



iWSN-200U

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

| <b>Features</b>   |
|---|
| 433 MHz Radio Frequency                                       |
| 16 RF Channels  |
| <ul> <li>Supported Modbus RTU protocol (Slave)</li> </ul>     |
| <ul> <li>Supported data buffers of 31 iWSN sensors</li> </ul> |
|   |
| 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.

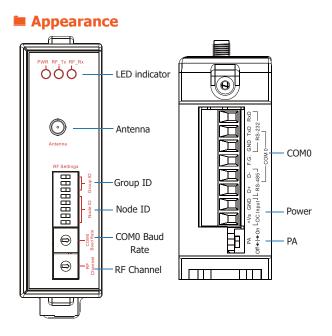
### Applications



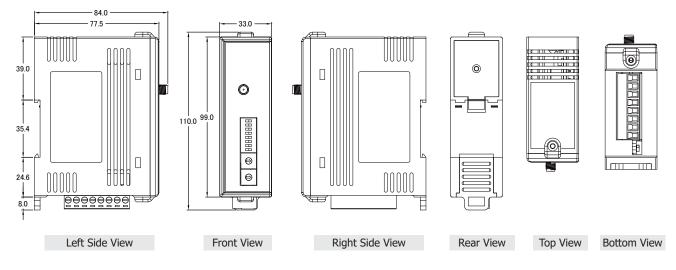
#### System Specifications

| 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<br>1 x RF_Tx<br>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)                      |
| Туре                        | 0 dBi, Omni-Directional               |

| Model                 | iWSN-200U  |
|-----------------------|--|
| COM Ports             |  |
| Ports                 | 1 x RS-485<br>1 x RS-232<br>(Cannot be used simultaneously)    |
| Baud Rate             | 1200, 2400, 4800, 9600, 19200, 38400,<br>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                                   |



Dimensions (Units: mm)



# Ordering Information

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

### Accessories

| Extension Colds       | ANT-Base-02, Antenna magnetic base with 1.5 meter cable (RP SMA Male Plug) (RoHS) |
|-----------------------|---|
| Extension Cable 35001 | 3S001-1, Antenna magnetic base with 1.5 meter cable (RP SMA Male Plug) (RoHS)     |