

Full Duplex 8/16 Channel LoRaWAN GW

DESCRIPTION

RHF2S208 is a new generation LoRaWAN GW developed by RisingHF which supports Full Duplex communication with up to 16 channels (SX1301 Multi SFs). The GW integrates one 1.2GHz ARM Cortex-A53 CPU which run Linux OS. And also 1x or 2x SX1301 to provide LoRa transmit and receive functionality. SX1301 is a high performance LoRa processor developed by Semtech. The 2 x SX1301 full duplex hardware version will extend the network capacity to 4x compare to the traditional 8 channels half duplex one.

The gateway is backhaul via 10/100M Ethernet or LTE. An on-board GPS module could be used to generate a PPS signal for synchronization.

Furthermore, an internal web UI is integrated for quick configuration and fault diagnosis analysis and maintenance. Benefit from RHF2S208 WIFI interface, customer could use devices like PC or laptop to connect with it directly to initial, configure or debug when needed.

Various power supply plans are supported, like DC injector, PoE and internal LiFePO4 battery. It also provides an acid battery charged with solar panels choice.



APPLICATIONS

- Smart security
- Industrial control
- Data collection from sensor node
- Automatic meter reading
- Environment monitoring
- Building automation

FEATURES

- Maximum output power : 25dBm
- High sensitivity : -140dBm@300bps
- Half duplex or Full duplex optional
- LoRaWAN uplink optional :
 - 8 normal multi-SF channels (SF7 to SF12,125kHz), 1 single SF high speed data rate channel and 1 GFSK channel
 - 16 normal multi-SF channels (SF7 to SF12,125kHz), 1 single SF high speed data rate channel and 1 GFSK channel
- LoRaWAN downlink: 1 normal channel(125kHz/250kHz/500kHz LoRa configurable or

GFSK)

- LoRaWAN Antenna Gain : 2dBi
- Compatible with PoE IEEE 802.3 af/at
- 10/100M Ethernet or 4G modem(WCDMA/TD-LTE/GPRS/EDGE) for networking
- synchronization with GPS PPS signal
- Quick configuration and maintenance through WiFi
- USB interface for debug
- Power supply : DC jack , PoE and internal LiFePO4 battery
- Up to 4hr duration time with backup battery
- Support acid battery charged with solar panels
- Operating temperature: -40°C to +75°C
- Waterproof level: IP67
- 10kA surge protection

ORDERING INFORMATION

TBD

CONTACT

Email salesww@risinghf.com to get more information.