General Description

The GBLG100LWL gateway offers a cost-effective and compact solution for seamless connectivity across diverse applications. Serving as a USB-powered bridge between BLE/LongRange and LTE/Wi-Fi/Ethernet networks, this gateway is designed to meet the demands of various industries, including enterprise, cold-chain monitoring, Smart Factories, Smart homes, and Smart kitchens. Equipped with an internal rechargeable battery, it ensures uninterrupted operation during mains failure, guaranteeing continuous data transmission for critical applications. The gateway's compact design and user-friendly interface make it easy to install and deploy, providing hassle-free connectivity without compromising on performance. Whether you're optimizing production processes in a factory or ensuring food safety in a kitchen, the GBLG100LWL gateway delivers reliable connectivity at an affordable price point.

Features

- Supports BLE5.3/ 5.2/ 5.1 / 5.0 / 4.2 & LoRa
- LTE 4G/ 2G Fallback [Option for NB-IoT/Cat.M1]
- Wi-Fi 2.4GHz [Dual band variant available]
- GPS [Optional]
- No data loss. 99.95% data assurance
- Internal battery backup support up to 10 hours
- Integrated with the thinxview platform
- Customizable with third-party cloud platforms
- Best-in-class performance
- Robust and reliable design
- Remote configurations and remote firmware upgrades
- IP54 rating [IP67 variable available]
- Plug and play with GND sensors
    - Temperature sensor
    - Humidity sensor
    - Contact sensor
    - BLE tag
- Each gateway handles up to 150 BLE sensors & 60 LongRange Sensor

USB Powered IoT Gateway, Battery Backup

Applications

- Warehouses
- Data centres
- Smart Kitchens
- Airports
- Industrial
- Pharmaceutical
- Office buildings
- Home automation

Technical Specifications

GBWG100LWL	– Specifications
Processer	STM32H7A3 Arm® Cortex®-M7 280MHz 2MB Flash 1MB RAM FreeRTOS
BLE	nRF52833 BLE5.0 SoC Arm® Cortex®-M33 64MHz 512KB Flash, 256KB RAM
RF Long-Range	Ultra-low power ISM Band RF proprietary protocol
Cellular	LTE-FDD/GSM [option Cat.m1/NB-IoT]
Wi-Fi	2.4 GHz 16MB 520KB RAM [Dual band available]
Ethernet	TCP/IP 15Mbps [Optional]
GPS [optional]	Acquisition: -148dBm, Re-acquisition: -160dBm, Tracking: -165dBm
BLE LOS Range	Up to 410 meters, up to 150 Nodes
LongRange Radio	Up to 1500 meters; 865/868/915MHz Ack Based Receiver, up to 60 Nodes
MODBUS	TCP/IP or RS485 [Optional]
Power Supply	5V standard USB Type-C cable
Operating Temperature	-20°C to +65°C
Enclosure	IP54
User Indication	3 LEDs [Power/Internet/Sensors]
Switch	Config/ Reset
Data backup	256 MB (Datalogger mode)
Battery	3500mAH Rechargeable Battery
Operational shock	20g
Operational vibration	3g
Dimensions	120mm x 100mm x 22mm
Product Life	7 years**
Communication Protocol	thinxview / custom Platform
Cloud	AWS/Azure/Google/Customization
Security	Encrypt (256-bit key exchange and AES-128)
Antenna	Onboard Antenna [Cellular, LongRange, Wi-Fi, BLE1, BLE2, GPS]
Target Regions	Global
Certifications*	CE, FCC, RCM, RoHS

* Product certifications are in progress.
** Under Standard Operating Conditions; Refer installation guide for further information. The battery is not included.

Product Part Numbering:

GBLG100LWL: BLE5.0 LTE & Wi-Fi Long-Range USB Powered Battery Backup IoT Gateway

GBLG100LW: BLE5.0 LTE & Wi-Fi USB Powered Battery Backup IoT Gateway

GBLG100WL: BLE5.0 Wi-Fi LongRange USB Powered Battery Backup IoT Gateway

GBLG100LWE: BLE5.0 LTE & Wi-Fi Ethernet USB Powered Battery Backup IoT Gateway