

Extend the EX9000/M(RS485) to 5Km~10Km  
 EX9212LoRa-S  
 (862~932MHz & +20dBm)



## EX9212LoRa-S



## Features

- LoRa gateways provide the way of connecting IoT remote units to a Local Area Network (LAN) or Host Computer from long distance. The data transmission via LoRa gateways mainly intended for the ISM (Industrial, Scientific, Medical) frequency bands at 862-932 MHz.
- The gateway has been built with the module integrated many RF functions and PA to make the maximum output power up to +20dBm.
- LoRa Interface Gateways are packaged in a plastic case well suited for industrial environments. LoRa Interface devices have different models for converting to Serial ports (RS-232, RS-422/485) and DI/DO, Ethernet, USB controller. Configuration is easy to set up via web page and utility tool.

## Specification :

CPU	32-bit MCU, 40MHz
RAM	16KB SRAM
ROM	128 K Bytes Flash ROM
Protocol	Support Modbus & Transparent
LoRa	Semtech SX1272
Freq. :	ISM band 862~936MHz
Receiver Sensitivity :	-137 dBm
Transmit Output Power :	20 dBm
Sleep Current :	3uA (at power down state)
TX current	< 140 mA@20 dbm , RX current < 10 mA
Security processor	( 128/192/256 bits AES )
Packet engine up to	256 bytes with CRC
Antenna :	SMA Type , 2 dBi , changeable
Distance :	Up To 5000 Meters in free space
Data Rate :	0.244 ~ 18.2K bps (LoRa) / 300 K bps (FSK)
Application mode :	Star

## Serial Port

No.of Port :	RS-232/422/485 * 1 port ( auto Detect )
RS-232 :	Rx , Tx , GND , RTS , CTS ( DB9 female )
RS-422 :	Tx+ , Tx- , Rx+ , Rx- (Surge Protect )
RS-485 :	Data+ , Data- (Surge Protect)
Built –in RS-422/RS-485	Terminal Resistor
Speed :	9600 bps~115.2K bps
Parity :	None , Odd , Even
Data Bit :	7, 8 / Stop Bit : 1 , 2

## Windows Utility

Power :	DC 9 ~ 24V / 150ma @ 9V , 60ma @ 24V
Led Lamp :	SYS (red) , Pairing (green) , Rx(red) Tx(green)
Environment :	Operating Temperature:-10°C ~ 70°C , Storage Temperature:-20°C ~ 80°C
Dimensions :	100 * 90 * 25 mm ( W * D * H )
Weight :	150 gm ( not include power )

## Order Information:

Optional : Din-Rail mounting kits  
 Power supply(Linear/ Switching)  
 Accessories : CD(Utility/ Exbrowser ; IP Search)  
 Relative products: EX9212LoRa-E; EX9212LoRa-U;  
 EX9212LoRa-DIO;  
 EX9133C-2/PoE; EX9133C-RS232/PoE;  
 EX9133C-RS485/PoE;EX9133C-2-MTCP  
 EX9132CST/DIO