Oceano MT932S Series

Medium Frequency - Miniature Transponder

The MT932S series miniature transponder, designed for use down to 3 000 m water depth, is a compact, lightweight and rugged MF acoustic transponder/responder, which makes it an ideal tool for AUV, ROV, and tow fish tracking operations. The MT932S series miniature transponder is a versatile unit easy to use and can be configured to suit any kind of underwater vehicle.

Developed from the iXblue new generation electronics and using iXblue well established wide spectrum technology, it is designed to operate with the Gaps long range and fully integrated MF-USBL acoustic positioning systems.

MT932S series is featuring an omnidirectional transducer and it is fitted with internal rechargeable battery pack but it can also be operated from external power supply voltage.

MT932S series is available with integral transducer or with split head (remote transducer).



FEATURES

- \cdot Fully compatible with Gaps USBL system
- \cdot Compact and rugged design
- 316L SS body with polyurethane coating, 3 000 m depth rated (dual-use good, submitted to export license)
- Medium frequency M-FSK chirp transmit signals
- Field selectable sound pressure level (188 dB default, 191 dB or 185 dB)
- Integral omni-directional acoustic transducer with protective cage
- Acoustic interrogation channel field selectable among 4 tonal frequencies
- Transponder and responder operating modes
- Responder mode reverts automatically to transponder mode after
 25 seconds delay
- Full configuration and set-up via serial port by PC-windows[™] based MMI software
- External ON / OFF plug
- · Long life Ni-MH rechargeable battery
- External power supply (15-30Vdc, 15 W peak transmitting / 30 W charging Ni-MH batteries)
- Micro Subconn 8-way connector for external power supply and responder signal inputs
- Supplied with charging / interface adaptator and responder interface cable.

OPTIONS

- \cdot Remote acoustic transducer configuration
- · 1000 m depth housing
- Provisions for pressure sensor.

APPLICATIONS

- ROV tracking
- AUV tracking
- Tow fish USBL tracking



TECHNICAL SPECIFICATIONS

General

| Operating temperature | -5°C to +40°C |
|-----------------------|---|
| Storage temperature | -20°C to +50°C |
| Shipping | Plywood transit case, 680 x 280 x 210 mm, 14 kg |

Electrical

| Transducer beam pattern | Omnidirectional | |
|------------------------------------|---|--|
| Receiving channels | 1 tonal channel, field selectable among 4 (19.5, 20, 20.5 and 21 kHz) | |
| Transmit frequency band | 21.7 to 30.3 kHz, 12 M-FSK wide-spectrum codes, 10 ms width | |
| Transmit source level | 188 ± 4 dB ref. 1µPa @ 1 m (default), 191 dB or 185 dB level field selectable | |
| Internal battery | Long life Ni-MH rechargeable battery | |
| Operating life | 4 months | |
| Number of Replies (@ 20°C) | 100,000 (@ 188 dB ref. 1µPa @ 1m transmit level) | |
| External power supply | 15 - 30 Vdc, 30 W peak | |
| Interface connector | Micro Subconn 8 pins female | |
| Interface pigtail cable (3 m long) | P/n SCA00092 (upon drawing 9300218) | |
| | | |

Mechanical

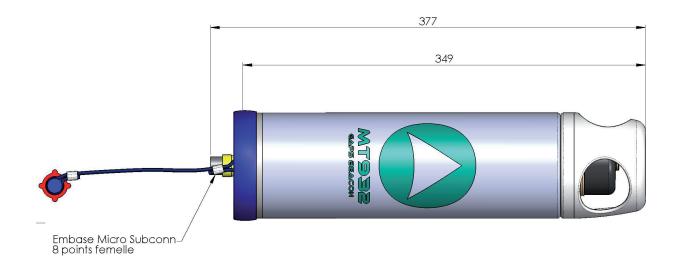
| Construction | 316L stainless steel body with polyurethane coating |
|--------------|---|
| Depth rating | 3 000 m |

Dimensions

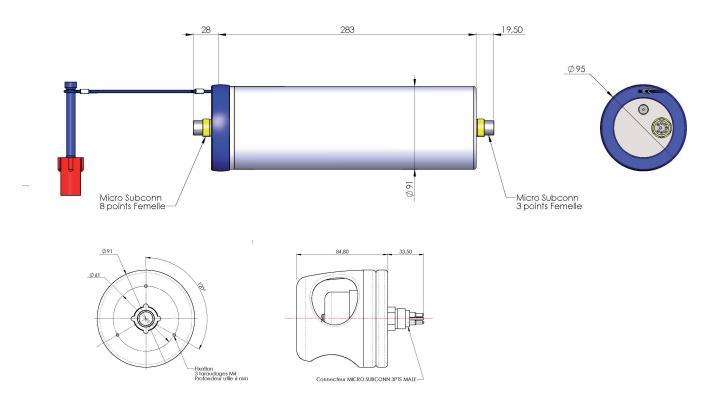
| Model | MT932S-R | MT932S/HD-R |
|------------------------------|---|---|
| Ordering part number | KAA00158 | KAA00157 |
| Drawing number | 4459300 | 4459310 |
| Transducer type | Integral transducer | Remote transducer PET962S (p/n KAA00178 / drawing 9400067) with 3 m long interconnect cable (p/n FCS00010 / drawing 9300212) |
| Container dimensions | L=349 mm without connector L=377 mm with connector Dia.=91 mm | L=283 mm without connector L=331 mm with connector Dia.=91 mm |
| Fransducer dimensions | | H=84 mm without connector Dia.=91 mm |
| Overall weight | 5.7 kg (air) 3.8 kg (water) | 7.0 kg (air) 4.4 kg (water) Including transducer and cable |
| | | |



MT932S-R Mechanical drawing



MT932S/HD-R Mechanical drawing



Specifications subject to change without notice.

contact@ixblue.com | www.ixblue.com EMEA: +33 1 30 08 88 88 | Americas: +1 781 937 8800 | APAC: +65 6747 4912

