

Datasheet

Dynamic Positioning Transponder (DPT)



Description

The Types 8124, 8126 and 8129 DPT's are full sized transponders designed specifically for seabed deployment or large target tracking.

Available in 3,000 metre rated omni-directional or directional transducers, DPTs are equipped with a rugged spring assisted release mechanism, depth sensors and advanced power and gain controls if required.

For deep-water towfish tracking, the Type 8129 DPT is a midi-sized unit with a high power super directional transducer that is depth rated to 7,000 metres.

DPTs support Sonardyne Wideband™ signals, tone frequencies and all HPR 300/HiPAP® channels. DPT also supports Sonardyne command and control options.

Also available is the Type 8132 DPTi which is fitted with internal inclinometers to accurately monitor riser angles (see separate datasheet). The DPTi can also be used with an external inclinometer unit to monitor flex joint angles.

Key Features

- 3,000 or 7,000 metre depth rating
- Omni, Directional or Super Directional transducers
- Incorporates Sonardyne's latest Wideband™ Technology
- Multiple operating modes; tone burst and wideband
- Hundreds of operating channels allowing truly independent acoustic operations
- Highly reliable release mechanism
- Standard Sensors - depth & temperature
- Easy to set-up and test using PC software, PTT or DTU
- Responder Operation
- Accepts external DC power
- Long battery life
- Midi housing option available (Type 8129)

Specifications

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Feature	Type 8124	Type 8126	Type 8129 (Midi)
Depth Rating	3,000 Metres	3,000 Metres	7,000 Metres
Operating Frequency	MF (18–36kHz)	MF (18–36kHz)	MF (18–36kHz)
Transducer Beamshape	Omni-Directional ($\pm 130^\circ$)	Directional ($\pm 35^\circ$)	Directional ($\pm 20^\circ$)
Transmit Source Level (dB re 1 μ Pa @ 1m)	184-193dB (3 Levels)	194-204dB (3 Levels)	195-207dB (3 Levels)
Receive Sensitivity (dB re 1 μ Pa)	90-125dB (4 Levels)	85-130dB (4 Levels)	80-120dB (4 Levels)
Relative Positioning Accuracy*	± 5 cm	± 5 cm	± 5 cm
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)	417 days (Lithium)
Dimensions (LxDia)	1035mm x 135mm	1005mm x 135mm	755 x 135mm
Weight In Air	22.8kg	22.8kg	tba
Weight in Water	11.6kg	11.6kg	tba
Temperature Sensor ($\pm 0.1^\circ\text{C}$)	Standard	Standard	Standard
Tilt Switch Sensor (± 30 - 45°)	Standard	Standard	Standard
Strain Gauge Pressure Sensor ($\pm 0.1\%$)	Standard	Standard	Standard
Release Mechanism	Standard	Standard	Fitted or not fitted
Safe Working Load (4:1)	250kg	250kg	250kg (Where fitted)

*Using Wideband acoustics. Depends on knowledge of sound speed