



## MCL360N

### Wreck Marking Lantern

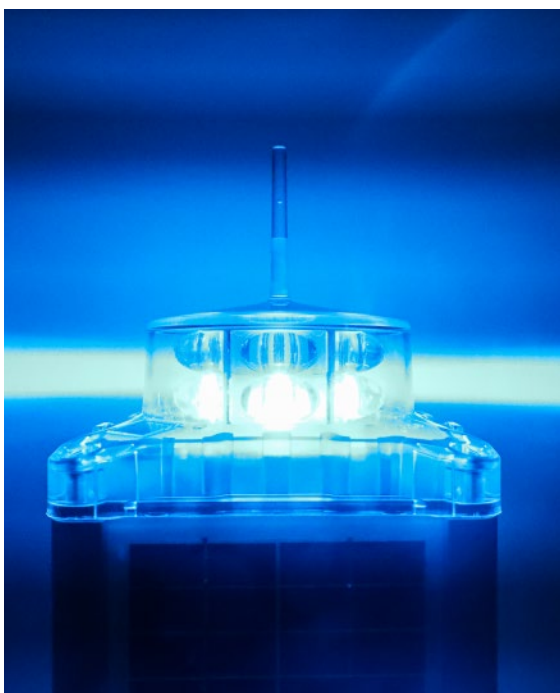
The **MCL360N** is a self-contained LED lantern with high luminous efficiency and low power consumption. It is composed of 10 high-intensity LEDs arranged in two levels: one yellow and one blue. This lantern is specifically designed for marking Wrecks and New Dangers in accordance with IALA Recommendation R1001.

### Excellent Autonomy

The MCL360N features a **modular design** available in two sizes. Two lantern models provide the same luminous range but offer different battery capacities and solar charging options to meet customer requirements based on the required autonomy. Its solar-free autonomy of up to 500 hours ensures optimal operation of the lantern and its complementary accessories, even under the most demanding conditions.

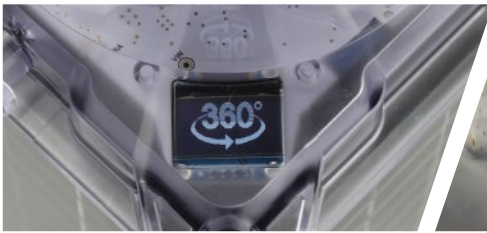
### Multiple Remote Control Options

This self-contained lantern can also integrate various monitoring and remote control options, such as GSM, UHF, satellite, IoT, AIS, or MODBUS communication. MSM's Global Netcom software is the ideal complement.



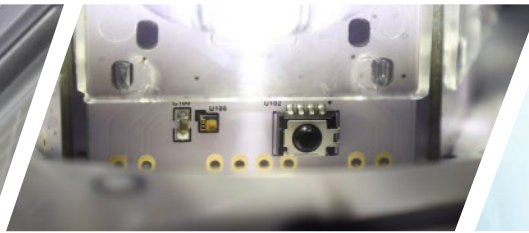
## FEATURES

- High-efficiency luminous system.  
Up to 6 nm ( $T=0.74$ ).
- Vertical divergence up to  $10^\circ$  ( $50\%I_0$ ).
- Integrated OLED display.
- Average operation lifetime over 10 years.
- Ideal self-contained lantern for energy demanding applications.
- IP 68 watertightness degree (immersion resistant).
- Programming, configuration and operating status via PC (RS-232 serial port), Bluetooth or IR programmer.
- Ready to integrate remote monitoring via GSM, UHF, satellite, IoT, AIS AtoN or MODBUS.
- GPS synchronization system included as standard.
- External charging port.
- Autonomy without solar charging up to 500 hours (depending on the model).
- Designed according to IALA Recommendations.



## Display

An integrated OLED screen displays information about the operating status of the lantern.



## Double on/off control

The lantern can be switched on and off via the photo-cell integrated in the optic assembly and with an internal astronomical clock, increasing the reliability.



## Smartcom360

Configuration software available for PC or mobile devices.



## Two LED levels

The lantern features two LED levels: the upper level emits yellow light, and the lower level emits blue light.



## Easily removable transport handle

The transport handle is removable, preventing shades' projection on the solar modules.

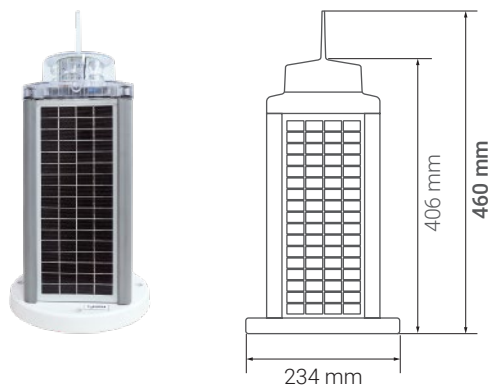


## Solar modules

Four high-performance monocrystalline solar modules cover the entire lateral surface of the lantern to optimize energy collection.

## Dimensions

### MCL360N-M



#### Up to 6 NM

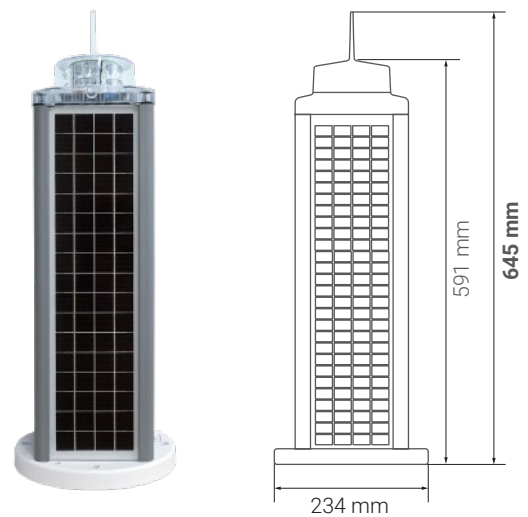
**Solar Module**  
5.3 W x 4 ud. = 21.2 W

**Battery**  
16.9 Ah / 12 V

**Autonomy without solar charging**  
up to 350 hours

**Weight\***  
9.2 kg

### MCL360N-L



#### Up to 6 NM

**Solar Module**  
9.1 W x 4 ud. = 36.4 W

**Battery**  
33.8 Ah / 12 V

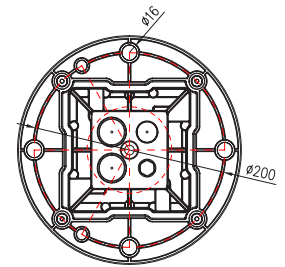
**Autonomy without solar charging**  
up to 500 hours

**Weight\***  
15.8 kg

\* Without Remote Control Modules.

## Technical features

|                               |                                                                       |
|-------------------------------|-----------------------------------------------------------------------|
| <b>Light source:</b>          | Ultra-bright LED diodes, with high-precision acrylic lenses.          |
| <b>LED average life:</b>      | More than 100,000 hours.                                              |
| <b>Flash rhythms:</b>         | Blue (1.0) + 0.5 s + Yellow (1.0) + 0.5 s = 3.0 s (non-programmable). |
| <b>Vertical divergence:</b>   | 8° and 10°.                                                           |
| <b>Battery:</b>               | Lead Crystal®, or Lithium as an option. Maintenance-free.             |
| <b>On/Off Switch:</b>         | External battery switch                                               |
| <b>Lens cover:</b>            | UV stabilised Polycarbonate. Integrated bird spike.                   |
| <b>Chasis:</b>                | Anodised marine aluminium.                                            |
| <b>Base:</b>                  | Polyamide PA66-GF30.                                                  |
| <b>Fixings:</b>               | Standard (4 - 3 M10 bolts in a 200 mm diameter).                      |
| <b>Watertightness degree:</b> | IP 68.                                                                |



Base

## Options

Remote control: GSM, Radio, satellite, IoT, AIS and/or Modbus.  
 AIS Type 1 or Type 3.  
 RS-232, RS-422 or RS-485 (Modbus) additional serial port (IP68).  
 Redundant remote control system.  
 Vertical divergence up to 10°.  
 Internal impact sensor.  
 External battery charger. 100 / 230 V AC.  
 Tool kit.  
 Spare parts kit.  
 Fixing screws kit.  
 Other fixings available.  
 Other bird deterrent systems.  
 Other specifications available under request.  
 Possibility of incorporating a Powerbank.

## SMARTCOM360: Configuration software

**SMARTCOM360** is a software designed to facilitate the lantern configuration process, analysing the optical and energy performance.

This software automatically performs feasibility calculations, considering the features of the lantern (colour, divergence, energy capacity ...) and the user-editable parameters (range, flash characteristic, solar radiation ...). This not only validates the user configuration, but also proposes the best solution for each case.

An improvement which makes SMARTCOM360 an excellent solution to set the maximum number of parameters for ensuring optimal performance.

### Main user-configurable parameters of the MCL360N:

- Light/intensity range in nautical miles/candelas.
- Switch on control and hibernation control by calendar.
- GPS synchronization and positioning.
- Communications system, remote monitoring and control.
- Test mode.

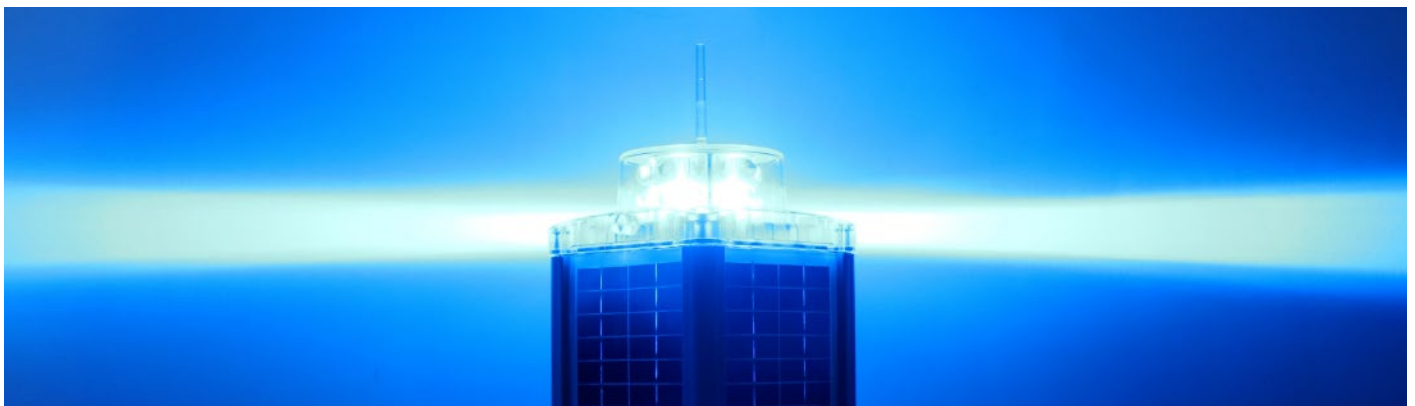
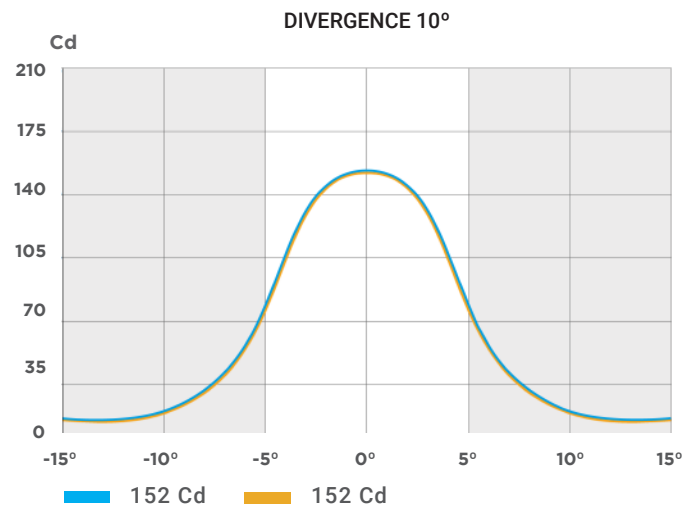
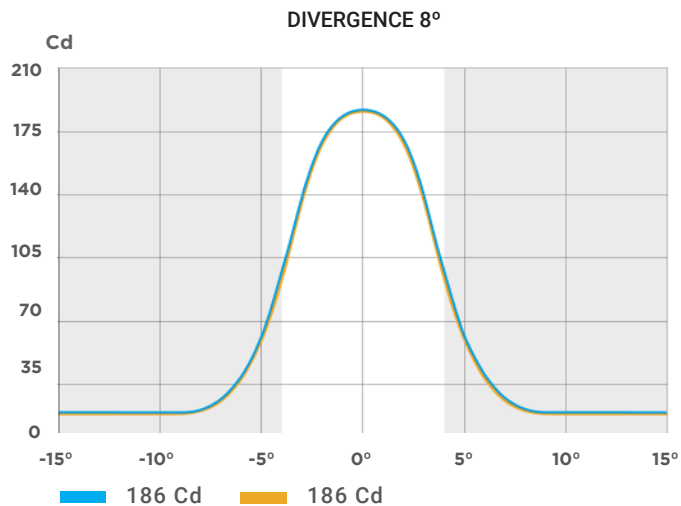
Software available for PC and mobile devices.



**!** Specifications subject to change without previous notice.  
 Luminous ranges will be affected depending on latitude, flash rhythms and chosen options.

## Peak intensities (Cd)

MCL360N-M & MCL360N-L | Up to 6 MN



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