

RBM4

Frequency-agile Radar Beacon

The RBM4 is a latest-generation (frequency-agile) Radar Beacon, which works in the marine X and S radar bands, providing an important information to mariners under whatever meteorological conditions.

Advanced electronic technology

The RBM4 incorporates advanced electronic technology components from radar systems, applied to navigation aids, such as programmable logic and flexible circuit antenna arrays.

Programmed Morse code

The Racon actively answers all active radars in the vicinity with a user programmed Morse code which identifies its location by appearing on the radar display.

Designed according to:

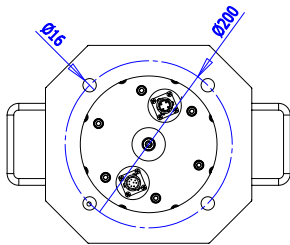
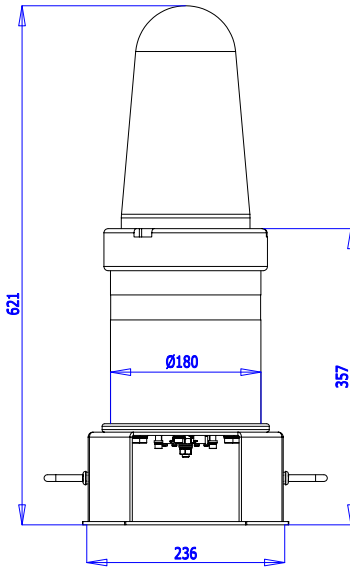
- . RO101 IALA Recommendation - Marine Radar Beacons (RACONS).
- . Recommendation ITU-R M.824-4 of the International Telecommunications Union - Technical parameters of radar beacons (RACONS)
- . and IMO Standards



FEATURES

- Response on X and S bands.
- Advanced Side-Lobe Suppression system (SLS) to better discriminate the genuine pulses to be responded.
- The length of the Morse code response matches the display range setting by programming the duration of the answer according to the pulse length before installation.
- Transmitter power: 1 W in both bands.
- Configurable receiver sensitivity.
- RS-232 communication serial port.
- Configuration via PC or Android APP (tablet and mobile).
- Protection against reverse polarity and transient overvoltages.
- Wide power supply range.
- Low power consumption.
- Light weight.
- Maintenance free.
- Lifting and carrying handles.

RBM4



Installation axis
(Standard)



Android APP

! Specifications subject to change without previous notice.

Specifications

Response encoding:	A-2, 0-9, SW-SE-NE-NW Morse codes, according IMO A530.
Output power:	Typical 1W (X and S bands).
Response delay:	<700 ns (X and S bands).
Speed response (each band):	10 KHz (X and S bands).
Azimuth response:	360°.
Communications and programming:	RS-232 serial port. 3 nos. status logic outputs. 1 no. control logic input.
Programmable activity:	0 to 60 seconds.
Programmable idle mode:	0 to 60 seconds.
Side-Lobe Suppression (SLS):	Advanced.
Temperature range:	From -40° to +70°C.
Materials:	Aluminium and polyamide.
Watertightness degree:	IP 68.
Weight:	< 10 kg.
Fixings:	4 nos. Ø16 drill holes in a 200 mm diameter.

Frequency range

X band:	9,300 - 9,500 MHz.
S band:	2,900 - 3,100 MHz.

Receptor sensitivity (adjustable)

X band:	-50 dBm.
S band:	-50 dBm.

Antenna

Broadcasting uniformity:	X Band: -4 dBi ±2 dB Horizontal over 360° (horizontal). S Band: -2 dBi ±0.5 dB Horizontal.
Vertical divergence:	X Band: 26°. S Band: 34°.

Polarisation

X band:	Horizontal.
S band:	Horizontal and vertical.

Power supply range

Range:	From 9 to 36 V d.c.
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Power consumption

Average nominal:	120 mA @ 12 V (1,44 W).
Maximum (X+S):	1.400 mA @ 12 V (16,8 W).
Idle:	<0,1 W.

Options

- ATEX version, RBM4-EX.
- Interface module for telecontrol.
- Plastic basement.

Accessories

- Programming cable.
- Power cable.
- User manual.
- APP for mobile phone (Android).

