

TAE KWANG ELECTRONICS CORPORATION
5th FLR., K-BLDG., 3,
SANGAM-RO 41-GIL, GANGDONG-GU
SEOUL 05307, KOREA

T 02 479 2703 ~ 4

E taekwang@tkec.co.kr

W tkec.co.kr

1300A Series Micro Beacon



Key features

- Sigma spread spectrum technology
- Rechargeable NiMH batteries
- USB PC connectivity via 5 pin connector
- Charging via USB with onboard charge indicator
- Easy channel configuration via Beacon Editor app
- Can operates from a 24V power supply
- Responder interface
- Legacy support for almost all industry USBL systems currently in use

- PRV, Pressure Release Valve (Auto)
- On/Off shorting link
- Multi-Fire common interrogate functionality

Applications

- General purpose tracking and positioning applications
- Diver tracking
- Static and dynamic operations e.g. ROV, and sidescan sonar

Series Micro Beacon Overview

The 1300A Series Micro Beacon is an evolution of the popular 300 Series that has been designed to add extra versatility to the Micro Beacon range. It is ideal for use in shallow water environments or operations in confined space.

In addition to its internal batteries, the 1300A Series Micro

Beacon has an external connector that allows it to operate from a ROV 24V power supply.

Channel selection is via a USB adaptor cable and beacon editor application.

Technical Specification

MODEL TYPES - PHYSICAL SPECIFICATION

Housing material; Hard anodised aluminium

Model	Beam Pattern	SPL	Survival Depth	Diameter	Length	Weight in Air / Water
1329A	±90°	183dB	600m	52mm	298mm	1.2kg/0.55kg
1329D	±90°	183dB	600m	52mm	298mm	1.2kg/0.55kg

^{*}Effective SPL is 5dB less when used with iXblue GAPS USBL systems.

Electrical Specification

BATTERY

Battery type	Rechargeable; NiMH
Charge time (Typical)	Computer USB port: 16 hours Mains USB dedicated charger: 8 hours
Listening life	45 days minimum (at 2°C)
Operational life	48 hours at 1.0pps (Sigma II with Depth Telemetry) 56 hours at 1.0pps (HiPAP / HPR400)

CONFIGURATION

Set-up	aae Beacon Editor software
Transmit frequency range	21.5 - 30.5kHz
Receive frequency range	16.0 - 26.5kHz
Turnaround time	Dependent on channel selection
Transmit pulse width	Dependent on channel selection
Depth sensor precision	± 1.0m (1329D version only)

EXTERNAL INPUTS

Connector type	мсвн5м
USB interface	USB 2.0 or greater
Responder key	Positive 5-20 Volts
External Power/Charge	24 Volts @ 50mA
Ground	Common ground
On/Off	Via connector shorting link



USBL Compatibility

Nexus 2, Pyxis	Sigma II spread spectrum systems.
aae Easytrak, Nexus	All models, tone systems
iXblue	GAPS USBL
Kongsberg	HPR/HiPAP

Options

- Compatibility with USBL systems not listed above
- Remote transducer, supplied with model BCN-1310A or BCN-1320D electronics bottle and model types RM91S or RM91SR
- Increased depth rating to 1000m



