



Digiseal NB-IoT Gateway

Bring any Bluetooth Digiseal device online — instantly



The Digiseal NB-IoT Gateway bridges BLE-only Digiseal modules to the cloud over Narrowband IoT, without replacing any existing hardware. Place the gateway within BLE range of one or more seals or lock modules to enable real-time alarm reporting, access logs, heartbeat monitoring, and remote key management — all without running cables or installing a local server. Built-in GPS/GNSS tracks gateway location, and a 3-axis accelerometer triggers movement and tamper alerts. Requires continuous USB-C power; no batteries are fitted in Gateway configuration, as continuous operation would over-discharge and damage batteries not supported by a charging circuit.

Technical Specifications

PCB Dimensions	90.0 × 31.0 mm
Casing Dimensions	Customisable per customer requirements
Power Supply	USB-C 5 V (continuous supply required). No battery fitted — continuous NB-IoT operation would over-discharge unmanaged batteries.
Connectivity	Bluetooth 5.1 (BLE): 6–12 m indoors; up to 50 m outdoors LTE CAT-M1 (eMTC): up to 375 kbps ↑ / 300 kbps ↓ LTE NB-IoT: up to 66 kbps ↑ / 34 kbps ↓ GPRS / EDGE (2G fallback): up to 236.8 kbps Cellular module: SIMCom SIM7000G — global band support
Network Coverage	LTE CAT-M1 and NB-IoT on global LTE bands; GPRS/EDGE fallback on 2G networks
GPS / GNSS	Integrated GNSS via SIM7000G (GPS, GLONASS, BeiDou, Galileo); active external antenna
Motion Detection	3-axis accelerometer (LIS2DW12); gateway tilt and shock alert
Connected Devices	Unlimited simultaneous BLE devices
Encryption	End-to-end hardware encryption for BLE and NB-IoT communication
IP Rating	Determined by customer-selected enclosure; IP65, IP67, IP68 and explosion-proof options available
Operating Temp.	–40 °C to +85 °C
Electrical Consumption	Idle ~2.5–3 mA; NB-IoT TX avg ~85–105 mA; NB-IoT peak ~600 mA; USB-C ≥1 A supply required
API Integration	MQTT for real-time integration with NOC, SCADA, or ticketing systems
Certifications	Available on request; additional certifications at customer cost



Key Features

- Instantly makes any BLE Digiseal device cloud-connected
- Supports unlimited simultaneous BLE device connections
- Transmits alarms, access logs, and heartbeats in real time via LTE CAT-M1, NB-IoT, or GPRS/EDGE fallback
- GPS/GNSS location tracking and geofence monitoring for the gateway
- 3-axis accelerometer — tilt and shock alerts if gateway is moved or tampered with
- USB-C powered for always-on operation; no battery configuration
- MQTT API for integration with NOC, SCADA, or workflow systems
- Configured via same Digiseal mobile app as all other hardware

Applications

- Remote substations and telecom infrastructure
- Utility metering sites and water infrastructure
- Logistics depots and transport hubs
- Smart city infrastructure monitoring
- Any site with BLE-only Digiseal devices needing cloud connectivity