ICP DAS

iWSN-200U
iWSN data concentrator with RS-232/RS-485 serial port

Features

- 433 MHz Radio Frequency
- 16 RF Channels
- Supported Modbus RTU protocol (Slave)
- Supported data buffers of 31 iWSN sensors

CE RED   RoHS

Introduction

The iWSN-200U is an iWSN wireless data contractor, it supports one 433MHz wireless communication interface and one RS-232/RS-485 communication interface. Among it, the RS-232/RS-485 interface can't be used simultaneously. The module supports Modbus RTU protocol slave, the main function can receive and buffer 31 iWSN sensor's data by wireless, and the user can transmit Modbus RTU commands to read the sensor's data by RS-232/RS-485 interface. In wireless interface, the module supports 16 wireless channels and 8 groups ID by rotary switch and DIP switch setting, the user can easy to use them to divide and manage the wireless network of 433MHz frequency.

In addition, iWSN Utility is a special software tool developed to simplify the configuration process and the setup of the iWSN network. It greatly reduces the burden of deploying the iWSN network and let users focus on big data processing and analysis. Through the intuitive visual operation interface of iWSN Utility, users can easily setup an iWSN data collection system on a local computer without knowing the Modbus address configuration of the iWSN data collector. The device tree diagram of the Utility allows users to clearly understand the network structure of the current iWSN network and is convenient to manage and check the configuration status of iWSN devices. In addition to showing the immediate value of iWSN sensing modules, the Utility also provides performance information and CSV/database storage functions, so that users can not only know the execution efficiency of each iWSN data collector, but also save time in building data storage systems.
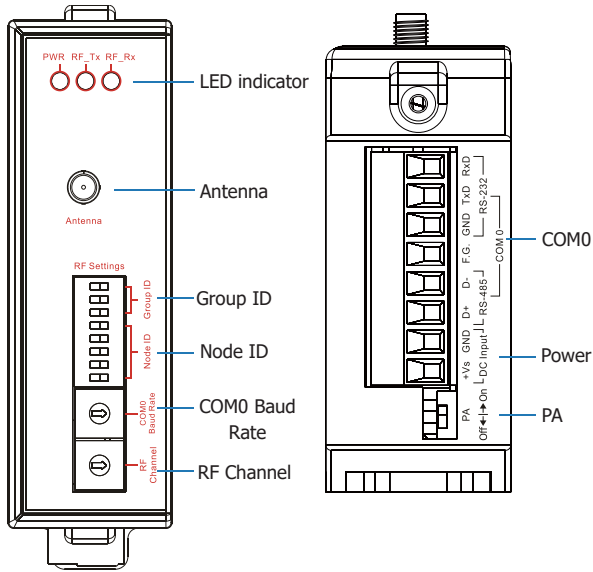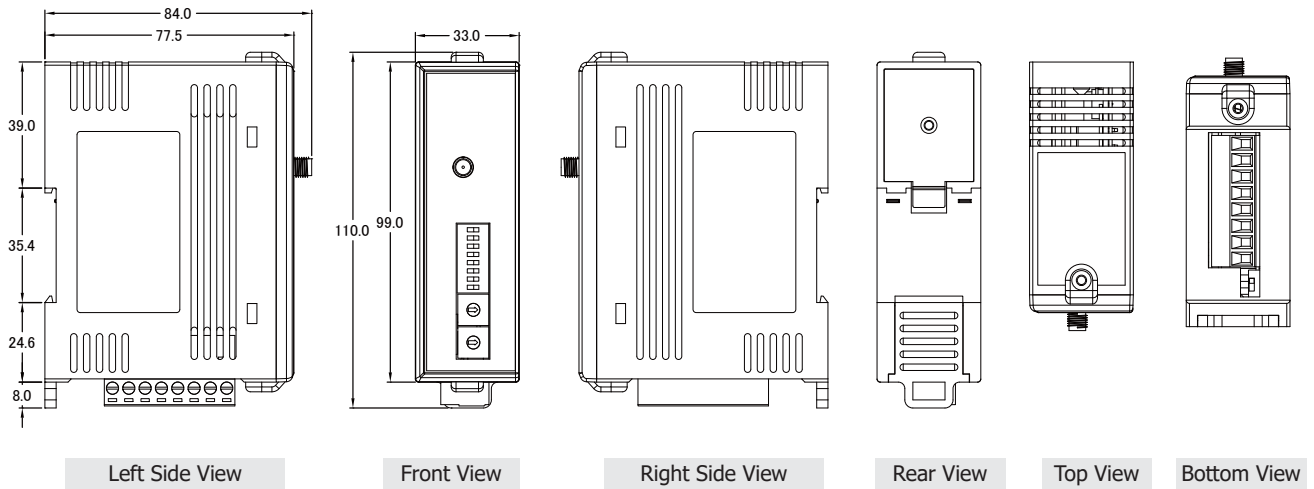
Applications

System Specifications

Model	iWSN-200U
EMS Protection	
EFT (IEC 61000-4-4)	+/- 1kV
ESD (IEC 61000-4-2)	+/- 4kV Contact
Surge (IEC 61000-4-5)	+/- 1kV
LED Indicator	
Status	1 x Power 1 x RF_Tx 1 x RF_Rx
RF	
Channels	0 to 15 (configured by rotary switch)
Radio Frequency	433MHz
Transmission Power	9±1dBm (PA Off) / 18±1dBm (PA On)
Transmission Distance (LoS)	100m (Line of sign, LoS)
Antenna	
Connector	RP-SMA Male (Plug)
Dimensions (mm)	10 x 108 (Ø x L)
Type	0 dBi, Omni-Directional

Model	iWSN-200U
COM Ports	
Ports	1 x RS-485 1 x RS-232 (Cannot be used simultaneously)
Baud Rate	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200bps, N81
Protocol	Modbus RTU
Node Address	1 to 31
Power	
Consumption	1W Max
Input Type	+10 to +30 VDC
Mechanical	
Dimensions (mm)	108 x 84 x 33 (W x L x H)
Installation	DIN-Rail
Environment	
Operating Temperature	-25 to +75°C
Storage Temperature	-30 to +80°C
Humidity	10 to 90% RH, Non-condensing

■ Appearance

- LED indicator
- Antenna
- Group ID
- Node ID
- COM0 Baud Rate
- RF Channel

- COM0
- Power
- PA

■ Dimensions (Units: mm)

| Left Side View | Front View | Right Side View | Rear View | Top View | Bottom View |

■ Ordering Information

iWSN-200U CR	iWSN data concentrator with RS-232/RS-485 serial port (RoHS)

■ Accessories

Extension Cable	ANT-Base-02, Antenna magnetic base with 1.5 meter cable (RP SMA Male Plug) (RoHS)
	3S001-1, Antenna magnetic base with 1.5 meter cable (RP SMA Male Plug) (RoHS)