

Datasheet

Compatt 5 Wideband Transponder - Standard



Description

Faster set up and calibration, greater equipment utilisation and reduced risk. These are just some of the cost saving benefits of the latest range of Compatt 5 Wideband transponders from Sonardyne.

All Medium Frequency Compatt 5s now incorporate Wideband Technology which uses advanced digital signalling techniques to dramatically improve the performance of acoustic positioning, navigation and telemetry systems.

The faster and more rugged wideband telemetry scheme supported by Compatt 5, enables baseline measurement and calibration data to be acquired faster and more reliably, allowing users to begin work sooner.

The Types 8000 Omni-Directional, 8003 Directional and 8103 Deep Directional Compatt 5 are 'Standard' length transponders that are suited to a wide range of subsea applications. The design offers the perfect balance between size, acoustic output and battery life.

Options include 3,000, 5,000 and 7,000 metre depth ratings, lithium or alkaline battery packs, high accuracy inclinometers and power for external sensors. For the first time, Compatt 5 endcaps also now have the option of a combined sound velocity and acoustic release mechanism.

Key Features

- Omni or Directional transducers
- MF operating frequency
- Depth rated to 3000 Metres (Options for 5000 Metres and 7000 Metres)
- Incorporates Sonardyne's latest Wideband Technology
- Multiple operating modes; tone burst and wideband
- Hundreds of operating channels allowing truly independent acoustic operations
- Offers integrated positioning and telemetry
- Highly reliable release mechanism
- Faster remote tracking of seabed structures
- Easy to upgrade
- Standard Sensors - depth & temperature
- Optional Sensors - Quartz Pressure Sensor, Inclinometer and Sound Velocity sensors

Specifications

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Feature	Type 8000	Type 8003	Type 8103
Depth Rating	3,000 Metres	3,000 or 5,000 Metres	7,000 Metres
Operating Frequency	MF (18–36kHz)	MF (18–36kHz)	MF (18–36kHz)
Transducer Beamshape	Omni-Directional	Directional	Directional
Transmit Source Level (dB re 1µPa @ 1m)	185-192dB (3 Levels)	190-202dB (3 Levels)	190-202dB (3 Levels)
Receive Sensivity (dB re 1µPa)	90-120dB (4 Levels)	80-120dB (4 Levels)	80-120dB (4 Levels)
Relative Positioning Accuracy*	±5cm	±5cm	±5cm
Number of Unique Addresses (Wideband)	224	224	224
Number of Unique Addresses (Tone)	All Sonardyne/Simrad	All Sonardyne/Simrad	All Sonardyne/Simrad
Battery Life (Listening, Disabled)	833 days (Alkaline) 1390 days (Lithium)	833 days (Alkaline) 1390 days (Lithium)	833 days (Alkaline) 1390 days (Lithium)
Safe Working Load (4:1)	250kg	250kg	250kg
Dimensions (LxDia)	1035mm x 135mm	1005mm x 135mm	1012mm x 135mm
Weight In Air	22.8kg	22.8kg	26kg
Weight in Water	11.6kg	11.6kg	13.6kg

Endcap Sensors and Options

Temperature (±0.1°C)	Standard	Standard	Standard
Tilt Switch (±30-45°)	Standard	Standard	Standard
Strain Gauge Pressure Sensor (±0.1%)	Standard	Standard	Standard
High Precision Strain Gauge (±0.1%)	Optional	Optional	Optional
Quartz Pressure Sensor (±0.01%)	Optional	Optional	Optional
1350m, 2000m, 3000m, 6000m			
High Accuracy Inclinometer	Optional	Optional	Optional
Range: ±90°, Accuracy: ±0.05° over 0 - ±15°; ±0.2° over 0 - ±45°			
Sound Velocity (±0.06m/s)	Optional	Optional	Not Available
Release Mechanism	Standard	Standard	Standard
Power for External Sensors	Standard	Standard	Standard
Gyro Input	Standard	Standard	Standard

*Depends on knowledge of sound speed