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1000 Series Seabed Beacon



Key Features

- AAE proprietary Sigma bi-directional Spread Spectrum technology
- Quick, easy configuration
- Survival depth to 4,000m as standard

1000 Series Seabed Beacons have long life battery options that make them ideal for long term reference points, USBL calibration beacons and Dynamic Positioning reference markers.

1000 Series Seabed beacons incorporate Applied Acoustics' proprietary Sigma acoustic protocols proven for use with AAE's USBL tracking systems, other manufacturers' USBL systems operating with wide bandwidth transmissions as well as those using 'narrow band' tone signalling.

Applications

- General purpose tracking and positioning applications for deeper water applications or in an acoustically challenging environment
- Static and dynamic operations

Technical Specification

MODEL TYPES - PHYSICAL SPECIFICATION

Housing material; Hard anodised aluminium with protection cages

	Beam Pattern	SPL	Survival Depth	Diameter	Length	Weight air/water
1059	±90°	188dB	4000m	125mm	1095mm	22.84kg/11.02kg
1055	±45°	195dB	4000m	125mm	1095mm	22.84kg/11.02kg
1055H	±45°	200dB	4000m	125mm	1095mm	22.84kg/11.02kg
High Power						

ELECTRICAL SPECIFICATION

Battery

Battery type Rechargeable. NiMH as standard

Listening life 120 days



1000 Series Seabed Beacon Technical Specification

Operational life, AAE Spread Spectrum Dependent on pulse rate and operational mode.

1059: 1800 hours at 1.0pps1055: 1200 hours at 1.0pps1055H: 500 hours at 1.0pps

Operational life reduced when used with non AAE USBL systems

Configuration

Transmit frequency range 24 – 33.5kHz Receive frequency range 17 - 31kHz

Turn around time 15/30/60/100ms dependent on channel selection Transmit pulse width 1.5/3.0/10ms dependent on channel selection

External Inputs

Connector type MCBH10M 10-way connector

Responder key + 5 to 25 Volts

External power 22 to 35 Vdc@120mA

Charge 1083 Multi-Charger, typical cycle charge time, 20 hours.

USBL COMPATIBILITY

AAE 1000 Series beacons use Tone, Chirp, MFSK, DSSS and FHSS as transmission/reception protocols, allowing cross-compatibility with many USBL systems, including:

AAE Nexus Sigma spread spectrum systems

iXblue GAPS USBLKongsberg HPR/HiPAPORE/Edgetech USBLSonardyne USBL

OPTIONS

- Compatibility with USBL systems not listed above
- Non-rechargeable batteries (alkaline)
- Depth sensors 100m/300m/1,000m/2,000m/4,000m (adds D suffix to model number)
- Digital depth transmission when used with AAE Nexus USBL systems
- Floatation collar





United Kingdom