ATrack

BL1
Rugged Bluetooth Sensor

The BL1 series includes a wide range of Bluetooth sensors that provide temperature and tag ID features. Based on Bluetooth Low Energy (BLE) technology, these sensors offer long-range support up to 600 meters. Encased in IP69K rugged and compact enclosures, the BL1 sensors are suitable for valuable goods tracking and cold chain monitoring.

Cold Chain Trailer

Valuable Goods (Tag ID)

BL1-T
IC:29638-BL1
FCC ID:YA7-BL1
Made in Taiwan
MAC: 1A2B3C4D5E6F

Features

- Supports Bluetooth Low Energy v5.1 and coded PHY
- Compact size and lightweight for easy installation
- High precision and accuracy in sensor detection
- Easy configuration update for mass deployment by ATrack telematics devices

Ordering Information

Model	Tag ID	Temperature
ZBL1XX-XXXSX-AT10	●	−
ZBL1TX-XXXSX-AT10	●	●

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Contact Us : sales@atrack.com.tw | www.atrack.com.tw

Specifications

WIRELESS

Frequency	BLE v5.1, Class 2 (Support Long Range)
Sensitivity	-103 dBm/125Kbps, -96dBm/1Mbps
Coded PHY	125k / 1Mbps (Configurable)
Transmit Interval	1 to 10 seconds (Configurable)
Transmit Power	Default: +3 dBm
	(From -20 dBm to +8 dBm in 4 dB steps)
Transmit Range	Up to 600M in open area
	(Base on +3 dBm TX power)
Transmit Protocols	Default: iBeacon, Eddystone, ATrack Proprietary

ELECTRICAL

Operating Voltage	3V
Battery Life	10 years (BL1) / 3 years (BL1-T)
	(Every 5sec report interval base on +0dBm TX power)
Battery Capacity	620mAh, Replaceable CR2450
Battery Type	Lithium
LED Indicator	1 (Power/Operating)
Device Activation*	Magnet trigger

BL1-T PERFORMANCE

Measuring Range	−20°C to +70°C
Resolution Accuracy	0.1°C
	±0.3°C maximum (-25°C to +70°C)
	±0.4°C maximum (-40°C to +70°C)

MEMORY

Internal Flash Memory	16Mbits
	Up to 130,000logs

PHYSICAL

Dimension	L76 mm x Φ60 mm x H21 mm
	(3.0" x Φ2.36" x 0.82")
Weight	BL1 / BL-T: 54g (0.12lb)
Enclosure	PC
Mounting Method	Screw Mount, Magnet Mount, Zip Tie

ENVIRONMENTAL

Operating Temperature	−20°C to +70 °C
Humidity	95%RH @ 50° C non-condensing
Vibration/Shock	MIL-STD-810H
Salt Fog	MIL-STD-810H
Unit Drop Test	MIL-STD-810H
Thermal Shock	MIL-STD-810H
Chemical Resistant	MIL-STD-810H
Temperature Recorders	EN12830
Impact Resistance	IEC 62262 (IK10)
IP Rating	IP69K, IP68

* Optional Accessories Required

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