

# Sonardyne MK4 Dual Band 7901

The Type 7901 Dual Band Compatt 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)



## FEATURES AND BENEFITS

- Long range MF baselines
- Depth rated to 2,500 metres
- High accuracy baseline measurements, including metrology
- "Box-In" with Sonardyne LUSBL or HiPAP® topside equipment
- Range and Direction from Sonardyne LUSBL or HiPAP® topside equipment
- Compatt with EHF and MF frequency functions in one combined transponder
- Capable of positioning either hard wired RovNav or remote, wireless, Compatt
- Compatible with existing acoustic topside calibration and navigation equipment, in the relevant frequency band

## TECHNICAL SPECIFICATION

System Property	Specification	
Depth Rating	2,500 metres	
Frequency Modes	MF (18-36) kHz	EHF (50-110) kHz
Transducer Beamshape	Omni-directional ( ±130degrees)	Omni-directional ( ±130degrees)
Typical Accuracy	0.15-1.0 metres	
Source Level	192 dB re 1 µPa @ 1 m	190 dB re 1 µPa @ 1 m ± 3dB
Receiver Threshold	< 85 dB re 1 µPa	< 90 dB re 1 µPa
Battery Life (Listening)	Lithium: 818 days	
No. of Transmissions (High Power)	Lithium: 3.4 x106	Lithium: 17 x106
Operating Life (@ 4 Second Interrogation in High Power)	Lithium: 112 days	Lithium: 257 days
Mechanical Construction	Aluminium Alloy Hard Anodised	
Dimensions	178mm diameter x 1453mm long	
Weight In Air	24kg	
In Water	12kg	
Features	Pressure Relief Safety Valve 12 Channel Simultaneous Receiver Acoustic Release Mechanism Quartz or Strain Gauge	
Optional Sensors	Depth:	
	Temperature:	PRT
	Salinity:	Conductivity

Note: Dynamic Positioning Services reserve the right to amend this specification without prior notice.