



iWSN-2200 / iWSN-2200-E

iWSN wireless data concentrator

Introduction

iWSN-2200 series are iWSN wireless data contractors, they support one 433MHz wireless communication interface and one RS-232/RS-485/Ethernet communication interface. Among them, the RS-232/RS-485 interface can't be used simultaneously.

The series modules support Modbus RTU/TCP protocol slave, the main function can receive and buffer 31 iWSN sensor's data by wireless, and user can transmit Modbus RTU/TCP commands to read the sensor's data by RS-232/RS-485/Ethernet interface. In wireless interface, the series modules support 16 wireless channels and 8 groups ID by rotary switch and DIP switch setting, the user can easy to use the them to divide and manage the wireless network of 433MHz frequency.

System Specifications

Model	iWSN-2200	iWSN-2200-E
RF Interface		
Radio Frequency	433MHz	
RF Channel	0~15 (configured by rotary switch)	
Transmission Distance	100m (Line of sign, LoS)	
Connecting Capability	Max. support 31 iWSN wireless sensing modules	
Communication		
Interface	RS-232 x 1/ RS-485 x 1 (Cannot be used simultaneously)	Ethernet x 1
Connector	Screwed Terminal Block (TXD·RXD·GND in RS-232 / D+·D- in RS-485)	RJ-45
Protocol	Modbus RTU	Modbus TCP
Modbus address (Node ID)	1~31	
COM0 Baud Rate	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200bps, N81	10/100Mbps
LED Indicator		
PWR	Red x 1	
RF_Tx	Green X 1	
RF_Rx	Yellow x 1	

Features

- 433 MHz Radio Frequency
- 16 RF Channels
- Supported Modbus RTU/TCP protocol (Slave)
- Supported data buffers of 31 iWSN sensors
- ESD Protection: +/- 4 kV for contact terminal
- Isolation: 3000 VDC for DC-to-DC, 2500 Vrms using a photocoupler
- DIN-Rail Mountable
- Operating Temperatures: -25 °C ~ +75 °C



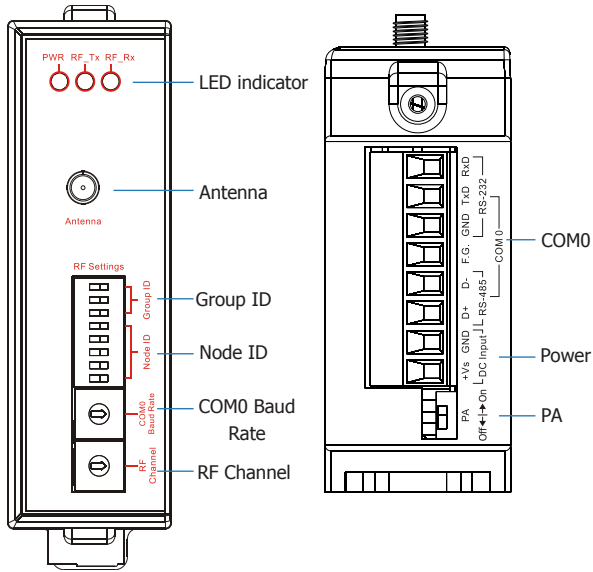
Applications



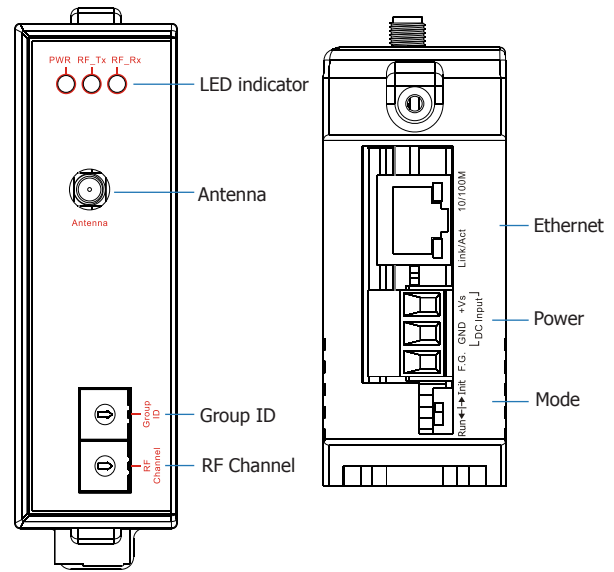
Model	iWSN-2200	iWSN-2200-E
EMS Protection		
ESD	+/- 4kV Contact	
EFT	+/- 1kV	
Surge	+/- 1kV	
Power		
Input Voltage Range	+10 ~ +30 VDC	
Power Consumption	0.5W Max.	1W Max.
Mechanical		
Dimensions(L x W x H)	84 mm x 108 mm x 33 mm (Without antenna)	
Installation	DIN-Rail	
External Antenna		
Dimensions(L x θ)	108 mm x 10 mm	
Connector	RP-SMA Male (Plug)	
Gain	0 dBi, Omni-Directional	
Environment		
Operating Temperature	-25 ~ +75°C	
Storage Temperature	-30 ~ +80°C	
Relative Humidity	10 ~ 90% RH, Non-condensing	
Others		
Certification	CE + RED	CE

Appearance

iWSN-2200

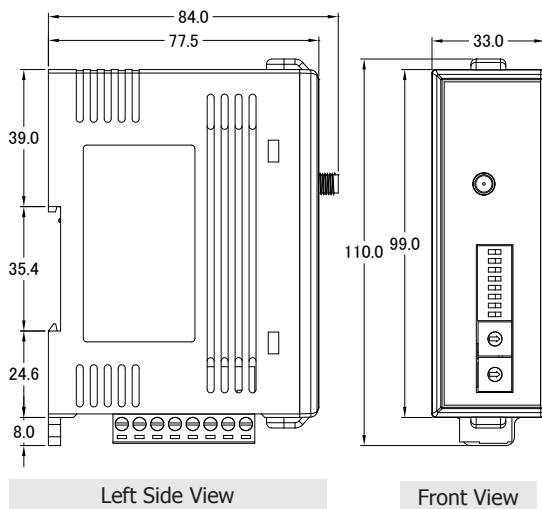


iWSN-2200-E

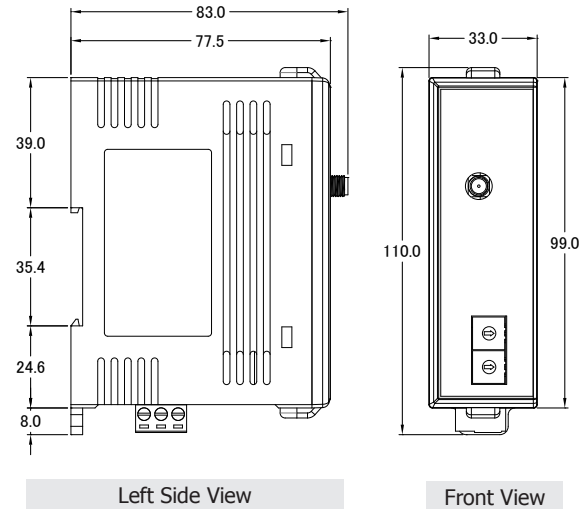


Dimensions (Units: mm)

iWSN-2200



iWSN-2200-E



Ordering Information

iWSN-2200 CR	iWSN data concentrator with RS-232/RS-485 serial port (RoHS)
iWSN-2200-E CR	iWSN data concentrator with Ethernet port (RoHS)

Accessories

iWSN sensing modules	iWSN-1110X, iWSN-1110X-160, iWSN-1110X-240, iWSN-1110X-360, iWSN-1121-DI-160, iWSN-1121-DI-240, iWSN-1121-DI-360, iWSN-1131-160, iWSN-1131-240, iWSN-1131-360, iWSN-1120X-240-RCT1000P, iWSN-1120X-360-RCT1000P
MDR-20-24 CR	24 VDC/1.0 A, 24 W Power Supply with DIN-Rail Mounting (RoHS)
External Antenna	ANT-104-02, 0 dBi 400MHz External Antenna
Extension Cable	ANT-Base-02, Antenna Base/1500 mm 3S001-1, RG58A/U 1 Meter Long RP-SMA (male) to RP-SMA (female)