

Datasheet

Super Sub-Mini Transponder/Responder (SSM)



Description

Sonardyne's range of Super Sub-Mini Transponder/Responders (SSMs) represent the latest design developments in the acoustic positioning of ROVs, towfish and other subsea targets.

The Type 7970 Super Sub-Mini is designed for deepwater applications up to 4,000 metres and has a high-power directional transducer with an acoustic output comparable to Sonardyne's most powerful Compatt transponders.

For improved positioning accuracy, a built-in pressure transducer provides depth; this can be telemetered to Sonardyne's USBL systems as part of the positioning cycle. A dual external channel selection control, or serial data link, allows the SSM to be used with all of the popular acoustic navigation systems. The unit's 'bilingual personality' mode automatically senses the type of positioning system interrogating it and switches mode accordingly.

In addition, Super Sub-Minis now support more Sonardyne frequencies and all HPR 300 and HiPAP® channels.

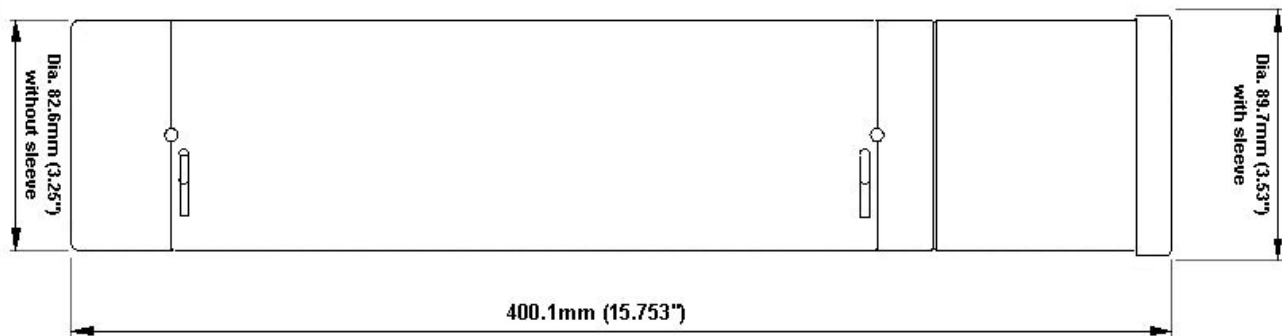
The Type 7970 is available with either 2,000 metre or 4,000 metre rated depth sensors.

Key features

- Depth telemetry capability with choice of 2,000 or 4,000 Metre rated sensors
- 1,000 Metre rated SSM also available
- Directional transducer with class leading acoustic power output
- Channel selection via dual external controls or serial data port by PC
- Long-life, fast charging NiMH battery
- Compact and rugged design
- Windows based software for test and setup

Specifications

Super Sub Mini Transponder/Responder (SSM)



Feature	Type 7970 (2,000 Metre Version)	Type 7970 (4,000 Metre Version)
Depth Rating	2,000 Metres	4,000 Metres
Operating Frequency	MF (19-36kHz)	MF (19-36kHz)
Transducer Beamshape	+/-45° (-10dB), +/-30° (-6dB), +/-20° (-3dB)	
Transmit Source Level (dB re 1µPa @1m)	202dB	202dB
Receive Sensitivity (dB re 1µPa)	<95dB	<95dB
Quiescent Life	42 Days	42 Days
Maximum Update Period	750ms	750ms
Number of Replies	Responder Unlimited	Unlimited
	Transponder 45,000	45,000
Depth Telemetry	Yes	Yes
Power Supply	Long life NiMH battery or External 24v via ROV's umbilical	Long life NiMH battery or External 24v via ROV's umbilical
Mechanical Construction	Aluminium Alloy, Hard Anodised	Aluminium Alloy, Hard Anodised
Dimensions (LxDia)	400.1mm (15.7") x 86.1mm (3.3")	400.1mm (15.7") x 86.1mm (3.3")
Weight in Air	4.5kg	4.5kg
Weight in Water	2.4kg	2.4kg

Ordering Information

Type 7970-000-01	2,000m Super Sub-Mini
Type 7970-000-02	4,000m Super Sub-Mini
Type 7970-054	Responder Lead (5 meters)
Type 7972 SSM	Charger/Interface Kit