintenance costs.
- Energy efficient light solution.

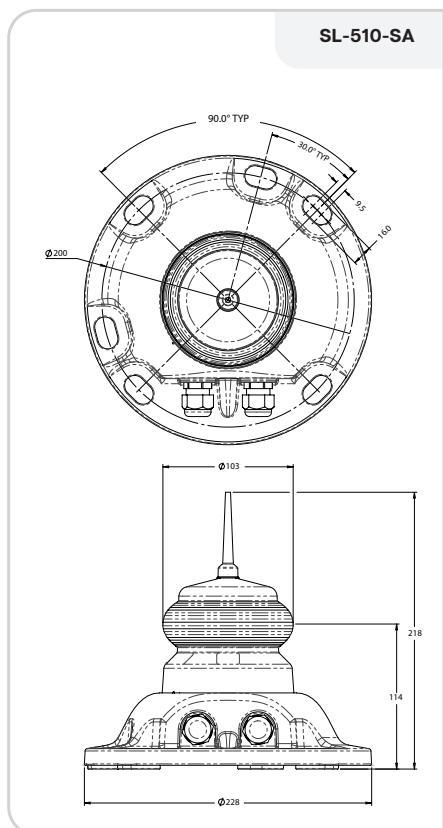
## Compliance

- IALA

## Technical Specifications\*

SL-510-SA	
<b>Light Characteristics</b>	
Light Source	LED
Available Colours	Red, Green, White, Yellow, Blue
SL-510-5D Typical Maximum Intensity (cd) <sup>†</sup>	Red - 620, Green - 690, White - 1150, Yellow - 570, Blue - 310
SL-510-10D Typical Maximum Intensity (cd) <sup>†</sup>	Red - 460, Green - 440, White - 650, Yellow - 320, Blue - 200
Visible Range (NM)	AT @ 0.74: 5-9NM
Horizontal Output (degrees)	360
Vertical Divergence (degrees)	5 or >10
Available Flash Characteristics	Up to 310 IALA recommended (user adjustable)
Intensity Adjustments	Multiple intensity settings
LED Life Expectancy (hours)	>100,000
<b>Electrical Characteristics</b>	
Available Power	Variable up to 15W
Circuit Protection	Integrated
Nominal Voltage (V)	12-24
<b>Physical Characteristics</b>	
Body Material	LEXAN® Polycarbonate – UV-stabilised
Lens Material	LEXAN® Polycarbonate – UV-stabilised
Lens Diameter (mm/inches)	98 / 3 <sup>7/8</sup>
Lens Design	LED Optic
Mounting	3 & 4 hole 200mm bolt pattern
Height (mm/inches)	218 / 8.58
Width (mm/inches)	228 / 8.98
Mass (kg/lbs)	1.2 / 2.65
Service Life	15 years ^
<b>Environmental Standards</b>	
Shock	MIL-STD-202G Test Condition H, Method 213B 30G vertical and 35G horizontal shock
Vibration	MIL-STD-202G, Test Condition B, Method 204D 5G in all axes
Ice Loading	Rated to withstand 22kg/m <sup>2</sup>
Salt Fog	MIL-STD-810F Method 509.4
Rain Test	MIL-STD-810F Method 506.4 procedure 1
Wind Exposure	Rated to withstand 140 knots
Humidity	MIL-STD-810F method 507.4 (0 – 100%, condensing)
Temperature Range	-30 to 50°C
<b>Certifications</b>	
CE	EN61000-6-2:2005, IEC61000-4-2:2008, IEC61000-4-3:2010, IEC61000-6-1:2016
IALA	Signal colours compliant to IALA E-200-1
Quality Assurance	ISO 9001:2015
Ingress Protection	IP68
<b>Intellectual Property</b>	
Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd
<b>Warranty *</b>	3 years
	<ul style="list-style-type: none"> <li>• Satellite Communications</li> <li>• GSM Communication</li> <li>• AIS Connectivity (Externally Fitted)</li> <li>• 5°, 10° Lens</li> <li>• IR Programmer</li> </ul>
<b>Options Available</b>	

## Technical Illustrations



### How to Order SL-510-SA Series SL-510-[XXD]-SABO-[X]-[XX]

Product No.: \_\_\_\_\_

Lens Type: \_\_\_\_\_

- 05 (5 Degree)
- 10 (10 Degree)

LED Option: \_\_\_\_\_

- W (White)
- Y (Yellow)
- G (Green)
- R (Red)
- B (Blue)
- BY (Blue / Yellow)

Option Configuration: \_\_\_\_\_

- 00 No Options
- 01 SAT Only
- 02 GSM Only
- 03 AIS Ready



• Specifications subject to change or variation without notice

\* Subject to standard terms and conditions

<sup>†</sup> Intensity may vary in accordance with LED manufacturers specification

<sup>^</sup> Refer to the Sealite website under the warranty section