

## MBR400R

### State-of-the-art LED Technology

The MBR400R is a long-range rotating beacon, fitted with state-of-the-art LED. This provides a low-consumption and low-maintenance beacon for more than 100,000 hours. It is ideally designed for isolated solar installations, able to reach up to 24 nautical miles.

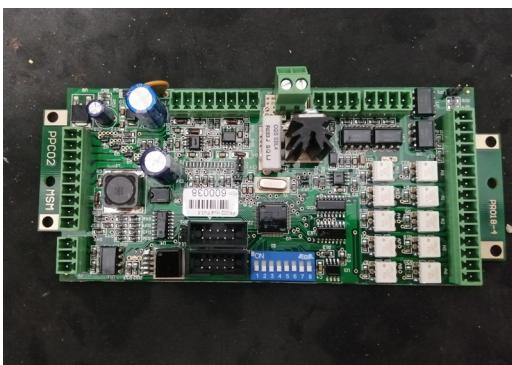
### Minimum maintenance

It is ideal to be installed in remote solar navaid stations, due its low power consumption of just 72 W maximum. The MBR400R includes a step-by-step rotating motor and an electronic control unit inside the lantern, thus completing a water-tight beacon easy to install and with minimum maintenance.

### Long service life

High-quality and resistant manufacturing materials, such as glass and marine aluminium, provide a long-service life under the harshest marine conditions.

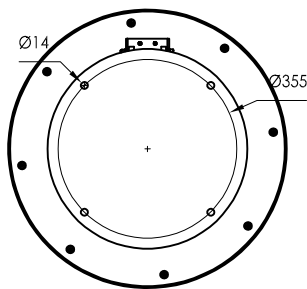
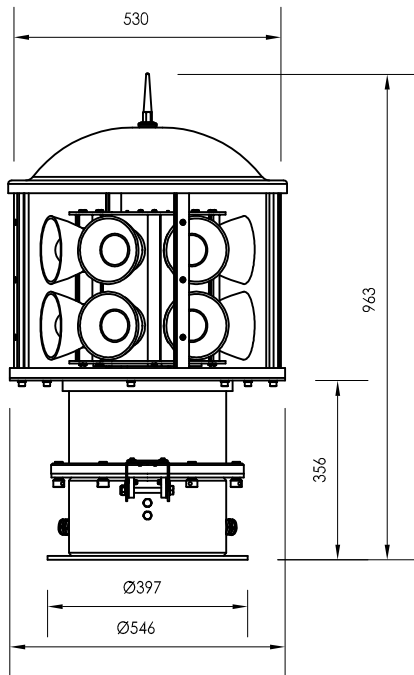
This beacon strictly meets IALA Recommendations.



## FEATURES

- *State-of-the-art LED technology.*
- *Maximum-efficiency luminous system.  
Up to 24 nm (T=0.74), 39 nm (T=0.85).*
- *Up to 72 W power consumption.*
- *Average operation lifetime over 15 years.*
- *No lampchanger needed.*
- *Compact design.*
- *Maintenance-free, brushless direct-drive motor.*
- *Rotating speed programmable from 0.5 to 10 rpm.*
- *Status and alarms available for remote monitoring, by opto-isolated signals and RS-232 serial port.*
- *Short-circuit, reverse-polarity and transient over-voltage protections.*
- *Easy installation.*
- *Minimum maintenance.*

# MBR400R



**!** Specifications subject to change without previous notice.

## Optical system

<b>Light source and Lens:</b>	High-intensity LEDs and Fresnel lens with dioptric and catadioptric prisms.
<b>Luminous range:</b>	Up to 24 nm (T=0.74), 39 nm (T=0.85).
<b>Power consumption:</b>	Up to 72 W.
<b>LED average life:</b>	More than 100,000 hours.

## Electronic rotating control

<b>Rotating control:</b>	Based on microprocessor.
<b>Rotating speed:</b>	Programmable by microswitches or PC. From 0.5 to 10 rpm.
<b>Programmed rotating speeds:</b>	64 (accuracy higher than 0.1%).
<b>Day/night threshold:</b>	Adjustable between 10 and 400 lux.
<b>Input voltage:</b>	From 9 to 36 V d.c.
<b>Protections against:</b>	<ul style="list-style-type: none"> <li>· Short-circuit.</li> <li>· Reverse polarity.</li> <li>· Transient over-voltage.</li> </ul>

## Rotating motor

<b>Type:</b>	Brushless d.c. direct-drive, step-by-step motor.
<b>Consumption:</b>	100 mA.
<b>Average life:</b>	More than 15 years.

## Materials and environment

<b>Lantern:</b>	Marine aluminium, with polyurethane finishing.
<b>Lens cover:</b>	High-resistance glass.
<b>Fixings:</b>	4 bolts in a 355 mm diameter.
<b>Watertightness degree:</b>	IP 66.
<b>Humidity resistance:</b>	100%. Pressure-compensation valve to avoid condensation.
<b>Temperature range:</b>	From -30° to 70°C.

## Options

- Other colours available.
- A.C. power supply.
- Remote monitoring modules.
- RS-485 MODBUS serial port.
- Other specifications available under request.
- Other lighting systems available.
- MBR400L version with LED light source and Fresnel lens as an option.
- MBR400X version with xenon lamp and Fresnel lens as an option.
- MBR400HI version with halide lamp and Fresnel lens as an option.
- MBR400-S sectorised version available.

## MBR400R

No. of levels	Stationary Intensity I <sub>0</sub> (Cd)	Effective intensity I <sub>e</sub> (Cd)								
		Rotating speed (rpm)								
		0.5	1	1.5	2	2.5	3	4	5	6
1	257,544	205,181	172,081	150,805	134,928	115,380	112,537	97,132	85,655	76,720
2	515,088	410,362	344,162	301,610	269,856	230,760	225,074	194,264	171,310	153,440
3	772,632	615,543	516,243	452,415	404,784	346,140	337,611	291,396	256,965	230,160

