

1000 Series Fatboy Beacon



1000 Series Fatboy Beacons are ideal for deep water operations, noisy and acoustically challenging environments, and applications requiring long operating ranges.

Fatboy transponders incorporate Applied Acoustics' proprietary Sigma acoustic protocols, allowing extremely stable and reliable performance with Nexus USBL systems, whilst maintaining compatibility with almost all of the industry's other standard USBL systems.

Key Features

- AAE proprietary Sigma bi-directional Spread Spectrum technology
- Quick, easy configuration
- On-board fast charger for typical 8 hour charge time
- Survival depth to 4000m as standard
- Options for use with remote transducers

Applications

- General purpose tracking and positioning applications in deeper water or challenging environments
- Static and dynamic operations e.g. ROV, sidescan sonar

Technical Specification

MODEL TYPES – PHYSICAL SPECIFICATION

Housing material; Hard anodised aluminium, with clear protection sleeve and stainless steel cage

	Beam Pattern	SPL*	Survival Depth	Diameter	Length	Weight in air
1062	±15°	208dB	4000m	130mm	652mm	14.82kg/6.62kg
1065	±45°	203dB	4000m	130mm	652mm	14.82kg/6.62kg

*Effective SPL is 5dB less when used with iXblue GAPS USBL systems

ELECTRICAL SPECIFICATION

Battery

Battery type Rechargeable. NiMH as standard

Listening life 90 days

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Operational life, AAE Spread Spectrum	Dependent on pulse rate and operational mode
	1062: 110 hours at 1.0pps
	1065: 110 hours at 1.0pps
	Operational life reduced when used with non Applied Acoustics' 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	MCBH5M 5-way connector
Responder key	+ 5 to 25 Volts
External power	22 to 35 Vdc@120mA
Charge	Onboard fast charger for 4 hour charge, typical. Activated and monitored via 1082 Smart Switch or 1083 Multi-Charger

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	Spread Spectrum systems
AAE Easytrak	All models, tone systems
iXblue	GAPS USBL
Kongsberg	HPR/HiPAP
ORE/Edgetech	USBL
Sonardyne	USBL

OPTIONS

- Compatibility with USBL systems not listed above
- Non-rechargeable batteries (alkaline)
- Remote transducer (supplied with Model BCN-1060 electronic bottle); RM90, omni-directional rated to 1500m. RM45, directional, rated to 2000m. RM15, directional, rated to 4000m. Interconnect cable for each option, 2m standard
- Depth sensors 100m/300m/1000m/2000m/4000m (adds D suffix to model number)
- Digital depth transmission when used with AAE Nexus USBL systems



APPLIED ACOUSTICS
Underwater Technology
An AAE Technologies Group Company

Due to continual product improvement, specification information may be subject to change without notice.
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