

Oceano MT912S Series

Medium Frequency - Miniature Transponder



The MT912S series mini transponder, designed for use down to 1 000 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 MT912S 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. MT912S 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.

MT912S series is available with integral transducer or with split head (remote transducer).

Key Features

- Fully compatible with Gaps USBL system
- Compact and rugged design
- 316L SS body with polyurethane coating, 1 000 m depth rated (free to export, no need of 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 adaptor and responder interface cable.

Options

Remote acoustic transducer configuration
 3 000 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, 11 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)

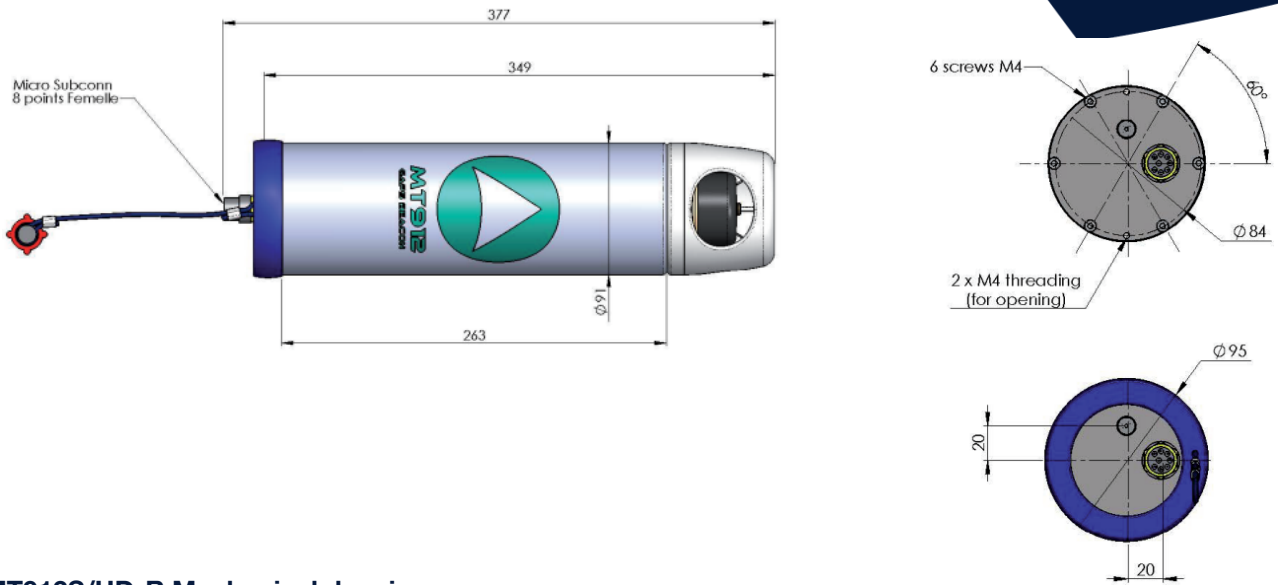
Mechanical

Construction	316L stainless steel body with polyurethane coating
Depth rating	1 000 m

Dimensions

Model	MT912S-R	MT912S/HD-R
Ordering part number	KAA00156	KAA00155
Drawing number	4459100	4459110
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=330 mm with connector Dia.=91 mm
Transducer dimensions		H=84 mm (3.3'') without connector Dia.=91 mm (3.6'')
Overall weight	4.4 kg (air) 2.3 kg (water)	5.6 kg (air) 3.0 kg (water) Including transducer and cable

MT912S-R Mechanical drawing



MT912S/HD-R Mechanical drawing

