

Blyott Heat Sensor BT-R2

HEAT-RESISTANT SENSOR

Start monitoring and locating your assets now

Meet the BT-R2, a BLE sensor capable of surviving high temperatures. The BLE V5.3 compliant module comes with a secure, custom firmware and a waterproof, easy-to-clean casing.

BT-R2 helps you keep track of your (mobile) assets and is well-suited for extreme conditions.

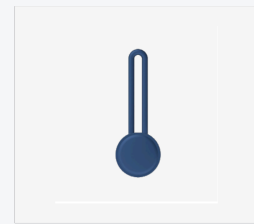
Support temperatures up to 150°C, making the BT-R2 ideal for tracking instrument trays and other assets undergoing sterilization processes.

The BT-R2 casing is crafted from silicone, a material known for its biocompatibility, durability, and resistance to extreme temperatures.

These qualities make it well-suited for healthcare applications, where long-lasting performance, safety, and stability are essential. Its built-in loop also enables easy attachment to assets, such as surgical kits.

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.



The built-in NFC makes it extremely easy to link the BT-R2 to assets.

AT A GLANCE

Radio	BLE V5.3 · 2.4 GHz
Battery	CR2032W · up to 5 years
Max temperature	+150°C
Connectivity	Built-in NFC
IP rating	IP68

Highlighted use case

- ✓ Track medical equipment and surgical trays during the sterilization processes.
- ✓ A built-in loop allows for easy usage, e.g. attach the BT-R2 to instrument trays.
- ✓ Start using immediately with no sensor activation required.

All specifications BT-R2

GENERAL

Battery reference	CR2032W (heat-resistant lithium ion battery)
Battery lifetime	Up to 5 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 BLE(*) infrastructure
Temperature accuracy	Temperature sensor with an accuracy of 2°C / 35.6°F
Connectivity	Built in NFC

(*) The Blyott solution is compatible with Wi-Fi APs enabled with Bluetooth® technology from various vendors. Bluetooth® is a registered trademark of Bluetooth SIG, Inc.

PHYSICAL

Dimensions	40 mm / 1.57" (diameter) x 7 mm / 0.27" (height) x 80 mm / 3.14" (length of loop)
Colours	Dark blue
Casing	Silicone, highly durable casing for temperatures up to 200°C

CHEMICAL AND MECHANICAL

Operating temperature	-20°C to +150°C / -4°F to +302°F (during a few minutes)
Humidity	100% (up to 150 °C / +302°F)
Environmental and chemical properties	Saltwater, salt mist, acetic acid water, carbonated sodium water, sugared water, ethylene glycol
Certificates	IP68, CE-RED (incl. safety, RF, EMC, SAR), FCC and ROHS

BT-R2 · V26R01

About Blyott

Blyott — a simac PHI DATA brand — is at the forefront of transforming industries with innovative localization and monitoring solutions. Our platform integrates advanced data analytics and AI, helping healthcare and logistics teams 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.



www.blyott.com

Blyott — a simac PHI DATA brand

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FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ✓ Reorient or relocate the receiving antenna.
- ✓ Increase the separation between the equipment and receiver.
- ✓ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ✓ Consult the dealer or an experienced radio/TV technician for help.

FCC RADIATION EXPOSURE STATEMENT

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.