



## Features

- Cutting-edge & robust 5G EPC software
- Support a couple of CBRs small cell basestations
- Compliance to LoRaWAN 1.0.3
- 8 concurrent channels for LoRa transmission
- Support Listen Before Talk for downlink
- Support background scan
- Support OTA and USB firmware upgrade

The MerryIoT 5G Gateway is designed specifically to deliver flexibility and openness for the next generation of service providers including MNOs, ISPs, MSOs, and Satellite providers.

It can be deployed as standalone hotspot core network to provide internet service. Applications include, but not only limited to Internet surfing but also expanding to IoT such as automatic meter reading, to monitor fault indicators and assets, to control sensors and actuators, etc.

The new concept of Industry 4.0 has been developed, with both Internet of Things (IoT) structure and the local networks that are still needed to carry out real-time tasks. The MerryIoT 5G Gateway equips with robust and reliable Intel platform and rich interfaces, that is capable of supporting large-scale and complexity of innovative applications and management system.

## LoRa Specification

Model Name	L0009 MerryIoT 5G Gateway
Frequency Band	Follow LoRaWAN® Regional Parameters: <ul style="list-style-type: none"><li>• US 902~928 MHz</li></ul>
Number of Channels	8 concurrent channels
WAN Protocol	LoRaWAN v1.0.3
Modulation	Based on LoRaWAN
RF Transceiver	SX1302 with SX1250 (additional SX1262 for LBT and background scan)
Transmit RF Power	0.5W (up to 27 dBm)
Receive Sensitivity	Down to -142 dBm

# Industrial LoRa Cellular Gateway

Doc ver.: BQW\_03\_0041.001

## Platform Specification

Processor	Intel Atom® x7-E3950 Processor, 2M Cache, up to 2.00 GHz
Memory	4GB DDR3
Hard Drive	64GB SSD
OS	Ubuntu 20.04
Security	TPM 2.0
Display ports	HDMI/DP
Ethernet	Four (4) RJ45 10/100/1000Mbps ports
Front I/O	<ul style="list-style-type: none"><li>1 x Power button</li><li>1 x HDMI /DP</li><li>1 x GbE RJ45</li><li>1 x SMA antenna connector (LoRa)</li><li>1 x Push button</li><li>2 x LED indicators</li></ul>
Rear I/O	<ul style="list-style-type: none"><li>3 x GbE RJ-45</li><li>1 x RS-232 (DB-9)</li><li>2 x USB 3.0 (type A)</li><li>1 x DC jack</li></ul>
Power	DC Jack with wide range 9~36V
Mechanical	<ul style="list-style-type: none"><li>Metal aluminum</li><li>Dimensions: 180 mm x 33 mm x 127.8 mm</li></ul>
Environment	<ul style="list-style-type: none"><li>Operating temperature: -20 to 60°C (with SSD or mSATA-mini)</li><li>Storage temperature: -20 to 85°C</li><li>Relative humidity: 5 to 95% RH (non-condensing)</li></ul>

