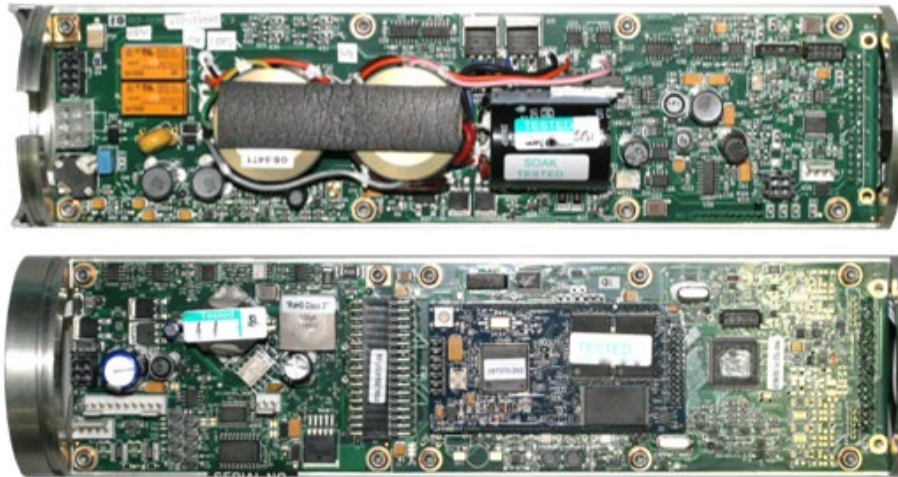


# Datasheet

## Wideband Mini Transponder (WMT) OEM



**The WMT OEM transponder is specially designed for underwater vehicles. The lightweight rechargeable transponder design allows for easy integration into autonomous vehicles and provides all the features supported by the standard WMT transponder.**

The integrated Li-ion rechargeable battery provides up to 30 days emergency standby life, allowing sufficient time to relocate and recover a lost vehicle.

The WMT includes full RS232 communications enabling channel set up, power on and off, gain, etc. to be changed by the underwater vehicle.

The WMT OEM transponder operates in the Medium Frequency (MF) band so it is compatible with Sonardyne's Ranger 2 and Mini-Ranger 2 6G® Wideband® Ultra-Short BaseLine (USBL) systems.

The WMT OEM supports the standard 6G command language (thereby simplifying development across the 6G instrument range).

The full Wideband transponder mode provides excellent USBL performance from a small, lightweight package.

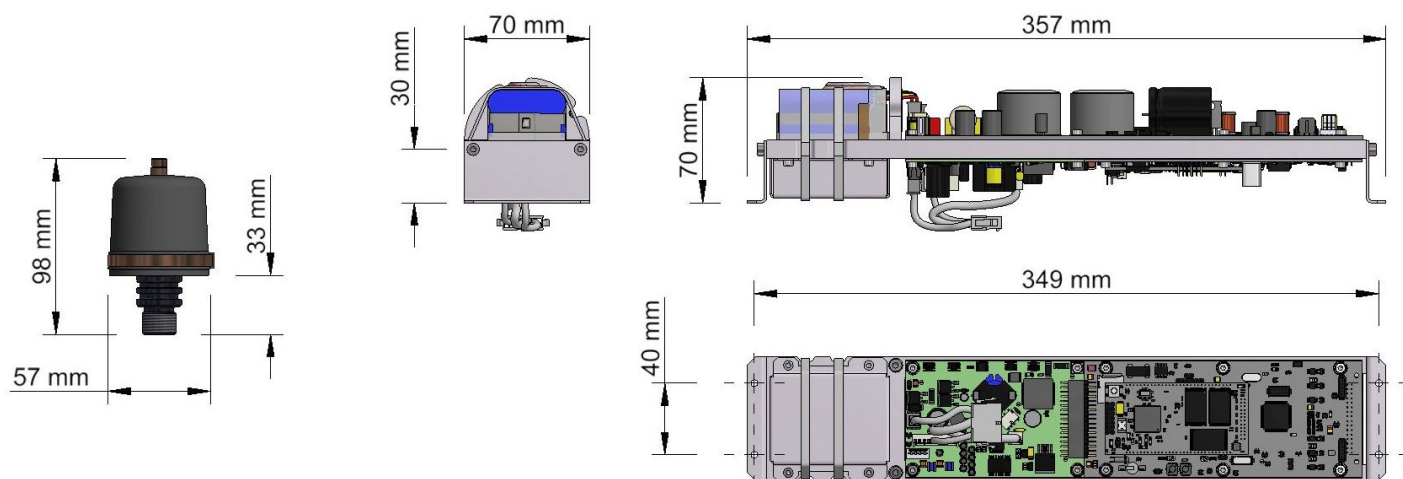
The OEM chassis can be customised to provide mounting points for specific vehicle internals and is supplied with a threaded boss mount MF omni-directional transducer for integration into a vehicle.

### Key Features

- Small size for fitting in small underwater vehicles
- Standard 6G command language to allow easy migration from other 6G transceivers or OEM solutions
- MF operation
- Compatible with Sonardyne Ranger 2 and Mini-Ranger 2 USBL systems
- Standard, oil filled, omni-directional transducer
- Full two-way Sonardyne Wideband 2 interrogation and reply – Mitigates any interference and multi-path issues
- Responder mode
- Li-ion rechargeable battery pack
- Optional pressure sensor input for depth aiding
- Operating range typically up to 3,000 m
- Full RS232 control

# Specifications

## Wideband Mini Transponder (WMT) OEM



Feature		Type 8190 WMT OEM
Operating Range		3,000 m
Operating Frequency		MF (19–34 kHz)
Transducer Beam Shape		Omni-directional $\pm 130^\circ$
Source Level (re 1 $\mu\text{Pa}$ @ 1 m)		187 dB
Communication Interface		Serial RS232
Pressure Sensor (Optional)		100 or 400 bar ( $\pm 0.5\%$ FS)
Power Supply <sup>1</sup>		24/48 V dc ( $\pm 10\%$ ) 650 mW to 6 W (depending on battery charge state) <50 W peak power when transmitting telemetry
Battery Life	Quiescent Listening	>30 days
	1 Second Ping Rate	>1 day
Transducer Wire Length <sup>2</sup>		150 mm (6")
Operating Temperature		-5 to 40°C
Storage Temperature		-20 to 55°C
Chassis Dimensions (Length x Height x Depth)	With Mounting Brackets	357 x 70 x 70 mm
	Without Mounting Brackets	335 x 69 x 70 mm
Weight in Air	Chassis	750 g
	Transducer	300 g

<sup>1</sup> Any noise on the external dc supply will have an effect on the acoustic performance of the instrument.

<sup>2</sup> It is possible to increase the transducer wire length if required; contact Sonardyne for more information.