ICP DAS

iWSN-1510X   iWSN-1511X

iWSN Environmental Sensing Module (Asia Only)

Features

- Self-powered by built-in a chargeable Li-ion battery
- Split-core current transformer (CT) for easy installation
- Energy harvest from the CT induced electricity.
- Uses 433 MHz radio frequency for communication
- 16 RF Channels and 4 Group ID, consist of maximum 64 RF sub-networks
- Provides expansion interface for flexibility and extensibility
- Offers wall-mount mechanism and magnet for installation
- Provides two modes of power supply: CT induced current or DC power supply

RoHS

Introduction

iWSN wireless environmental sensing series including wireless signal sensing and expansion module. By means of sub-1G RF communication interface, iWSN wireless environmental sensing module can approach to the real wireless deployment. It is suitable for measuring various signals such as temperature, humidity, CO2e, TVOC, CO and vibration, provides users more choices for various applications. iWSN wireless environmental sensing module provide two modes of power supply: CT induced current or DC power supply. Diverse power supply delivers reliable electricity and reduces the cost of wiring. Considering the maintenance and installation, the iWSN wireless environmental sensing module uses the DIP switch for configuration. Through the flexibility of the expansion interface, the iWSN wireless environmental sensing module can be widely used in the application of saving power, big data analysis, and predict maintenance.

Applications

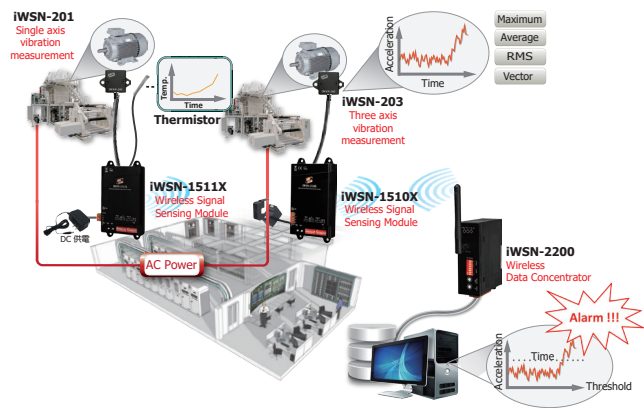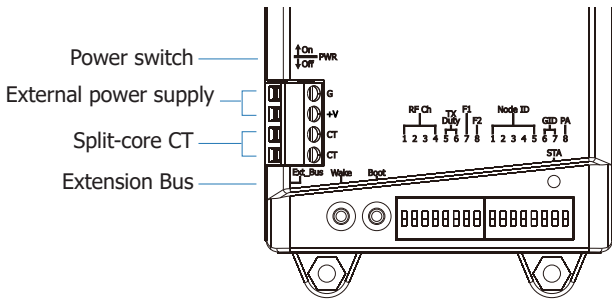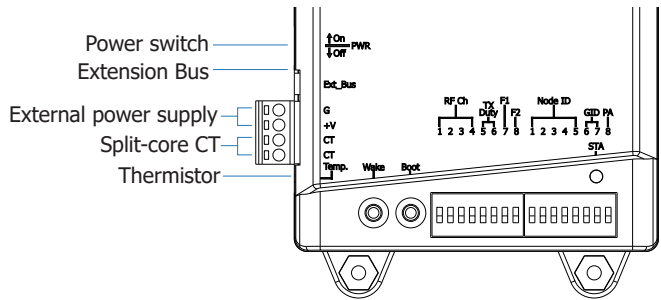## System Specifications

Model	iWSN-1510X	iWSN-1511X
Bus Interface		
Channels	1	
Type	4 pole 3.5mm audio cable with 25 cm wire lead	
EMS Protection		
EFT (IEC 61000-4-4)	+/- 500 V	
ESD (IEC 61000-4-2)	+/- 4 kV Contact	
LED Indicators		
Status	1 x Power, 1 x STA	
Temperature Measurement		
Channels	-	1
Range	-	0 °C ~ +80 °C
Accuracy	-	±2 °C
RF		
Channels	0 ~ 15, configured by DIP switch	
Group ID	0 ~ 3, configured by DIP switch	
Radio Frequency	433.1000 ~ 434.6000 MHz	
Transmission Power	9±1dBm (PA Off) / 18±1dBm (PA On)	
Transmission Distance (LoS)	100 m	
Node ID	1 ~ 31, configured by DIP switch	
Working Duty (configured by DIP switch)	1 sec, 10 sec, 30 sec and 60 sec 3 min, 5 min, 10 min and 30 min	
Antenna		
Type	0 dBi Omni directional PCB antenna	

Model	iWSN-1510X	iWSN-1511X
Power		
Input Type (Jumper-selectable)	Split-Core CTΦ16mm (100A); Φ36mm (400A); For charging only DC Power Supply 1~3 VDC, 1A	
Battery	Li-ion battery (compliant with UL1642) charged by CT induced current or DC Power Supply	
Mechanical		
Dimensions (mm)	85 x 152 x 25 (W x L x H)	94 x 152 x 21 (W x L x H)
Installation	Wall-mount or magnet adsorption	
Environment		
Operating Temperature	0 °C to +45 °C	
Storage Temperature	-20 °C to +50 °C	
Humidity	10 to 90% RH, Non-condensing	

◼ Appearance

iWSN-1510X

- Power switch
- External power supply
- Split-core CT
- Extension Bus

iWSN-1511X

- Power switch
- Extension Bus
- External power supply
- Split-core CT
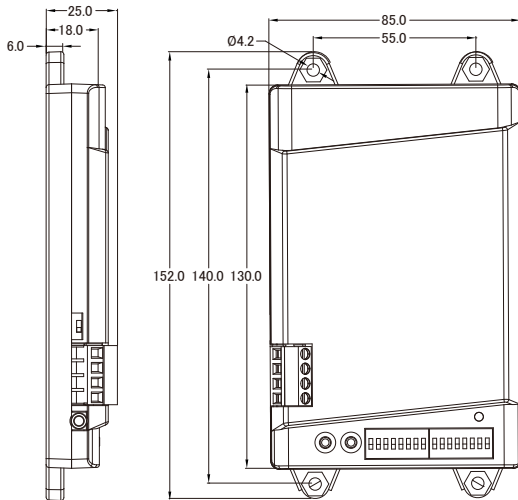- Thermistor

◼ Dimensions (Units: mm)
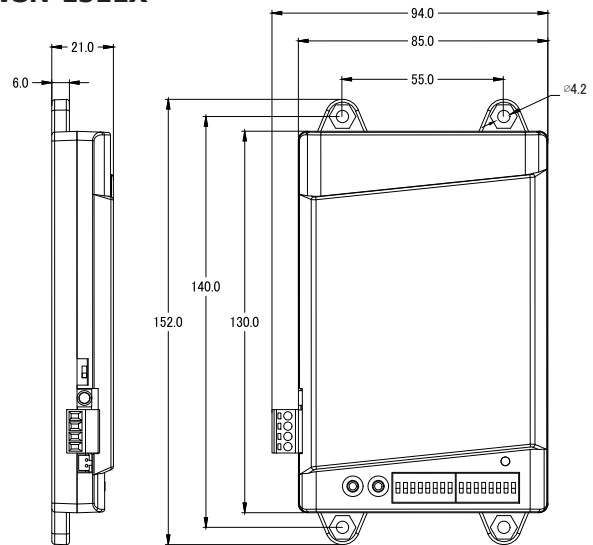
iWSN-1510X

Left Side View   Front View

iWSN-1511X

Left Side View   Front View

◼ Ordering Information

iWSN-1510X CR	iWSN Environmental Sensing Module with 1-ch CT Input and 1 Expansion Interface (RoHS) (Asia Only)
iWSN-1511X CR	iWSN Environmental Sensing Module with 1-ch CT Input, 1-ch Thermistor Input and 1 Expansion Interface (RoHS) (Asia Only)

◼ Accessories

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)
iWSN-010 CR	iWSN temperature and humidity sensing module (RoHS)
iWSN-012 CR	iWSN CO2e/TVOC sensing module (RoHS)
iWSN-101 CR	iWSN CO sensing module (RoHS)
iWSN-201 CR	iWSN 1-axis vibration sensing module (RoHS)
iWSN-203 CR	iWSN 3-axis vibration sensing module (RoHS)
CA-TM-M200-L050P CR	5 m Magnetic plug thermistor
CA-TM-M100-L050P CR	5 m Metal plug thermistor
CA-TM-M100-L020P CR	2 m Black plastic plug thermistor
CA-TM-M100-L050P CR	5 m Black plastic plug thermistor