

Datasheet

Compatt 6 Mega – Long Life USBL Transponder



Description

The Type 8312 Compatt 6 Mega is a long endurance USBL transponder based on the field proven technology of Compatt 6 with a form factor that can provide up to three times the battery life of the standard model. The ultra-long battery life enables Compatt 6 Mega transponders to be left on the seabed for longer, with the potential to provide vessel positioning throughout all drilling and construction activities, resulting in significant set-up and operational cost savings during extended acoustic positioning campaigns.

The Type 8312 Compatt 6 Mega is rated to 3,650 metres (12,000 feet); it has a hard anodised aluminium alloy housing and a protective polyurethane sleeve.

The design improves reliability for long life deployments by omitting any bulkhead connectors. Configuration and pre-deployment checks are done remotely using Sonardyne's handheld iWand instrument.

The electronics are separately enclosed and secured in the transducer endcap to allow servicing of the instrument without the need for transporting the complete unit.

Up-to three standard Compatt 6 lithium or alkaline batteries can be fitted inside the Compatt 6 Mega, giving over 10 years of listening life.

A non-penetrating battery disconnection switch allows for ease of transportation and deployment, and an integrated MEMS based inclinometer provides tilt information; both come as standard.

Compatt 6 Mega is fully compatible with all of Sonardyne's latest 6G[®] equipment including Sonardyne's Marksman LUSBL and Ranger 2 USBL systems. Sonardyne Wideband acoustic ranging and telemetry provides high accuracy positioning, robust performance in noisy and multipath conditions and easy set-up and use. With hundreds of channels, less interference to and from other acoustic systems and multi-user capability, Sonardyne Wideband technology enables reliable multi-user, multi-vessel capability.

This transponder is particularly suited for use by drilling and production vessels that require fast acoustic updates to stay on location for extended periods of time.

Typical Applications

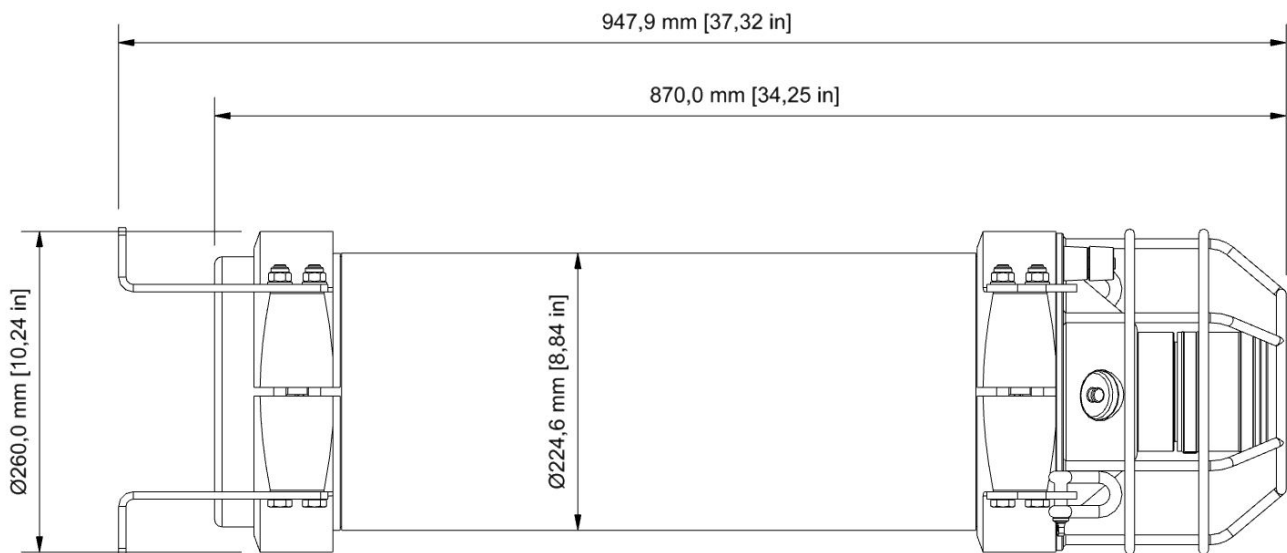
- DP vessel positioning
- Rig positioning

Key Features

- Ultra long-life semi-permanent transponder – reduces operational costs for long drilling campaigns
- Battery disconnection switch – easier (and faster) to transport, deploy and store
- Supports multiple users and simultaneous operations
- Sonardyne Wideband and HPR400 USBL mode compatible
- More than 500 unique Sonardyne Wideband 1 and 2 channels
- Robust acoustic performance in noise and multipath conditions
- Real time diagnostics available on ranges to enable quality control
- Reduced mutual interference to further improve simultaneous ops
- Automatic power-down if not used for a programmable period
- Standard sensors: MEMS inclinometer
- Can be installed into transponder frames or directly onto the seabed using a mud mat
- Designed for ROV handling
- Based on field proven electronics

Specifications

Compatt 6 Mega Transponder



Features		Type 8313-4183
Depth Rating		3,650 Metres (12,000 Feet)
Operating Frequency		MF (19-34 kHz)
Transducer Beam Shape		Directional
Transmit Source Level (dB re 1 μ Pa @ 1 m)		190-202 dB (4 Levels)
Tone Equivalent Energy (TEE)*		196-208 dB
Receive Sensitivity (dB re 1 μ Pa)		80-120 dB (7 Levels)
Ranging Precision		Better Than 15 mm
Number of Unique Addresses Wideband 1 & 2		>500
Inclinometer (Tilt Sensor)		Standard
Range $\pm 90^\circ$, Accuracy: $\pm 1^\circ$		
Battery Life (Listening)	Alkaline	>2500 Days
	Lithium	>4500 Days
Dimensions; Length x Diameter		948 mm x 260 mm
Weight in Air (Water)**		55 kg (28 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.