

MK 5 Compatt Transponder



FEATURES AND BENEFITS

- Smaller and lighter than Compatt 4
- A flexible platform for future expansion
- Endcaps simple to configure and change
- Firmware upgrade via PC download and Internet
- Self-test diagnostics without opening pressure housing
- Easy access to electronics for maintenance and upgrade
- Faster acquisition of sensor data by 'smart smart' sensor endcap
- Short version available for applications requiring less battery life
- Broadband signal capability for navigation and high-speed data transmission
- Flange-less exterior to simplify ROV placement in subsea frames and buckets
- Working depth increased to 3,000 metres using Compatt 4 floatation collars
- Connector for power input/output to save battery or to power external devices
- External analogue or digital sensors may be connected; RS232 data input/output
- Battery packs with improved redundancy; cell failures have less effect on operating life
- Fast, simple battery pack replacement without exposing or removing electronics from housing
- Battery pack memory chip records remaining capacity, even when removed from transponder
- Stronger guard protects transducer against impacts without degrading acoustic beam pattern

Compatt 5 is based on a totally new **electro-mechanical design** and employs the latest acoustic signal processing technology. This new platform is designed to take Compatt forward for many years **with regular upgrading of capability**, easily installed by the user. Compatt 5 is necessary to support a new acoustic architecture, utilising modern broadband signals.

Compatt 5 has been initially configured to emulate Compatt 4, whilst **offering additional functionality**, such as additional reply channels, faster telemetry, alternate CIF mode and status locking for multi-user scenarios.

TECHNICAL SPECIFICATION

Compatt Version	Type 8000 (MF)	Type 8001 (EHF)	Type 8002 (LF)	Type 8003 (MF)	Type 8004 (MF)
Frequency MF	(18-36 kHz) EHF	(50-110kHz) LF	(7.5-15kHz) MF	(18-36kHz) MF	(18-36kHz)
Transducer Beamshape	Omni-directional	Omni-directional	Omni-directional	Semi-directional ±45 degrees	Super-directional ±15 degrees
Depth Rating	3,000 metres Options for deepwater	2,500 metres Options for deepwater	3,000 metres Options for deepwater	3,000 metres Options for deepwater	3,000 metres Options for deepwater
Relative positioning accuracy	0.15-1.0m	0.02-0.15m	0.25-2.0m	0.15-1.0m	0.15-1.0m
Max. Acoustic Range	3km	1km	10km	5km	7km
Acoustic Output Power dB re 1 µPa @ 1m	185-192dB (3 levels)	183-190dB (3 levels)	188-195dB (3 levels)	195-202dB (3 levels)	200-208dB (3 levels)
Receive Threshold dB re 1 µPa	90-120dB (4 levels)	90-120dB (4 levels)	90-120dB (4 levels)	90-120dB (4 levels)	90-120dB (4 levels)
Battery Listening Life (Standard batt. pack)	1600 days (Alk) 2300 days (Lith)	1600 days (Alk) 2300 days (Lith)	1600 days (Alk) 2300 days (Lith)	1600 days (Alk) 2300 days (Lith)	1600 days (Alk) 2300 days (Lith)
Battery Listening Life (Short housing batt. pack)	400 days (Alk) 690 days (Lith)	400 days (Alk) 690 days (Lith)	N/A N/A	N/A N/A	N/A N/A
Weight In Air/Water (Standard Housing)	21.6Kg / 11.2Kg	21.6Kg / 11.2Kg	TBA	21.6Kg / 11.2Kg	TBA
Max. Dimensions (Standard Housing)	133mm (d) x 1035mm (L)	133mm (d) x 1035mm (L)	TBA	133mm (d) x 1035mm (L)	TBA
Endcap Sensors (Fitted as standard)	Strain gauge, PRT, Dual Axis Inclinometer and power for external sensors				
Endcap Sensors (Optional)	High accuracy Inclinometers, Quartz Pressure Sensor and Sound Speed Sensor				

Note: Dynamic Positioning Services reserve the right to amend this specification without prior notice.