

# MBL160

LED marine lantern

Up to 5 NM



## Excellent optical efficiency

The MBL160 is a LED marine flashing lantern of short and medium range, with a great optical efficiency and low consumption, fitted with LED diodes of high intensity.

## FEATURES

- High-efficiency luminous system.  
Up to 5 nm (T=0.74).
- Vertical divergence up to 5°.
- 360° horizontal output.
- Average operation lifetime over 10 years.
- Internal photocell adjustable in lux.
- IP 68 watertightness degree (immersion resistant).
- Linear adjustment of luminous intensity.
- Double RS-232 serial port for setting adjustments by PC and remote monitoring system.
- Programming, configuration and operating status via PC, IR programmer or Bluetooth.
- Ready to integrate remote monitoring via GSM, UHF or satellite, synchronization via GPS or AIS AtoN module.
- Short-circuit, reverse-polarity and transient over-voltage protections.
- PATENTED OPTICAL SYSTEM ®.



Ideal for permanent beaconing of offshore windfarms or platforms. This lantern is prepared to integrate a monitoring and synchronisation system based on GPS and protocols for monitoring and synchronisation options with others wind turbines.

Its luminous source consists of an innovating lens system especially designed to take the maximum profit of LED diodes, thus obtaining an output of up to 5° of vertical divergence. Manufactured with high-quality and resistant materials, the MBL160 provides a long service life under harsh marine conditions.

Designed according to IALA Guidelines G1162 and G1065.

**IP68.**

## Optical System

Light source:	3 to 12 nos. ultra-bright LED diodes, with high-precision acrylic lens.
Luminous range:	Up to 5 nm (T=0.74).
Colours available:	White, Yellow, Red and Green.
Vertical divergence:	Up to 5° (50% Io).
LED average life:	More than 100,000 hours.
Power supply:	From 12 V dc to 24 V dc.
Power consumption:	From 12 W.
Idle current:	2 mA.

## Electronic control

Flash rhythms:	256 (6 nos. user selectable).
Day/night threshold:	Adjustable between 10 and 400 lux.
Solar charge regulation function:	Regulation in 3 phases.
Settings:	PC / IR programmer / Bluetooth.
Luminous intensity adjustment:	Linear, between 10 - 100%.
Light intensity reduction due to low battery:	Configurable by the user.

## Materials and environment

Base:	Glass-fibre reinforced polyamide PA66-GF30.
Lens cover:	Acrylic, UV stabilised.
Vibrations resistance:	MIL-STD-202G, Method 204D (5G).
Shock resistance:	MIL-STD-202G, Method 213B.
Dimensions:	240 x 240x 289 mm Weight: 5.5 kg
Watertightness degree:	IP 68.
Fixings:	3 - 4 bolts in a 200mm diameter.
Humidity resistance:	100%. Pressure-compensation valve to avoid condensation
Temperature range:	From -30° to 70°C.

## Options

PC programming kit.

RS-485 MODBUS serial port.

Marine aluminium base.

Other specifications available under request.

GPS synchronisation.

GSM remote monitoring.

Radio remote monitoring.

Satellite remote monitoring.

AIS AtoN.

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! Specifications subject to change without previous notice.

