



BLE Gateway ID-BGW-02 (Ethernet + Wi-Fi or 4G, PoE)

Model ID-BGW-02 · Brand: Identium



An industrial Bluetooth 4.2 / 5.0 gateway with a PA + LNA for long-range scanning. It picks up BLE beacons, tags and sensors and forwards their data to your server over Ethernet, Wi-Fi or 4G using UDP, TCP or MQTT. Indoor and outdoor versions.

KEY FEATURES

- **Bluetooth 4.2 / 5.0 with PA + LNA:** rated scan distance >100 m, connection 30–50 m
- **Scans 300+ Bluetooth devices per second; up to 20 simultaneous connections**
- Wi-Fi backhaul (-P, -M) or 4G LTE (-PC, -MC); every version has an Ethernet / PoE port
- Sends data by UDP, TCP or MQTT in JSON or HEX; filters by name, RSSI or MAC
- PoE (IEEE 802.3at) or 6–28 V DC power; remote firmware upgrade
- Indoor ABS + PC (Ø 124 × 40 mm) and outdoor metal (153 × 137 × 97 mm) housings

APPLICATIONS

Hospital asset tracking

Elderly care monitoring

Warehouse asset tracking

Factory tool management

Staff attendance check-in

Sensor data collection

Indoor zone positioning

Retail indoor positioning

SPECIFICATIONS

Variants	ID-BGW-02-P (indoor, Wi-Fi), ID-BGW-02-PC (indoor, 4G), ID-BGW-02-M (outdoor, Wi-Fi), ID-BGW-02-MC (outdoor, 4G)
Bluetooth	Bluetooth 4.2 / 5.0, integrated PA + LNA, nRF52832 Bluetooth chip
Frequency	Licence-exempt 2.4 GHz band (Bluetooth and Wi-Fi)
Scanning distance	More than 100 m rated (actual distance is set by the beacon's own range and the site)
Connection distance	30–50 m
Capacity	Scans 300+ Bluetooth devices per second; caches up to 5000 devices per cycle; 20 concurrent connections
Bluetooth transmit power	0 to +18 dBm

Bluetooth receiver sensitivity	-104 dBm
Bluetooth data rate	1 Mbps / 2 Mbps (uncoded)
Bluetooth security	AES hardware encryption
Filtering	By device name, signal strength (RSSI) or MAC address
Wi-Fi	-P and -M versions (Wi-Fi backhaul): IEEE 802.11 b/g/n, up to 150 Mbps (HT40); WPA / WPA2, WEP, TKIP, AES; bridge, gateway or AP-client mode
4G LTE	-PC and -MC versions: LTE-TDD / LTE-FDD / TD-SCDMA / UMTS / EVDO / EDGE / GPRS / GSM / CDMA
Ports	1 × WAN / LAN adaptive network port (PoE input), power port, reset button; indoor -P / -PC: hold reset 5 s for factory settings
Data protocols	UDP, TCP, MQTT; JSON or HEX data formats
Processor and memory	580 MHz MIPS24KEc, 64 MB DDR2 DRAM, 16 MB flash
Power	PoE 48 V (IEEE 802.3at) or DC 6–28 V; adapter DC 12 V / 1 A (indoor), DC 12 V / 2 A (outdoor)
Working current	180 mA @ 12 V without 4G module; 280 mA @ 12 V with 4G module
Dimensions	Indoor: Ø 124 × 40 mm; outdoor: 153 × 137 × 97 mm
Material	Indoor: ABS + PC case; outdoor: metal case
Mounting	Outdoor versions supplied with mounting / holder accessories
Operating temperature	-20 °C to +70 °C
Indicators	Indoor -P / -PC: power, network, Wi-Fi and Bluetooth status LEDs
Management	Remote (OTA) firmware upgrade and settings, auto-reset, hardware reset
Software	Visual demo, SDK, debugging assistant and data-packet analysis tool
Packaging	Indoor: 10 per inner box, 20 per outer carton; outdoor: 1 per inner box, 6 per outer carton
Compatible with	Identium BLE beacons, asset tags, work cards and wristbands; other Bluetooth beacons, wristbands, door locks and sensors