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.

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
  - 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
  - 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.