

PRODUCT SPECIFICATIONS

Blyott Ruggedised Sensor BT-R1

Start monitoring and locating your assets now

Meet the BT-R1 ruggedised sensor, also referred to as the world's smallest high-temperature sensor. It's a BLE V5.0 compliant module with secure, custom firmware and a waterproof, easy-to-clean casing.

BT-R1 helps you keep track of your (mobile) assets and is well-suited for extreme conditions.

Support temperatures up to 150°C, which makes the BT-R1 ideal for tracking surgery kits and other assets undergoing sterilization processes.

While supporting high temperatures, the BT-R1 is also suitable for accurate temperature monitoring of cold chain applications like medicines and other pharmaceutical products.

If needed for regulatory compliance, the sensor can optionally be provided with a temperature certificate as evidence for the accuracy of the built-in temperature sensor.

With optimized and ultra-low power consumption, the sensor guarantees a very long battery life, even when exposed to extreme conditions.

Finally, a secure operational mode is included and based on an AES-128 crypto algorithm.



This ruggedised sensor is suitable for a variety of use cases in extreme environments and conditions.

Highlighted use case

- ✓ Track medical equipment and surgical trays during the sterilization processes.
- ✓ Suitable for accurate temperature monitoring of cold chain applications.
- ✓ Start using immediately with no sensor activation required.

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All specifications BT-R1

General

| | |
|--------------------|--|
| Battery reference | CR2032W (heat-resistant lithium ion battery) |
| Battery lifetime | Up to 7 years depending on the sensor configuration and usage |
| Broadcasting range | Up to 15 m / 590.55" (-5 dBm; RSSI @ 12 m / 472.44" = -100 dBm) |
| Location accuracy | Depends on the available Wi-Fi and Bluetooth ⁽¹⁾ infrastructure |
| Sensors | Temperature sensor with an accuracy of < 0.5°C / 32.9°F |

⁽¹⁾The Blyott solution is compatible with Wi-Fi AP's enabled with Bluetooth[®] technology from various vendors. Bluetooth[®] is a registered trademark of Bluetooth SIG, Inc.

Physical

| | |
|------------|--|
| Dimensions | 36 mm / 1.41" (width) x 25 mm / 0.98" (length) x 10 mm / 0.39" (height) |
| Colours | Black |
| Casing | PEEK (polyetheretherketon), highly durable casing for temperatures up to 280°C |

Chemical and mechanical

| | |
|---------------------------------------|---|
| Operating temperature | -20°C to +150°C / -4°F to +302°F |
| Humidity | 100% (up to 150 °C / +302°F) |
| Environmental and chemical properties | IP65, saltwater, salt mist, acetic acid water, carbonated sodium water, sugared water, ethylene glycol |
| Certificates | BLE, CE, FCC, ISED, RoHS & Reach conform (www.conflictreesourcing.org) |

About Blyott

Blyott is at the forefront of transforming industries with innovative localization and monitoring solutions. Our platform integrates advanced data analytics and AI, supporting various sectors to navigate operational challenges, enhance efficiency, foster staff well-being, and achieve sustainability goals.



EASY TO SET UP

Works in a matter of minutes.



SCALABLE

Scale to millions of assets.



PAY-AS-YOU-GROW

Custom plans are available.



OPEN STANDARD

Integrate using REST APIs and webhooks.



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