



OVERVIEW

The Phalcon-EX-SS Zone 1 Racon is an important all-weather aids to navigation radar beacon which provides radar range and bearing information to ships for safe and efficient navigation, 24 hours a day. The Racon is energy efficient, compact, lightweight, and designed for superior performance.

This Zone 1 Racon is ideal for offshore structures, FPSO's, navigation buoys, and CALM and SPM Buoys.

CERTIFICATIONS

- ATEX Certificate: ITS16ATEX101048X
- IECEx Certificate: IECEx ITS16.0046X
- Coding: Ex II 2 G Ex db eb mb [ibGb] IIB T5 Tamb -40°C to +55°C Gb
- Ingress Protection: IP-66

STANDARDS

- Directive 2014/34/EU, Annex II
- ITU-R M824-4
- EMC Directive 2014/30/EU:
- EN6100-6-4:2007+A1 :2011
- EN61000-6-2:2005

KEY FEATURES

- No pressurisation needed
- Extremely effective and reliable
- Frequency agile
- Side-lobe suppression (SLS)
- Automatic self-test feature
- Stainless Steel 316L base
- IALA and IMO compliant
- Proportional scaling
- Blanking
- 26 Morse code character settings
- External RS232 or RS485 port for programming
- X and S band

MECHANICAL SPECIFICATIONS

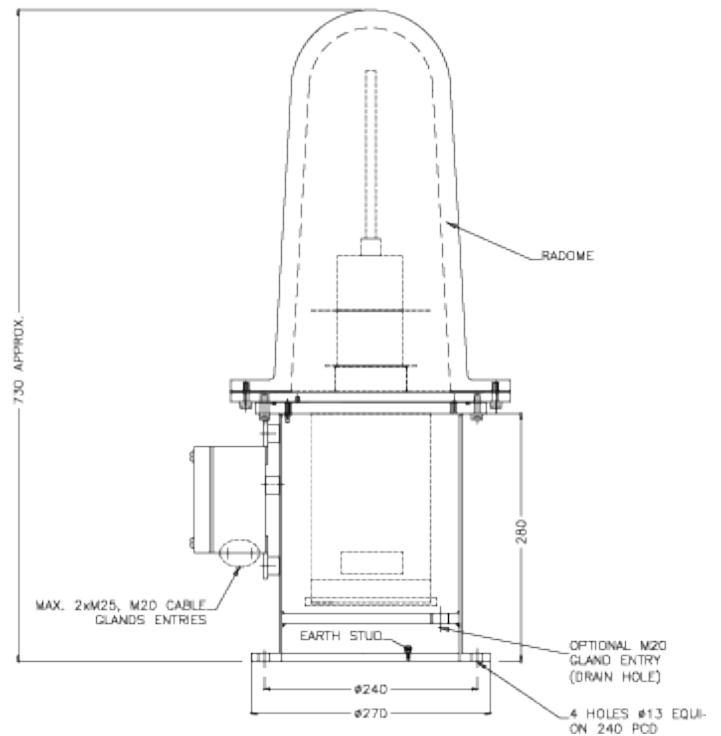
Dimensions	730x270mm
Weight	20kg
Mounting	4x M13 Bosses on 240mm PCD
Standard Accessories	2m Power and communications cable

PERFORMANCE CHARACTERISTICS

Programmable	All 26 Morse Code letters
Frequency	X-Band (9300-9500 MHz) S-Band (2900-3100 MHz)
Frequency Accuracy	±2MHz (<200ns radar pulse X-band and S-band) ±1MHz (>200ns radar pulse X-band and S-band)
Response Delay	0.5µs (X and S-band)
Receiver Sensitivity	-40dBm (X and S-band)
Polarization	Horizontal (X) and Vertical/Horizontal (S)
Antenna Gain	X-band: 5dBi, S-band 3dBi
Azimuth Response	360° (±1dB) X-band and S-band
Vertical Response	±10° (-3dB) X-band and S-band
Sidelobe Suppression	Dual token SLS (X-band and S-band)
Communications	RS-485-USB interface for programming, external diagnostics and alarm outputs

ELECTRICAL SPECIFICATIONS

Input Voltage	9-36V DC
Average Power	3W, based on traffic



**All values are subject to change without notice.*

Pharos Marine Automatic Power, Inc.
Houston, TX - USA
sales@automaticpower.com
Phone: +1-713-228-5208

Pharos Marine Automatic Power
Gray, LA - USA
rleblanc@automaticpower.com
Phone: +1-985-223-8700

Pharos Marine Automatic Power, Ltd.
London, UK
sales@pharosmarine.com
Phone: +44-20-8538-

AB Pharos Marine Pte.
Singapore
sales@pharos-api.com
Phone: +65-6747-9325