Compatt 6+
USBL/LBL transponder and modem

Compatt 6+, is Sonardyne's latest generation of intelligent transponder represents a big 'plus' for your LBL, INS and USBL operations. Built using the same reliable mechanics as Compatt 6 on the outside, powered by both Wideband 2 and Wideband 3 signal processing on the inside. Compatt 6+ is used for high precision survey and construction operations in all water depths, including: spoolpiece metrology, pipeline touchdown monitoring, structure installation and dynamic positioning reference.

Compatt 6+ offers significant time saving with fast update rates (up to 1 Hz LBL tracking), all made possible using the Wideband 3 acoustic telemetry protocols.This makes any system operating with Compatt 6+ significantly easier to operate therefore de-risking operations, reducing vessel time and reducing training requirements for offshore personnel.

Specifications

Product	Compatt 6+ USBL/LBL transponder and modem
Country of origin	UK
Manufacturer	Sonardyne

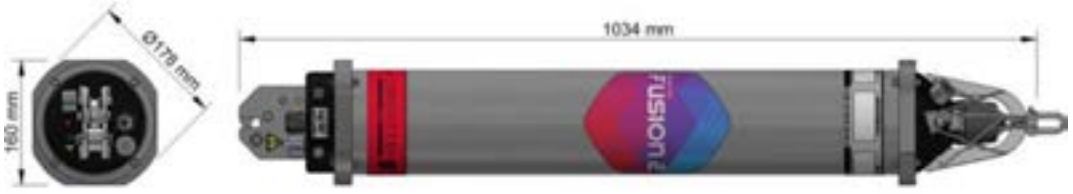
Features

- Robust performance
- Highly reliable release mechanism
- Battery disconnect fob allows quick battery disconnection
- Standard sensors – Temperature, pressure and MEMS inclinometer
- Automatic power-down if not used for a programmable period
- Optional sensors – DigiQuartz, inclinometer and sound velocity
- Multiuser support included
- Omni or directional transducer
- Sonardyne Wideband 2 and HPR 400 navigation compatible
- Real time diagnostics available on ranges to enable qualitycontrol
- Faster and easier to set-up, calibrate and operate
- Integrated modem mode with data rates from 100 to 9,000 bps
- Medium Frequency (MF) band utilising Sonardyne Wideband 2 and 3 telemetry protocols

Sonardyne Wideband advanced signal processing offers improved acoustic performance in challenging conditions, longer ranges, improved multipath rejection around structures and real-time range diagnostics for quality control. Sonardyne Wideband also reduces the interference to and from adjacent Sonardyne and other acoustic positioning systems.

The integrated communications and navigation technology allows the transponder to be used as a multipurpose modem, autonomous data logger and navigation reference transponder.

The Type 8300 Compatt 6+ is the standard length version and is based on the field proven mechanics of Compatt 6. The design offers the perfect balance between size, acoustic output and battery life. Several depth ratings are available: 3,000, 5,000 and 7,000 m, all using a hard anodised aluminium alloy with protective polyurethane sleeves.



Specifications

Feature		Type 8300-3111	Type 8300-3113	Type 8300-5213
Depth rating		3,000 m	3,000 m	5,000 m
Operating frequency		MF (20–34 kHz)	MF (20–34 kHz)	MF (20–34 kHz)
Transducer beam shape		Omni-directional	Directional	Directional
Transmit source level		187–196 dB (4 levels)	190–202 dB (4 levels)	190–202 dB (4 levels)
Tone equivalent energy (TEE)1		193–202 dB	196–208 dB	196–208 dB
Receive sensitivity (dB re 1 µPa)		90–120 dB (7 levels)	80–120 dB (7 levels)	80–120 dB (7 levels)
Number of unique Wideband 2 addresses		>300	>300	RS232, 3V3 TTL
Battery life (listening)	**Alkaline**	833 days	833 days	50 bar abs +/-0.7% FS
	Lithium	1,390 days	1,390 days	1,390 days
Safe working load (4:1)		250 kg	250 kg	250 kg
External power supply		24 V	24 V	24 V
Storage temperature		-20 to 55°C	-20 to 55°C	v
Operating temperature		-5 to 40°C	-5 to 40°C	-5 to 40°C
Weight in air/water		23.8/11.8 kg	27.0/14.0 kg	29.0/15.0 kg
Dimensions length x diameter	**With sensor guard** **Without sensor guard**	1,034 x 200 mm 1,034 x 178 mm	1,018 x 200 mm N/A	1,018 x 200 mm N/A
Ranging precision		Better than 15 mm	Better than 15 mm	Better than 15 mm

Endcap sensors and options

Feature	Type 8300-3111	Type 8300-3113	Type 8300-5213
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 (±0.01%) Presens or Keller	Optional	Optional	Optional
Paroscientific DigiQuartz pressure sensor 1,350 m, 2,000 m, 4,130 m, 6,800 m (±0.01%)	Optional	Optional	Optional
Inclinometer (tilt sensor) range ±90°, accuracy: ±1°	Standard	Standard	Standard
High accuracy inclinometer range ±90°, accuracy: ±0.05° over 0 - ±15°; ±0.2° over 0 - ±45°	Optional	Optional	Optional
Sound velocity sensor ±0.02 m/s accuracy under calibration conditions	Optional	Optional	Optional
Release mechanism	Standard	Standard	Standard
Power for external sensors	Standard	Standard	Standard
Gyro input	Standard	Standard	Standard