

Datasheet

Micro Compatt 6 – LBL Transponder



Description

Micro Compatt 6 is our smallest ever LBL transponder. Designed for short duration missions such as spoolpiece metrology or dynamic mobile mapping, Micro Compatt 6 is perfect for installation on Inspection-class ROVs where payload is limited.

Its small size also means that a Work-class ROV can deploy multiple units in one trip to the seabed - contributing to those all-important project time savings.

Although not as capable as its bigger brothers, Micro Compatt 6 offers you the same accurate and robust positioning that 6G is known for. Plus, its small form factor reduces offsetting errors when used with a stab and receptacle for improved metrology results. Also being a rechargeable unit, it saves you time and money on replacing depleted primary batteries.

Micro Compatt 6 operates in Sonardyne Wideband[®]2 or HPR400 series tone modes with a variety of other acoustic systems and transponders. It is also fully compatible with Sonardyne's family of survey quality LBL and USBL navigation systems.

Micro Compatt 6 offers significant time saving using faster and more robust Sonardyne Wideband[®]2 acoustic ranging and telemetry protocols. This makes any system operating with Micro Compatt 6 significantly easier to operate therefore de-risking operations, reducing vessel time and reducing training requirements for offshore personnel.

Sonardyne Wideband 2 advanced signal processing offers improved acoustic performance in challenging conditions, longer range, improved multipath rejection around structures and real-time range diagnostics for quality control. Sonardyne Wideband 2 also reduces the interference to and from adjacent Sonardyne and other acoustic positioning systems.

Micro Compatt 6 is available as a omni-directional unit with a 3,000 m depth rating.

Typical Applications

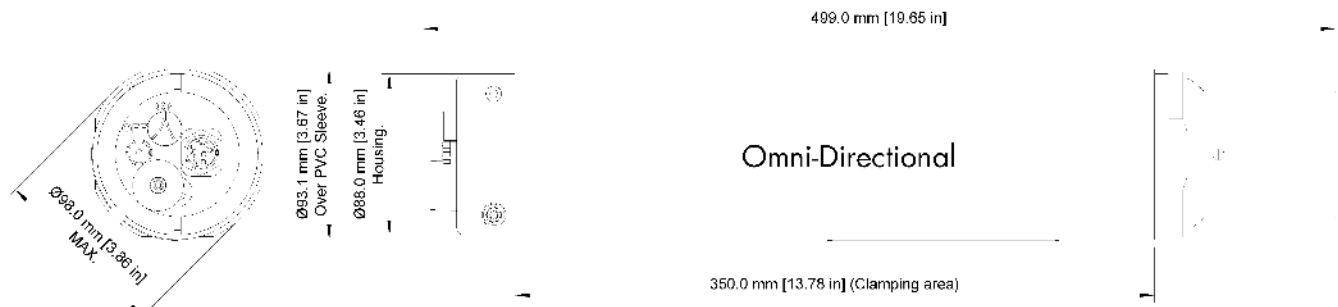
- Spoolpiece Metrology
- Dynamic Mapping operations
- Use on inspection class vehicles

Key Features

- Incorporates Sonardyne Wideband[®]2 acoustic navigation and telemetry technologies
- Compatible with both Fusion LBL and Ranger 2 USBL positioning systems
- Robust performance in shallow water and reverberant environments around structures
- Real time diagnostics available on ranges to enable quality control
- More than 500 unique Sonardyne Wideband 1 and 2 addresses
- Sonardyne Wideband 1 and HPR400 navigation compatible
- Internal Pressure sensor
- Internal rechargeable battery
- Field proven
- On/off switch

Specifications

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Features		Type 8242-3111
Depth Rating		3,000 m
Frequency Band		MF (19–34 kHz)
Transducer Beam Shape		Omni-directional
Source Level	High Power	187 dB
(re 1 µPa @ 1 m)	Low Power	181 dB
Tone Equivalent Energy (TEE)* WBv2+	High Power	193 dB
	Low Power	187 dB
Range Precision		Better than 15 mm
Depth Sensor		± 0.5% full scale
Communications Interface		RS232 (9,600–115,200 baud)
External Supply Voltage		24 or 48 V DC (± 10%)
External Power	Sleep	<300 mW
	Wideband Listening	<500 mW
	Battery Charging	6 W
	Peak (During Transmission)	<50 W
Battery Life	Listening	30 Days
(Li-ion 15 V)	Continuous 5 Sec Interrogation	Approx 6 days at low power
Mechanical Construction		Anodised aluminium alloy and plastics
Operating Temperature		-5 to 40°C
Storage Temperature		-20 to 55°C
Dimensions (Diameter x Length)		93 x 499 mm
Weights in Air/Water**		5.1/2.2 kg

*TEE – WBv2+ signals are 4x the duration of Sonardyne tone signals (WBv1 & WBv2 are 2x). The TEE figure shows the operational performance when comparing wideband and tone systems.

**Estimated Weights.