

WiFi Outdoor Sensor

Mobile Device detection for real-time queue, flow and occupancy measurement



How it works

The solution works by placing BlipTrack sensors at strategic points in a specified area. The sensors detect Wi-Fi and Bluetooth devices, such as mobile phones and tablets. When the mobile device passes the sensors, its unique ID—called a MAC address—is recorded, encrypted and time-stamped. By re-identifying devices from multiple sensors, the travel times, dwell times and movement patterns become available.

Sensor mounting

The sensors are easily mounted and connected via Ethernet or mobile broadband. Live sensor monitoring with automated alarms and recovery handles issues before they escalate into problems. Once mounted, the sensors require no maintenance. The sensors are passive and do not interfere with existing WiFi networks.

Measurement capabilities

The low power-consuming sensor has built-in directional antennas, which enables more accurate positioning of detected devices, in a wide coverage area. The sensors measure 24/7. The sensors are either powered via PoE or a separate power supply. The raw data from the sensors is transferred in real-time to a secure data warehouse. At network connection loss, data caching is enabled.

Data export and visualization

BlipTrack provides reporting capabilities with live and historical information in a web-based, intuitive user interface with graphs and dashboard views. The Platform enables data extraction in any combination, exportable in various formats, allowing quick and efficient integration into existing management systems.

Sensor Specifications

BlipTrack WiFi Outdoor Sensor w/ PoE

Item number

BNL2i-WF-OUTDOOR

Exterior Description

- Size: 202 x 152 x 90 mm (without cable gland) (7.95 x 5.98 x 3.54 in)
- Weight: 1000g (2.20 Lbs)
- Color: Light gray polycarbonate (waterproof)
- Temperature range of material: -40°C (-40°F) -> +80°C (176°F)

Power Interface

- Power Over Ethernet (PoE 802.3af 48V) Consumption: < 5W

GPS Receiver (Optional)

- High Sensitive SIRF Star 4 GPS

BlipTrack WiFi Outdoor Sensor

w/ power supply and mobile broadband/Wi-Fi

Item number

BNL2i-WF-OUTD2

Exterior Description

- Size: 252 x 162 x 90 mm (without cable gland) (9.92 x 6.37x 3.54 in)
- Weight: 1300g (2.86 Lbs)
- Color: Light gray polycarbonate (waterproof)
- Temperature range of material: -40°C (-40°F) -> +80°C (176°F)

Power Supply

- 100 - 240 VAC, 50 - 60Hz, max 0.5A, Consumption: <5W

Connectivity

- Mobile broadband or Wi-Fi

Shared Specifications

Ambient Temperatures

- Max: +55°C (131°F) / Min: -10°C (14°F)
- Storage: Max: +60°C (140°F) / Min: -10°C (14°F)

WiFi Technical Data

- 2 x WiFi radios (802.11 b/g/n)
- 2 X 5 dBi directional RHCP antennas

Bluetooth Technical Data

- 1 x Bluetooth radio class2 (Bluetooth 2.0 + EDR)
- 1 x 1.2 dBi omnidirectional antenna

Ethernet Interface

- 10BASE-T 10/100 Mbit, auto sensing
- 8-pin RJ connector (RJ-45)
- Power over Ethernet (PoE 802.3af 48V)

Frequency Band

- 2.4 GHz

Transmission Power

- Wi-Fi: Only receiving
- Bluetooth: Class 2, max 2.5mW (4dBm)

LED Interface

- Power and server = Green
- Bluetooth = Blue
- GPRS = Yellow

BlipTrack™