

1019 Mini Beacon



1000 Series Mini 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 signaling.

With an industry standard 5-pin connector, the beacons are quick and easy to configure using the 1082 Smart Switch or 1083 Multi-Charger that also activate and monitor the charging of the battery pack.

Specifications

Product	1019 Mini Beacon
Country of origin	UK
Manufacturer	Applied Acoustic Engineering Ltd
Material	Aluminum

Key features

- AAE proprietary Sigma bi-directional spread spectrum technology
- Quick and easy configuration
- Directional or omni-directional beam pattern options available
- High power option model to operate longer ranges
- Options for use with remote transducers
- Externally configurable as transponder, responder or pinger

Model types

Model	Beam Pattern	SPL*	Survival depth	Diameter	Length	Weight in air / Water
1015	±45°	194dB	2000m	74mm	410mm	3.08kg/1.46kg
1015H	±30°	196dB	2000m	74mm	410mm	3.08kg/1.46kg
1019	±90°	188dB	1500m	74mm	395mm	2.88kg/1.38kg
1022	±20°	202dB	4000m	95mm	418mm	5.03kg/2.75kg

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

1015	150 hours at 1.0pps
1015H	100 hours at 1.0pps
1019	150 hours at 1.0pps
1022	100 hours at 1.0pps

Configuration

Transmit frequency range	24 - 33.5kHz
Receive frequency range	17 - 31kHz
Turnaround 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@80mA
Charge	Onboard fast charger for 3 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

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

Options

- Compatibility with USBL systems not listed
- Non-rechargeable batteries (alkaline)
- Toroidal beam pattern version, Model 1019T
- Survival depth to 4000m]
- Remote transducer (supplied with Model BCN-1010 electronic bottle);
RM90, omni-directional rated to 1500m.
RM45, directional, rated to 2000m. Inter connect cable, 2m standard
- Digital depth transmission when used with AAE Nexus USBL systems
- Depth sensors 100m/300m/1000m/2000m/4000m (adds D suffix to model number)
- Floatation collar