

F8926-GW

LoRaWAN Gateway



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 port.

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*LAN/WAN, 1*LAN, 1*Console, 1*WIFI, 1*USIM, 3*antenna interfaces and DC power supply. And it supports wireless configuration, management and online update.

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.

HIGHLIGHT

INDUSTRIAL-GRADE DESIGN

- ◆ High-performance industrial-grade CPU and wireless module
- ◆ High-performance industrial-grade multi-channels LoRaWAN gateway RF chip
- ◆ Aluminum shell, IP30 protection
- ◆ 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 wireless data transmission by LoRaWAN 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 and support repeater mode
Protocol	LoRaWAN™
Class	Class A, Class C
Band	EU433, CN470-510, CN779-787, EU863-870, US902-928, AU915-928, AS923, KR920-923
Urban Communication Distance	3.5km
Output Power	23±2dBm
Sensitivity	-142dBm@LoRa
Bandwidth	125kHz \ 250kHz \ 500kHz
Upstream Channel	8

Downstream Channel	1
Data Rate	ADR
Working Mode	Support full-duplex and half-duplex
Server Report Method	Support 3G/4G or wired-ethernet
ANTENNA	
Cellular	1*Standard SMA female antenna interface, characteristic impedance: 50Ω
LoRa	1*Standard SMA female antenna interface, characteristic impedance: 50Ω
WIFI	1*Standard SMA male antenna interface, characteristic impedance: 50Ω
POWER SUPPLY	
Standard	12V/1.5A
Range	DC 9~36V
POWER CONSUMPTION	
Stand By	Average Current ≤ 145mA@12V
Communication	TXD ≤ 450mA@12V RXD ≤ 390mA@12V
PHYSICAL PROPERTIES	
Dimensions	157x97x25mm
Weight	510g
Shell	IP30
OTHERS	
Operating Temperature	-35~+75°C
Storage Temperature	-40~+85°C
Relative Humidity	95% (non-condensing)
Certifications	CE



Model	Description
F8926-GW-L-433	LORA+LTE WIFI GATEWAY
F8926-GW-L-470	LORA+LTE WIFI GATEWAY
F8926-GW-L-868	LORA+LTE WIFI GATEWAY
F8926-GW-L-915	LORA+LTE WIFI GATEWAY
F8926-GW-W-433	LORA+WCDMA WIFI GATEWAY
F8926-GW-W-470	LORA+WCDMA WIFI GATEWAY
F8926-GW-W-868	LORA+WCDMA WIFI GATEWAY
F8926-GW-W-915	LORA+WCDMA WIFI GATEWAY