# SLC420
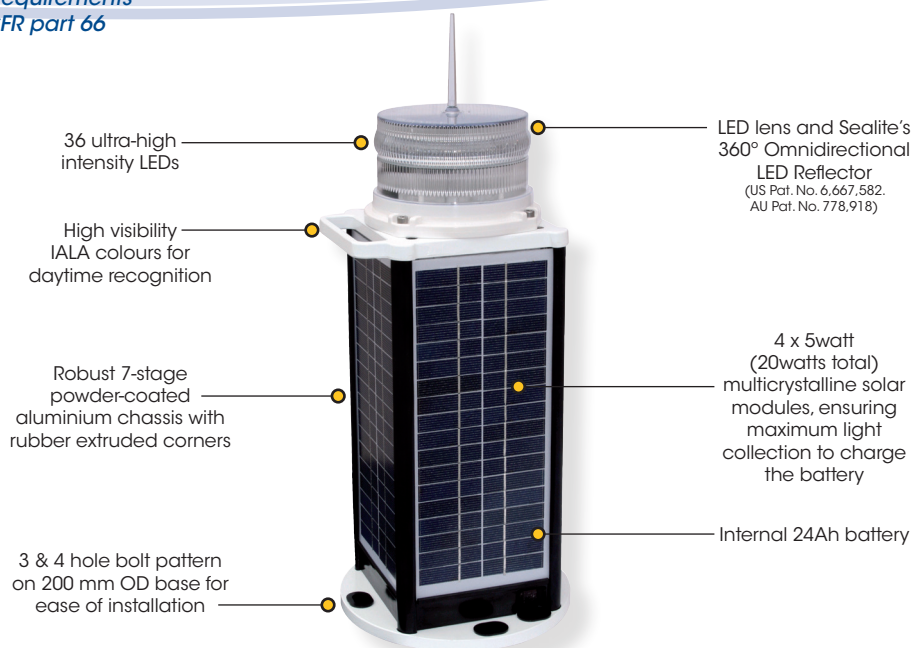## 4–5nm+ Solar Marine Lantern

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

36 ultra-high intensity LEDs

High visibility IALA colours for daytime recognition

Robust 7-stage powder-coated aluminium chassis with rubber extruded corners

3 & 4 hole bolt pattern on 200 mm OD base for ease of installation

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

4 x 5watt (20watts total) multicrystalline solar modules, ensuring maximum light collection to charge the battery

Internal 24Ah battery

**Available with GPS Synchronisation, RF Synchronisation, Radio Control or GSM Monitoring & Control**

## The Sealite Advantage

- Simplicity of design ensures ease of maintenance in the field
- Heavy-duty aluminium construction
- All components are user-replaceable in the unlikely event of damage
- 200mm OD base pattern for immediate installation on existing structures
- User-replaceable battery
- Vertical light emissions to maintain visibility when passing adjacent to light
- IP68 waterproof
- 3 year warranty

**The SLC420 is a robust, completely self-contained 4–5nm+ Solar LED Marine Lantern which incorporates a 36 LED light source for even greater light intensity. The 3 & 4 hole bolt pattern base fits directly onto existing 200mm OD industry standard mounts for ease of installation.**

The chassis of the SLC420 is 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.

Four (4) premium-grade solar modules are integrated into the assembly and mounted to collect sunlight at all angles.

The unit is capable of producing any of 256 IALA recommended flash characters – field-adjustable without the need for ancillary equipment.

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

### Optional RF Synchronisation or GPS Synchronisation

The SLC420 may be fitted with an optional RF Synchronisation module for short range flash synchronisation. For flash synchronisation of lanterns installed over longer ranges, a GPS module may be fitted.
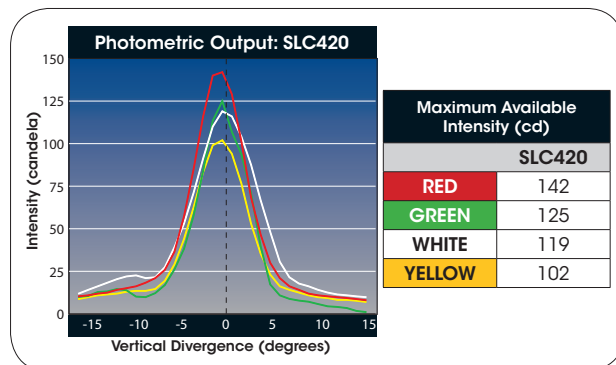
When lanterns flash in synchronisation they can be clearly distinguished from other navaids and confusing background lighting – ideal for rivers, marina entrances, channel marking and aquaculture.

### Optional GSM Monitoring & Control System

The SLC420 may also be fitted with GSM Monitoring and Control – enabling users to access real-time diagnostics data and change lantern settings via cell-phone or PC interface.
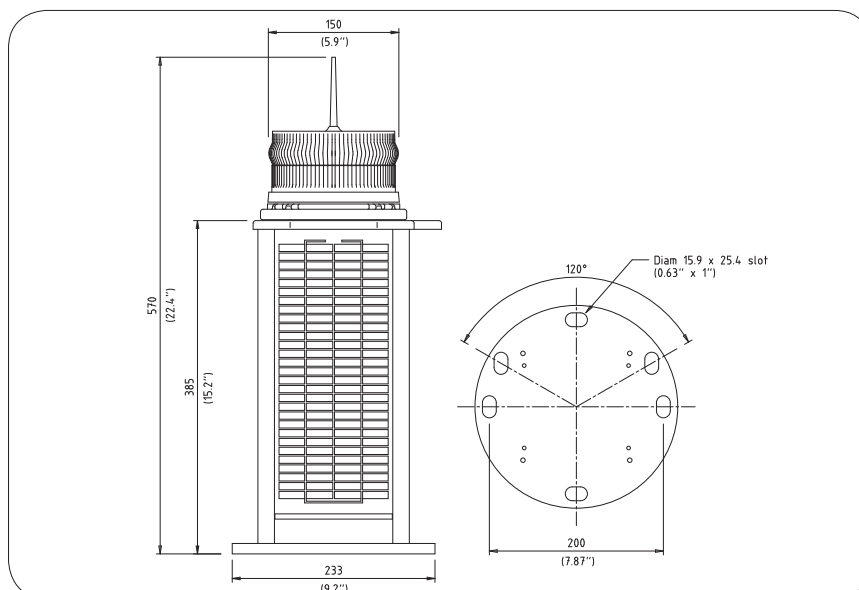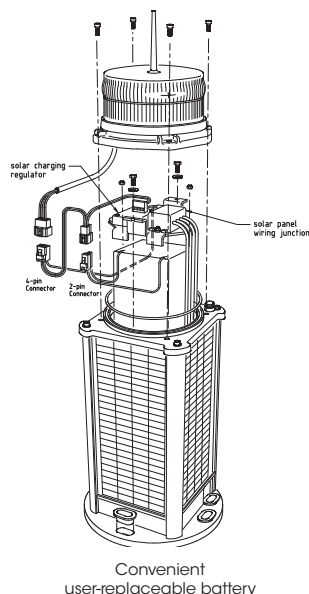
### Optional Radio Control System

Radio Control may be fitted to the SLC420 model enabling users to remotely modify the setup of their lantern via handheld radio controller.

**Photometric Output: SLC420**

*Intensity (candela)* vs *Vertical Divergence (degrees)*

| Maximum Available Intensity (cd) | |
|---|---|
| | **SLC420** |
| **RED** | 142 |
| **GREEN** | 125 |
| **WHITE** | 119 |
| **YELLOW** | 102 |

Convenient
user-replaceable battery



## SPECIFICATIONS •







SLC420's mounted on SLB1250 Navigation
Buoys, Pasig River, Manila, Philippines

### Light Characteristics

| | |
|---|---|
| Light Source | 36 ultra-high intensity LEDs |
| Available Colours | Red, Green, White, Yellow, Blue |
| Maximum Available Intensity (cd)† | Red - 142  Green - 125  White - 119  Yellow - 102 |
| Visible Range (nm) | 4–5+ |
| 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 Sealite Power Calculator |
| Circuit Protection | Integrated |
| Nominal Voltage (v) | 12 |
| Autonomy (days) | >15 (14 hour darkness, 12.5% duty cycle) |
| Temperature Range | -40 to 80°C |

### Solar Characteristics

| | |
|---|---|
| Solar Module Type | Multicrystalline |
| Output (watts) | 20 (4 x 5watt) |
| Solar Module Efficiency (%) | 14 |
| Charging Regulation | Microprocessor controlled |

### Power Supply

| | |
|---|---|
| Battery Type | SLA (Sealed Lead Acid) |
| Battery Capacity (Ah) | 24 |
| Nominal Voltage (v) | 12 |
| Battery Service Life | Average 5 years |

### Physical Characteristics

| | |
|---|---|
| Body Material | 7-stage powder-coated aluminium chassis with UV-stabilised rubber corners and gaskets |
| Lens Material | LEXAN® Polycarbonate – UV-stabilised |
| Lens Diameter (mm/inches) | 150 / $5^7/_8$ |
| Lens Design | External optics with interior flute design |
| Mounting | 3 & 4 hole bolt pattern on 200mm OD base |
| Height (mm/inches) | 570 / $22^2/_5$ |
| Width (mm/inches) | 233 / $9^1/_5$ |
| Mass (kg/lbs) | 13.9 / $30^5/_8$ |
| Product Life Expectancy | Up to 12 years |

### Certifications

| | |
|---|---|
| CE | EN61000-6-3:1997. EN61000-6-1:1997 |
| Quality Assurance | ISO9001:2008 |
| Waterproof | IP68 |

### 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 *

3 years

### Options Available

• GPS Synchronisation
• RF Synchronisation
• GSM Monitoring & Control System
• Radio Control System
• *Note* - remote monitoring/control will reduce visible range of lantern due to increased power consumption
• 50mm pole mount adapter plate