# UI GEL

#### **ITR04EX**

Explosion proof racon

Zone 1 reliable Frequency Agile Racon in accordance with IALA and IMO specifications. Side Lobe Suppression function on both X and S band and designed from stainless steel to meet the requirements of the harsh offshore environment.



Orga BV Strickledeweg 13 3125 AT SCHIEDAM The Netherlands

P.O. Box 3046 3101 EA SCHIEDAM The Netherlands

T +31 (0)10 208 5555 F +31 (0)10 437 8445 info@orga.nl www.orga.nl **Key features** 

- Reliable Frequency Agile Racon in accordance with IALA and IMO specifications
- Low cost of ownership and power consumption
- Designed to work in conjunction with the Navaid Central Control Panel (NCCP) concept
- Built-in self test and self calibration capabilities ensuring low unattended service
- Possibility to activate the side lobe suppression (SLS on X and S band) function and choose duty operation cycles (Orga service engineer only)
- Measures and answers each detected ship's radar pulse (except for the wake-up pulse) and answers simultaneous to several radars

Standards/Certification

- Complies with IALA
   recommendation; R-101 Marine
   Radar Beacons (racons), 2nd
   Edition Dec. 2004
- Complies with IMO resolution; A.615(15) Radar beacons and transponders, Nov. 1987
- Complies with ITU-R recommendation; M.824-2 Technical parameters for radar beacons, Annex 1
- Cenelec EN 50014, EN 50018, EN 50019, EN 60079-0, EN 60079-1 and EN 60079-7
- KEMA 06ATEX0018; 🗟 II 2G Ex de IIB T6,

**Performance characteristics** 

- Frequency range: X band (9,300-9,500MHz) / S band (2,900-3,100MHz)
- Reception: X and S bands independently
- Detected pulse widths: 50 to 2,000nsec
- Receiver sensitivity: -40dBm, X band (adjustable) / -35dBm, S band (adjustable)
- Response delay: 670nsec and <700nsec typical</li>
- Transmission: X and S bands
- Frequency response accuracy: +/- 1.5MHz if pulse with >200ns +/- 3.5 MHz if pulse with <200nsec</li>
- Side Lobe Suppression: Independent in X and S bands
- Transmission power: 1.0W minimum, X band / 1.0W minimum, S band
- Code answers: Programmable, 15 letters of Morse code in compliance with IMO A.530(13)
- Answer duration: Selected by user (6 to 60microsec)
- Duty cycles: Programmable, active from 0 to 60sec, idle from 0 to 60sec

**Electrical characteristics** 

- Operating Voltage: 10 to 32Vdc
- Power consumption: Max. 15W peak
- Stand-by current: Max. 20mA @ 12Vdc (with X and S bands in operation)
- Listening current: Max. 100mA @ 12Vdc (with X and S bands in operation)
- Operating current: Max. 1300mA @ 12Vdc (with X and S bands in operation)

## **ITR04EX**

Explosion proof racon

#### continued

**Physical characteristics** 

- Dimensions (L x W x H): 379 x 268 x 856mm
- Weight: 30kg
- Degree of protection: IP66
- Operating temperature range:
- -20°C to +40°C
  Material housing: stainless steel 316 and impact resistant synthetic antenna dome fitted with anti bird spike to provent
- with anti bird spike to prevent bird foulingMaterial junction box:
- glass-reinforced polyester

System design, control and monitoring

- All parameters are factory preset, with re-programming of the internal software in order to make future upgrades possible (Orga service engineer only)
- Default parameters: Serial link RS-232 for programming and maintenance (Orga service engineer only)
- Output logical: 3-state digital output, open collector X-band fault, S-band fault, power supply fault
- Logical input: beacon inhibition for VTS (Vessel Traffic Service)
- Antenna polarization: Horizontal and vertical polarization in S band / Vertical in X band
- Antenna gain (pan): +/- 2dB in X band and S band over 360°
- Antenna gain (tilt): +/- 3dB in X band and S band over 15°

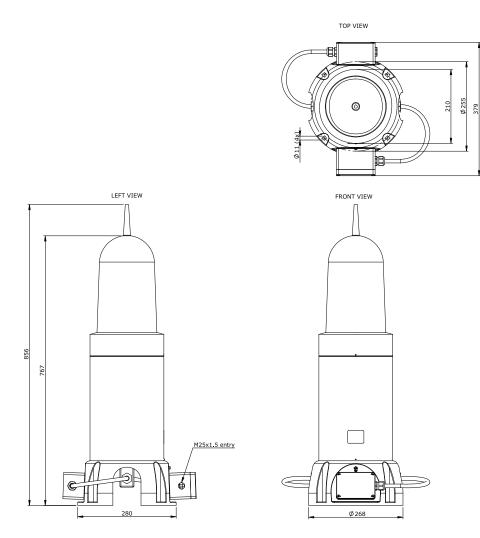
Orga BV Strickledeweg 13 3125 AT SCHIEDAM The Netherlands

P.O. Box 3046 3101 EA SCHIEDAM The Netherlands

T +31 (0)10 208 5555 F +31 (0)10 437 8445 info@orga.nl www.orga.nl

### **ITR04EX**

Explosion proof racon



Orga BV Strickledeweg 13 3125 AT SCHIEDAM The Netherlands

efero.

P.O. Box 3046 3101 EA SCHIEDAM The Netherlands

T +31 (0)10 208 5555 F +31 (0)10 437 8445 info@orga.nl www.orga.nl