

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.

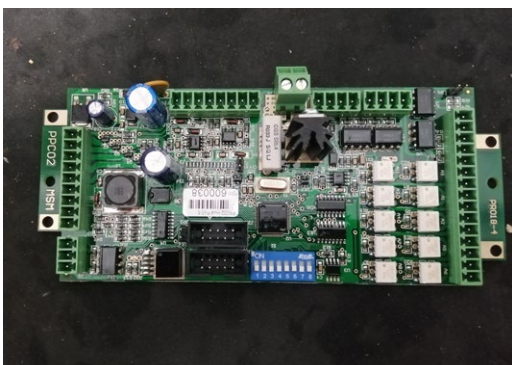
Minimum maintenance

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.

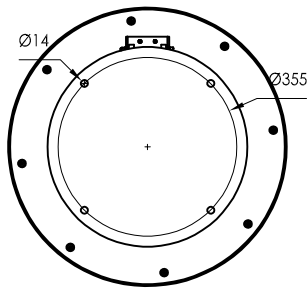
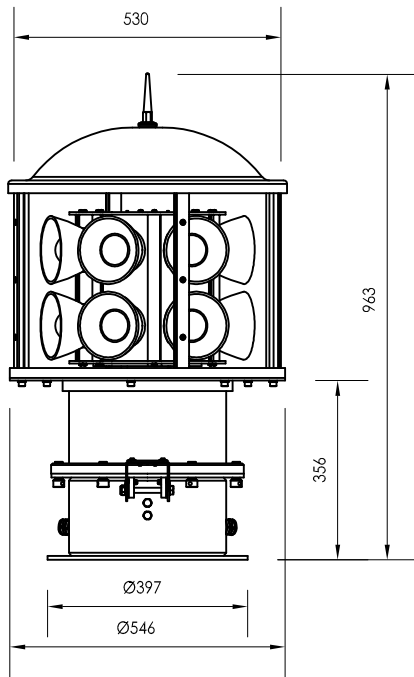
This beacon strictly meets IALA Recommendations.



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

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

Electronic rotating control

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

Rotating motor

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

Materials and environment

| | |
|-------------------------------|--|
| Lantern: | Marine aluminium, with polyurethane finishing. |
| Lens cover: | High-resistance glass. |
| Fixings: | 4 bolts in a 355 mm diameter. |
| Watertightness degree: | IP 66. |
| Humidity resistance: | 100%. Pressure-compensation valve to avoid condensation. |
| Temperature range: | 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 ₀ (Cd) | Effective intensity I _e (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 |

