

Dual Band (MF/EHF) COMPATT Transponder

The Type 7901 Dual Band COMPATT is the latest addition to the Sonardyne's family of subsea intelligent transponders. The unit integrates the electronics of transponders in 2 different frequency bands within a single mechanical housing, designed for easy, long term deployment.

Depending on the seabed positioning accuracy and telemetry range that is required, the transponder can be operated in either Extra High Frequency (EHF) mode with relative positioning accuracy of better than +/- 5cm or in Medium Frequency (MF) mode with telemetry ranges of up to 3km. In EHF mode, telemetry ranges are up to 1km. In MF mode, relative positioning accuracies of +/- 15cm can be achieved. (Note: All ranges are subject to local levels of noise.)

The unit is depth rated to 2,500 metres and has a fully instrumented bottom endcap with acoustic release mechanism. It is compatible with existing acoustic topside calibration and navigation equipment, in the relevant frequency band.



Multi Frequency Functionality

- ☞ **COMPATT with EHF and MF frequency functions in one combined transponder.**
- ☞ **Capable of positioning either hard wired ROVNav or remote, wireless, COMPATT.**
- ☞ **Depth rated to 2,500 metres.**

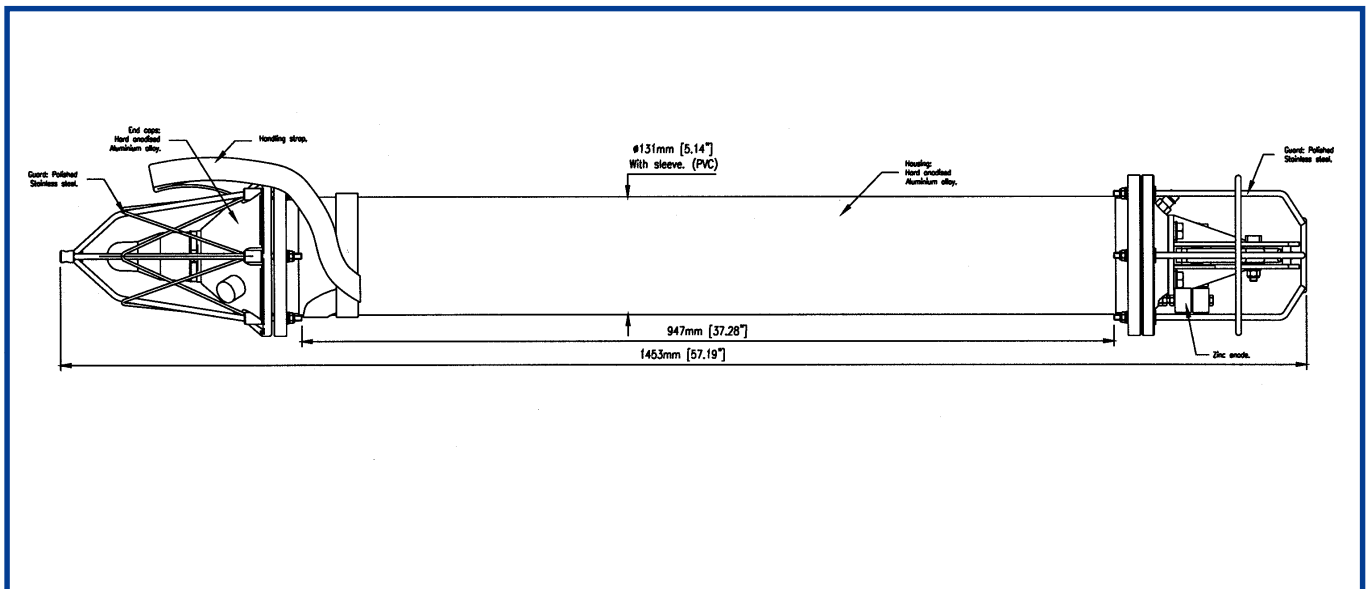
MF Functions

- ☞ **"Box-In" with Sonardyne LUSBL or HiPAP® topside equipment.**
- ☞ **Range and Direction from Sonardyne LUSBL or HiPAP® topside equipment.**
- ☞ **Long range MF baselines.**

EHF Functions

- ☞ **High accuracy baseline measurements, including metrology.**

TECHNICAL SPECIFICATION



COMPATT Type No.	7901 Dual Band (MF or EHF)	
Depth Rating	2,500 metres	
Frequency Modes	MF (18-36) kHz	EHF (50-110) kHz
Transducer Beam Shape	Omni-directional (± 130 degrees)	Omni-directional (± 130 degrees)
Typical Accuracy	0.15-1 metres	0.05-0.15 metres
Source Level	192 dB re 1 μ Pa @ 1 metre	>190dB re 1 μ Pa @ 1 metre ± 3 dB
Receiver Threshold	< 85 dB re 1 μ Pa	< 90 dB re 1 μ Pa
Battery Life (Listening)	Lithium: 818 days	
No. of Transmissions (High Power)	Lithium: 3.4m	Lithium: 17m
Operating Life (@ 4 Second Interogation in High Power)	Lithium: 112 days	Lithium: 257 days
Mechanical Construction	Aluminium Alloy Hard Anodised	Aluminium Alloy Hard Anodised
Dimensions	178mm diameter x 1453mm long	
Weight in Air/ Water	24 kg/12 kg	
Features	Pressure Relief Safety Valve 12 Channel Simultaneous Receiver Acoustic Release Mechanism	
Optional Sensors:	Depth: Temperature: Salinity:	Quartz or Strain Gauge PRT Conductivity

Copyright Sonardyne International Ltd. Specifications subject to change without notice. Issue A 8/99 (Provisional)

Sonardyne International Ltd.
Blackbushe Business Park
Yateley, Hampshire,
GU46 6GD, UK.

Tel: +44 (0)1252 872288
Fax +44 (0)1252 876100
Email: sales@sonardyne.co.uk

Sonardyne International Ltd.
Unit 14, Claymore Drive,
Bridge of Don, Aberdeen,
AB23 8GY, UK.

Tel: +44 (0)1224 707875
Fax: +44 (0)1224 707876
Email: abz@sonardyne.co.uk

Sonardyne Inc.
11210 Steeplecrest Drive,
Suite 300, Houston,
Texas 77065, USA.

Tel: +1 281 890 2120
Fax: +1 281 890 7047
Email: sales@sonardyne.com

Sonardyne Asia Pte. Ltd.
Second Floor,
35 Loyang Crescent,
Singapore 509012.

Tel: +65 542 1911
Fax: +65 542 6937
Email: sing@sonardyne.co.uk

www.sonardyne.co.uk