

BlueRange Asset Beacon R1 Datasheet

IoT Bluetooth and BLE beacon for getting tracked within a BlueRange BLE mesh infrastructure in a Real Time Location use case or used as a sensor device

Item number: BR-AB-2019-00001-1



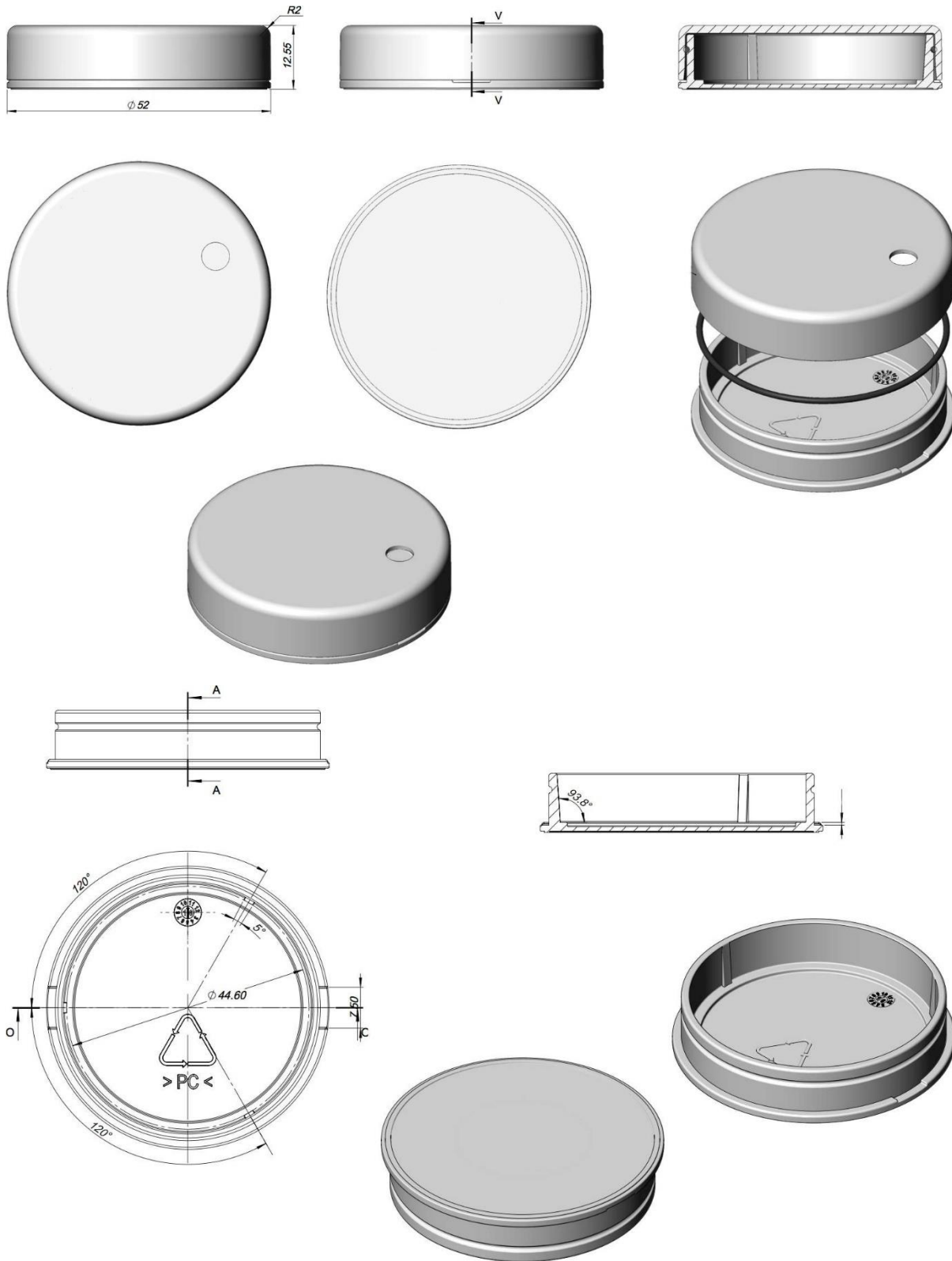
BlueRange Asset Beacon R1

Overview

- IoT Bluetooth and BLE beacon for getting tracked within a BlueRange BLE mesh infrastructure in a Real Time Location use case or used as a sensor device
- Optimized with BlueRange firmware
- Powered by exchangeable 1000 mAh CR2477 Li/MnO₂ battery (included)
- Easy installation and attachment via adhesives

Specification, Characteristics

Type	Asset Beacon, Tag
Item number	BR-AB-2019-00001-1
Power supply	1000mAh CR2477 Li/MnO ₂ battery
Transmission power	-30 to +4 dBm
Transmission circuit	10.5 mA (max.)
Chipset	Nordic Semiconductors nRF52832
Connectivity	Bluetooth 4.2 and newer, BLE
Accelerometer sensor	STMicroelectronics LIS2DH12 - 3-axis, ±2 g / ±4 g / ±8 g / ±16 g, 1 Hz -5.3 kHz
Temperature sensor	Bosch BME280 - Typical absolute accuracy ±0.5°C @ 25°C, ±1°C @ 0-25°C, output resolution 0.01°C
Relative humidity sensor	Bosch BME280 - Typical accuracy tolerance ±3%, Hysteresis ±1 %
Air pressure sensor	Bosch BME280 - RMS Noise 0.2 Pa, equiv. to 1.7 cm; Offset temperature coefficient ±1.5 Pa/K, equiv. to ±12.6 cm at 1 °C temperature change
Geometry (Diameter/H)	52mm / 12.55 mm
Weight	25 g
Operating and storage temperature	-20 to 65 °C
Protection class	IP67



Connection

The beacon doesn't need any external connection to a power source. The beacon is powered by an internal battery. These can be easily replaced by removing the top of the casing.

The beacon will be automatically tracked in a BlueRange mesh, as soon as the device is enrolled. To easily enroll a beacon, use the BlueRange Commissioning App. The Application provides the opportunity to name the beacon for easy mapping.

The connection to the BLE mesh infrastructure is determined by the enrollment.

Functional Description

The BlueRange Asset Beacon is used for all kind of IoT installations utilizing Bluetooth Low Energy communication to form set up asset tracking use cases. The beacon is tracked inside of any BlueRange installation, as long as the beacon is enrolled there.

Order Information

BlueRange Asset Beacon R1




Item number: BR-AB-2019-00001-1

In standard application used for BlueRange installations of BLE mesh infrastructure and comes with BlueRange Firmware.

One year legal warranty.

Battery included.

Signs and certificates

	WEEE directive 2012/19/EU Do not dispose of with household waste!
	CE certification - Conformité Européenne Declaration in accordance with EU Regulation 765/2008 that the product complies with the applicable requirements laid down in the Community harmonisation legislation on its affixing.
	Approved by the Federal Communications Commission (FCC). FCC ID: 2AKDDRUUVITAG

Related Components

BlueRange Mesh Gateway (non-PoE), non-CE

Item number: BR-MGW-2019-00001-2

Mesh Gateway without PoE power supply and without CE certification.

BlueRange Mesh Gateway (PoE), non-CE

Item number: BR-MGW-2019-00001-1

Mesh Gateway with PoE power supply and without CE certification.

BlueRange Mesh Gateway (PoE), CE

Item number: BR-MGW-2020-00002-1

Mesh Gateway with PoE power supply and CE certification. Can be pre-ordered from 12/2019.

BlueRange Mesh Beacon E2

Item number: BR-MB-2019-00001-1

Mesh Beacon – BLE mesh infrastructure node

Further information and tools

Please find our documentation on how to setup and enroll a BlueRange BLE mesh infrastructure at bluerange.io/developer.

Link to the BlueRange Provisioning App:



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General information on BlueRange

www.bluerange.io

Disclaimer

Subject to change without notice. All data without guarantee.

The data sheet refers to the current factory setting.

The function in installations with other devices must be checked in advance for compatibility.