



Super Sub-Mini Transponder/Responders Types 7970/7973



Sonardyne's range of Super Sub-Mini Transponder/Responders (SSMs)'s 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.

The Type 7973 Super Sub-Mini is depth rated to 1,000 metres and has an omni-directional beam pattern that gives a wide area of acoustic coverage.

FEATURES AND BENEFITS

Type 7970

- Depth telemetry capability with choice of 2,000 metre or 4,000 metre rated sensors
- 1,000 metre rated SSM also available
- Directional beamshape 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

Type 7973

- Depth telemetry capability with 1,000 metre rated sensor
- 2,000m and 4,000m SSM's also available (Type 7970)
- Directional beamshape with class leading acoustic power output
- Channel selection via dual external controls or serial data port by PC
- Long-life, fast charging NiMH battery

TECHNICAL SPECIFICATION

System Property	Type 7970-01	Type 7970-02	Type 7973
Frequency	MF (19-36 kHz)		MF (19-36 kHz)
Frequency Channels	All Sonardyne and HPR300/400 Channels, HiPAP @ Channels B12-B87		All Sonardyne and HPR300/400 Channels, HiPAP @ Channels B12-B87
Transducer Beam Shape	Directional ±45 degrees		Omni-Directional
Acoustic Output Power (dB re 1 µPa @ 1m)	202dB		190dB
Number of Replies			
Responder	Unlimited		Unlimited
Transponder	45,000		40,000
Depth Telemetry	Yes		Yes
Receive Sensitivity (dB re 1 µPa)	95dB		95dB
Maximum Update Period	750 ms		750 ms
Mechanical Construction	Aluminium Alloy Hard Anodised		Aluminium Alloy Hard Anodised
Dimensions	86.1mm dia. x 400.01mm long		69.9mm dia. x 399.6mm long
Weight in Air/ Water	4.5Kg/ 2.4Kg		2.7Kg/ 1.4Kg
Power Supply	Long-Life NiHM battery or external 24v via ROV's umbilical Quiescent Life 42 days 42 days		Long-Life NiHM battery or external 24v via ROV's umbilical
Mating Connections (Bulkhead Connector)	Subconn MCIL5M		Subconn MCIL5M

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