



### 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.

- 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

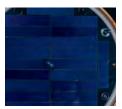








Bird Deterrents
Stainless steel as standard.



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.



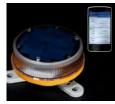
Colour Indicator
Protective bumper indicates
LED colour.



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® Control
Lantern can be programmed
and battery status checked up
to 50 meters distance with an
app for Android and iOS.

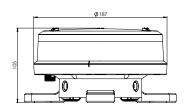


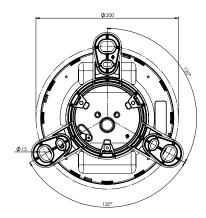
IR Controller
Set intensity, change flash
code, check battery status, set
ship mode and turn lantern
off with optional IR (Infrared)
controller.



External Switch
An optional external switch can be installed.

# **Technical Specification M660**





### **Optical performance**

Maximum fixed intensity						
cd 42 cd	71 cd	52 cd	18 cd			
42 cu	7 1 Cu	52 Cu		10 cu		

NOTE: Peak IALA intensity dependent on location. To view performance in your installation location, visit www.carmanahmarine.com/selector.

### **Main Technical Specification**

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