



LoRaWAN[®] Gateway

F8L10GW



Introduction

F8L10GW is a wireless data transmission gateway based on standard LoRaWAN[®] protocol. It can be connected to LoRaWAN[®] terminals in various application nodes, collects useful information, and sends the data to cloud server through wireless 3G/4G cellular network or wired ethernet. The product has been widely used in the M2M industry of the IoT industrial chain, such as smart grid, intelligent transportation, smart home, finance, mobile POS gateways, etc.



Industrial-grade Design

- ▶ High-performance industrial-grade CPU and wireless module
- ▶ High-performance industrial-grade multi-channel LoRaWAN[®] gateway RF chip
- ▶ Aluminum shell, IP67 protection
- ▶ Support AC 220V, POE (optional), DC 12-48V (optional) or solar power supply (optional)
- ▶ CE&FCC certification



Stability & Reliability

- ▶ WDT watchdog timer to ensure system stability
- ▶ Anti-drop mechanism to ensure device always online
- ▶ SIM/UIM card interface with built-in 15KV ESD
- ▶ Power interface with built-in phase-reversal, overvoltage and lightning protection
- ▶ Antenna interface with lightning protection



Standard & Convenience

- ▶ Provide standard Ethernet and WIFI interface, can be connected to device by Ethernet and WIFI directly
- ▶ Provide standard wired WAN interface (support standard PPPOE protocol), can be connected to ADSL device directly.
- ▶ Provide powerful central management software to facilitate equipment
- ▶ Convenient system configuration and maintenance interface
- ▶ Intelligent data terminal, automatically enter transmission status after power on.

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High Performance

- ▶ Provide wired Ethernet and DHCP-4G (default) connection modes
- ▶ Support LoRaWAN[®] protocol: Class A, Class C
- ▶ Support 802.11 b/g/n WIFI network
- ▶ WIFI support variety types of encryption such as WEP, WPA and WPA2. Support MAC address filtering
- ▶ Support LoRaWAN[®] wireless data transmission protocol

Product Specification

Characteristics	
Items	Contents
Network Structure	Simple Star Network Topology and support repeater function
Band	EU433, CN470-510, CN779-787, EU863-870, US902-928, AU915-928, AS923, KR920-923
LoRaWAN [®] Protocol	Class A, Class C
Output Power	23±2dBm
Sensitivity	-142dbm@LoRa -70dbm@WIFI
Bandwidth	125kHz \ 250kHz \ 500kHz
Upstream Channel	8
Downstream Channel	1
Data Rate	ADR
Urban Communication Distance	6Km
Working Mode	Support full-duplex and half-duplex
Location Service	GPS, Beidou (optional)
Server Report Method	3G/ 4G/ Wired Ethernet
Local Storage	32G TF card

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Antenna	
Items	Contents
LoRa	N-type female antenna, omnidirectional fiberglass antenna, 2dBi
4G Cellular	N-type female antenna, omnidirectional fiberglass antenna, 3dBi
WIFI	N-type female antenna, 2.4G omnidirectional fiberglass antenna, 3dBi
GPS	N-type female antenna, omnidirectional fiberglass antenna, 4dBi
Power Supply	
Items	Contents
Standard	AC 220V
Range	DC 9~36 V
POE (optional)	10/100 Base-T, IEEE802.3af/IEEE802.3at standard
Power Consumption	
Items	Contents
Stand By	Average Current≤140mA@12V
Communication	TXD≤ 550mA@12V
	RXD≤ 420mA@12V
Physical Properties	
Items	Contents
Installation	Wall mounting or pole mounting
Dimensions	289.4x217.5x115.0mm
Weight	2700g
Shell	IP67
Others	
Items	Contents
Operating Temperature	-35~+75°C (-40~+185°F)
Storage Temperature	-40~+125°C (-40~+257°F)
Relative Humidity	95% (non-condensing)
Platform	Four-Faith Cloud \ TTN \ LoRoit \ LinkWAN \ CLAA
Certifications	CE & FCC

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Dimensions (mm)



217.5 mm

289.4 mm



115.0 mm

Note: There may be differences between models of accessories and interfaces, actual products shall prevail.

Order Information

Products	Description	Remark
F8L10GW-433-L	LoRa+LTE+WIFI GATEWAY	Power Supply: AC220 (Default) Installation: Wall-mounting (Default)
F8L10GW-470-L	LoRa+LTE+WIFI GATEWAY	
F8L10GW-868-L	LoRa+LTE+WIFI GATEWAY	
F8L10GW-915-L	LoRa+LTE+WIFI GATEWAY	