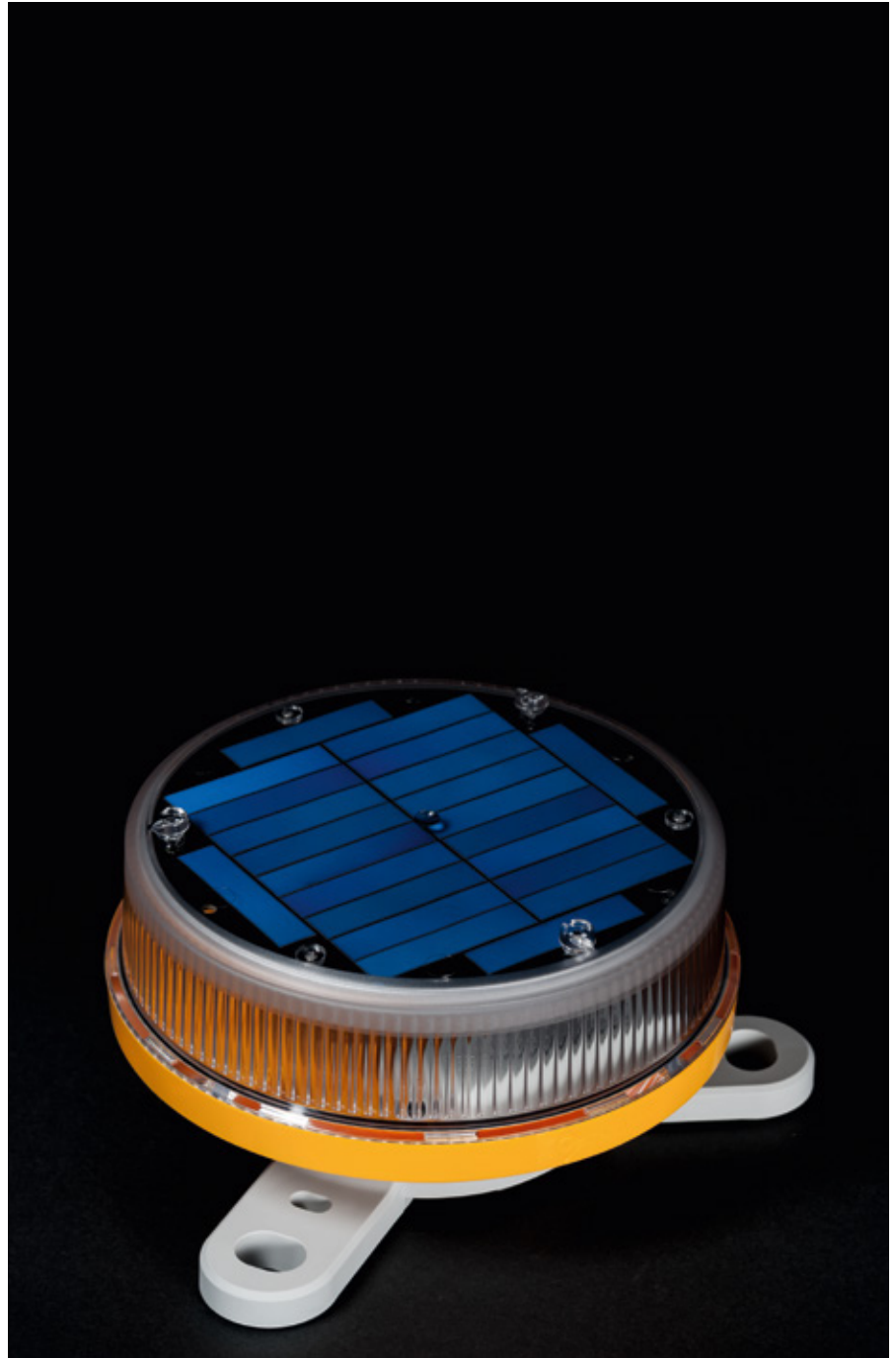


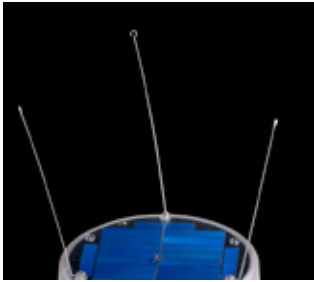
## Carmanah M660

Self-contained LED lantern  
for buoys and minor beacons,  
up to 4 NM Range

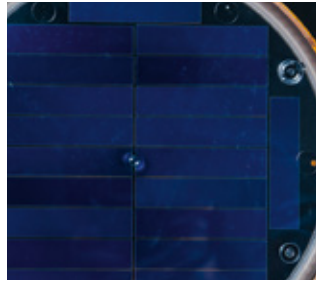
The M660 is a high-performance, long life, easy-to-use and cost effective self-contained solar LED marine lantern. The M660 features a Li-ion battery pack that extends the service life of the lantern up to eight years. M660 has four different mounting options and can be programmed and controlled with Bluetooth® Control. To view performance in your installation location, visit Marine Selector Tool at [www.carmanahmarine.com/selector](http://www.carmanahmarine.com/selector).

- **Standard IALA colours Red, Green, White, Yellow, Blue**
- **Ventilated battery compartment**
- **Adjustable intensity and range**
- **Vertical divergence > 8° (FWHM)**
- **High-efficiency solar cells. Maximum Power Point Tracking (MPPT) for optimal energy collection**
- **Premium grade UV resistant, polycarbonate/polysiloxane co-polymer body and lens material**
- **IP 68 rated. O-ring sealing with waterproof vent. Battery case is also IP68 (duration under test)**
- **Li-ion battery, optional dual pack**
- **Programmable with Bluetooth® Control and IR-Programmer**
- **Optional ON/OFF switch, external charger and charging port**





**Bird Deterrents**  
Stainless steel as standard.



**Solar Modules**  
High-efficiency cells. Maximum Power Point Tracking (MPPT) for optimal energy collection.



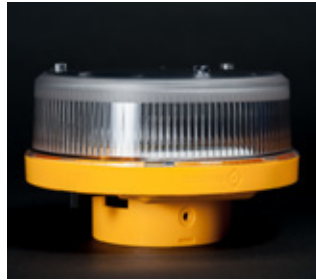
**Li-ion**  
Replaceable Li-ion battery pack with extreme temperature range and up to 8-year life expectancy.



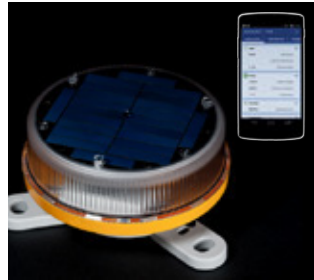
**Colour Indicator**  
Protective bumper indicates LED colour.



**Installation**  
Four different mounting options Dual bolt circles standard (150 and 200 mm, 3 holes). Two pole mounting options.



**Pole Mount**  
Pole mount by removing adapter. 2.5" or 6 cm diameter and smaller and 4" or 10 cm diameter (nominal, sched. 40)



**Bluetooth<sup>®</sup> Control**  
Lantern can be programmed and battery status checked up to 50 meters distance with an app for Android and iOS.

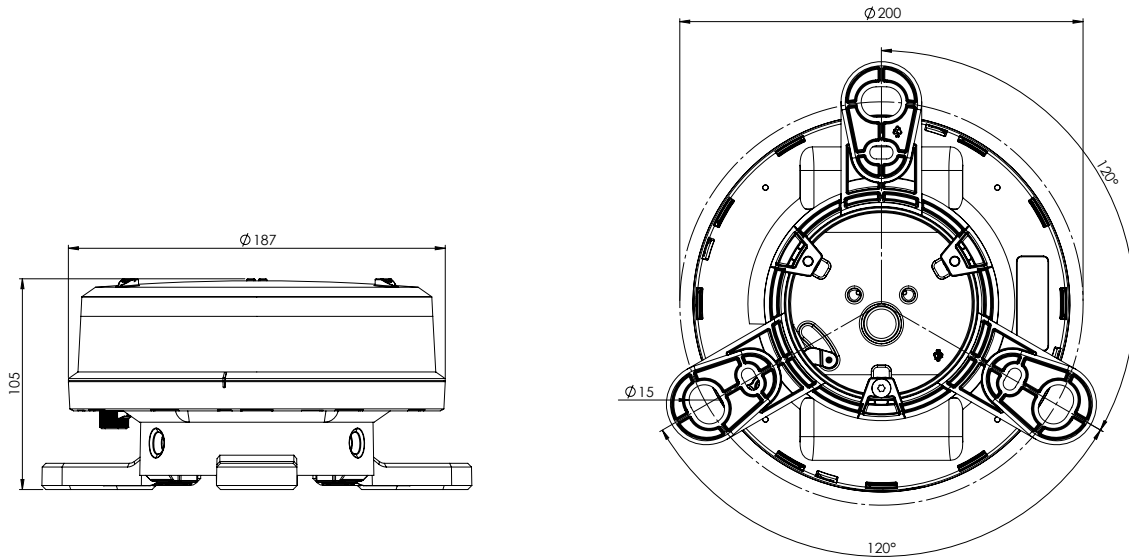


**IR Controller**  
Set intensity, change flash code, check battery status, set ship mode and turn lantern off with optional IR (Infrared) controller.



**External Switch**  
An optional external switch can be installed.

## Technical Specification M660



### Optical performance

#### Maximum fixed intensity

<b>40 cd</b>	<b>42 cd</b>	<b>71 cd</b>	<b>52 cd</b>	<b>18 cd</b>
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NOTE : Peak IALA intensity dependent on location. To view performance in your installation location, visit [www.carmanahmarine.com/selector](http://www.carmanahmarine.com/selector).

### Main Technical Specification

<b>Lens visual/Mechanical diameter</b>	177 mm
<b>Lens material</b>	UV stabilized Polycarbonate
<b>Light source</b>	High Power Light Emitting Diode (LED)
<b>Vertical divergence</b>	>8° (FWHM)
<b>Solar module</b>	High efficiency cells; MPPT
<b>Battery</b>	Li-ion (IEC 61233)
<b>Degree of ingress protection</b>	IP 68
<b>Weight</b>	0.8 kg
<b>Overall height (excl. bird deterrents)</b>	105 mm
<b>Installation (adapter)</b>	3 x M6 on 150mm and 3 x M12 on 200mm
<b>Installation (pole mount)</b>	3 x #10-14 60mm or 73mm diameter

## Order Overview M660

### Option matrix

M660 Switched	ON/OFF switch
M660 Unswitched	No ON/OFF switch
M660 Dual Battery	Dual Battery Pack
M660 Charge Port	With Charge Port

### Accessories

69934	660 Bird Deterrent – Single
79848	Spare adapter (incl. screws)
79273	Optional switch
79399	660 Battery Replacement Pack
69885	660 International Wall Charger Assembly
69899	IR (Infrared) Programmer
38334	660 Standard Bolt Kit
79400	660 Dual Battery Replacement Pack

### Product codes

Colour	M660 unswitched	M660 switched	M660 dual battery	M660 charge port
red	M660R	M660R-S	M660R-2B	M660R-C
green	M660G	M660G-S	M660G-2B	M660G-C
white	M660W	M660W-S	M660W-2B	M660W-C
yellow	M660Y	M660Y-S	M660Y-2B	M660Y-C
blue	M660B	M660B-S	M660B-2B	M660B-C

### Product code example: M660RSC2B

- M660R is Sabik/Carmanah code for M660 in red
- with a selection of switched with charge port and dual battery