

# 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. 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 & BENEFITS

- 4000m operating range
- Fully compatible with Gaps USBL system
- Compact and rugged design
- 3,000 m depth rated
- Medium frequency M-FSK chirp transmit signals
- Integral omni-directional acoustic transducer with protective cage
- 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

### APPLICATIONS

- ROV tracking
- AUV tracking
- Tow fish USBL tracking

### OPTIONS

- Remote acoustic transducer configuration

### DESIGNED FOR

- Gaps M7

## TECHNICAL SPECIFICATIONS

### General

Operating range	4,000 m*
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
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

### Electrical

Internal battery	Long life Ni-MH rechargeable battery
Operating life	4 months
Number of Replies (@ 20 °C)	100,000 (@ 188 dB ref. 1Pa @ 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

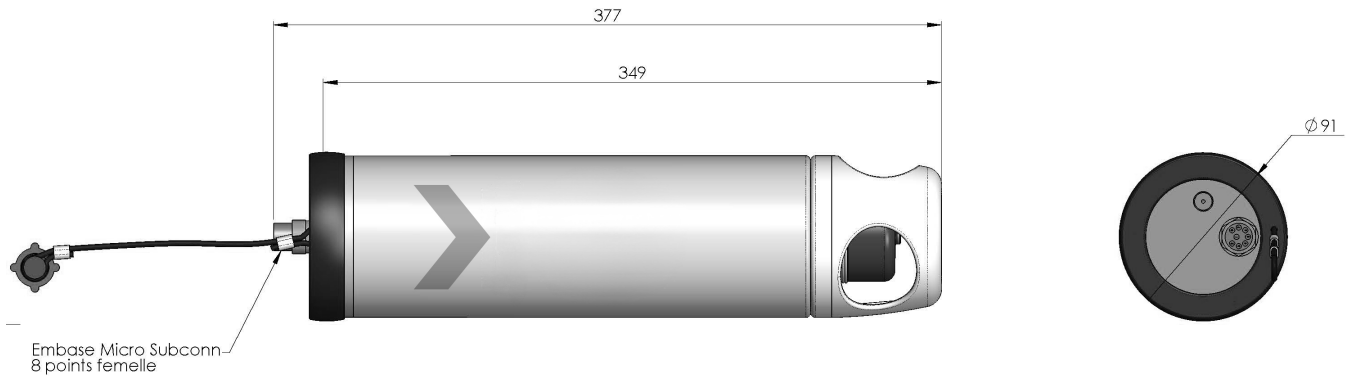
Construction	316 L stainless steel body with polyurethane coating
Depth rating	3,000 m

### Dimensions

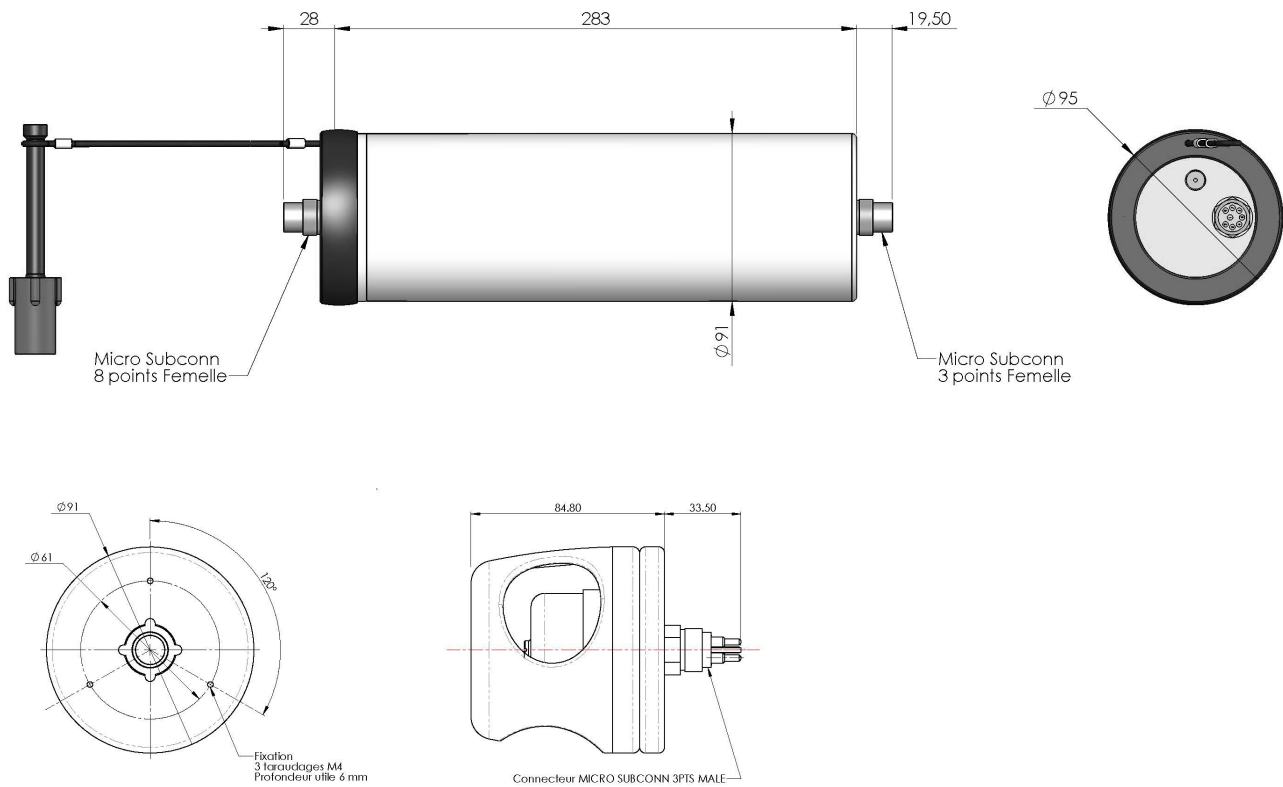
Model	MT932S-R	MT932S/HD-R
Ordering part number	KAA00158	KAA00157
Drawing number	4459300	4459310
Transducer type	Integral transducer	Remote transducer PET962S (p/n KAA00178 / drawing 9400067) with 3 m long interconnect cable (p/n FCS00010 / drawing 9300212)
Container dimensions	L=349 mm without connector L=377 mm with connector Dia.=91 mm	L=283 mm without connector L=331 mm with connector Dia.=91 mm
Transducer 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

- \*: positioning range with :
- Gaps , USBL system (M7 or extended range version, subject to export licence
  - surface noise level < 67 dB ref 1µPa/sqrt(Hz)

## MT932S-R Mechanical drawing



## MT932S/HD-R Mechanical drawing



Specifications subject to change without notice.