

F8926GW

LoRaWAN Gateway



V2.0.0

F8926GW is a wireless data transmission gateway based on standard LoRaWAN protocol, and it applicable to the terminal and NS which meets 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 uses the high-performance industrial-grade 32-bits CPU and wireless module, with the embedded real-time operating system as the software support platform. It provides 1 Ethernet LAN/WAN configurable, 1 WIFI interface, supports WIFI wireless configuration, management and online update, supports DC power input.

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, supply chain automation, industrial automation, intelligent building, fire protection, public safety, environmental protection, meteorology, digital medical, telemetry, agriculture, forestry, water, coal, petrochemical and other related fields.

HIGHLIGHTS

INDUSTRIAL-GRADE DESIGN

- ◆ High-performance industrial-grade CPU and wireless module.
- ◆ High-performance industrial-grade multi-channel LoRaWAN gateway RF chip.
- ◆ Aluminum shell, IP30 protection.
- ◆ Support DC 9-36V, standard: 12V/1.5A.

POWERFUL FUNCTIONS

- ◆ Provide wired Ethernet and dhcp-4G (default) connection modes.
- ◆ Support LoRaWAN protocol: Class A, Class B* and Class C.
- ◆ WIFI standard: 802.11 b/g/n.
- ◆ WIFI encryption: WEP, WPA and WPA2 encryption. Support MAC address filtering.
- ◆ Support LoRaWAN wireless data transmission protocol.

STABLE & RELIABLE

- ◆ WDT watchdog timer to ensure system stability.
- ◆ Mature anti-drop mechanism to ensure device always online.
- ◆ Ethernet interface with built-in 15KV ESD.
- ◆ SIM/UIM card interface with built-in 15KV ESD.
- ◆ Power interface with built-in phase-reversal, over-voltage and lightning protection.
- ◆ Antenna interface with lightning protection.

STANDARD INTERFACE & EASY-TO-USE

- ◆ Provide standard RS232(or RS485/RS422), Ethernet and WIFI interface, can be connected to device by Serial, Ethernet and WIFI directly.
- ◆ Provide standard wired WAN/LAN 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.

TYPICAL APPLICATION

- ◆ Smart grid power line online monitoring.
- ◆ Smart parking solution.
- ◆ Soil temperature and humidity monitoring.
- ◆ Intelligent Agriculture.
- ◆ Wireless remote meter reading.
- ◆ Photovoltaic array monitoring.

SPECIFICATIONS

CHARACTERISTICS

Network Structure	Simple Star Network Topology.
LoRaWAN Protocol	Class A, Class B*, Class C.
Working Frequency	EU433, CN470-510, CN779-787, EU863-870, US902-928, AU915-928, AS923, KR920-923.
Communication Distance (Outdoor)	TBD.
Maximum TX Power	23±2dBm.
Sensitivity	-142dbm @LoRa.
Communication Bandwidth	125kHz, 250kHz, 500kHz.

Upstream Channel	8.
Downstream Channel	1.
Communication Rate	Adaptive link rate.
Work Mode	Support receive and send at same frequency or different frequency.
Server Report Method	3G/4G, Wired Ethernet.
Wireless Management	WiFi management and update.
ANTENNA	
Cellular	Standard SMA female antenna interface, characteristic impedance: 50Ω.
LoRa	Standard SMA female antenna interface, characteristic impedance: 50Ω.
WIFI	Standard SMA male antenna interface, characteristic impedance: 50Ω.
POWER	
Standard Input Voltage	12V/1.5A.
DC Input Voltage Range	12~48 V.
POWER CONSUMPTION	
Stand By	Average Current ≤ TBD.
Communication	Transmitting current ≤ TBD. Receiving current ≤ TBD.
PHYSICAL PROPERTIES	
Dimensions	157x97x25mm (excluding antennas and mountings).
Weight	TBD.
OTHERS	
Operating Temperature	-35~+75°C.
Storage Temperature	-40~+125°C.
Relative Humidity	95% (non-condensing).

【Remark: "*" it means is in development.】