



ZT-2017C

Wireless 8-channel Current Input Module with High Common Voltage Protection

Introduction

The ZT-2017C is a wireless 16-bit, 8-channel differential analog input ZigBee module that provides a programmable input range on all analog channels ($-20\text{ mA} \sim +20\text{ mA}$, $0 \sim +20\text{ mA}$ or $+4 \sim +20\text{ mA}$). Each analog channel can be configured for an individual range and has a high 200 VDC common voltage protection. The module Supports open wire detection for $4 \sim 20\text{ mA}$. Users can easily configure the module address, protocol, checksum, ZT-PID, ZT-channel and type code settings using a combination of rotary and DIP switches.

System Specifications

Communication Interface	
Wireless Standards	ZigBee 2007 Pro
Transmission Power	11 dBm (FCC Certificated) (Max 19 dBm)
Antenna	2.4 GHz - 5 dBi Omni-directional Antenna
Transmission Range (LoS)	700 m (Typical)
Certification	CE/FCC, FCC ID
Max. Slaves in a ZigBee Network	255
ZB-100R/ZB-100T Support	-
Protocols	Supports DCON and Modbus RTU Protocols
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)
LED Indicators	
Power	1 LED, Red
ZigBee Communication	1 LED, Green
Power	
EMS Protection	ESD, Surge, EFT
Input Voltage Range	$+10\text{ VDC} \sim +30\text{ VDC}$
Power Consumption	1.4 W Max.
Mechanical	
Flammability	Fire Retardant Materials (UL 94V-0 Level)
Dimensions (L x W x H)	87 mm x 33 mm x 110 mm
Installation	DIN-Rail
Environment	
Operating Temperature	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Storage Temperature	$-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$
Relative Humidity	10 ~ 90% RH, Non-condensing

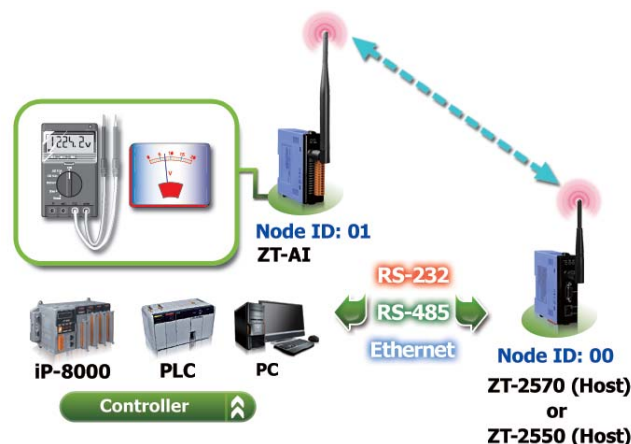
Features

- ISM 2.4 GHz Operating Frequency
- Fully Compliant with 2.4 G / ZigBee Specifications
- Wireless Transmission Range up to 700 m
- External DIP and Rotary Switches for easy Configuration
- GUI Configuration Software (Windows Version)
- 8 Differential Current Input Channels
- Individual Channel Configuration
- Open Wire Detection for $4 \sim 20\text{ mA}$
- $\pm 4\text{ kV}$ ESD Protections (Contact for each Terminal)
- DIN-Rail Mounting



Applications

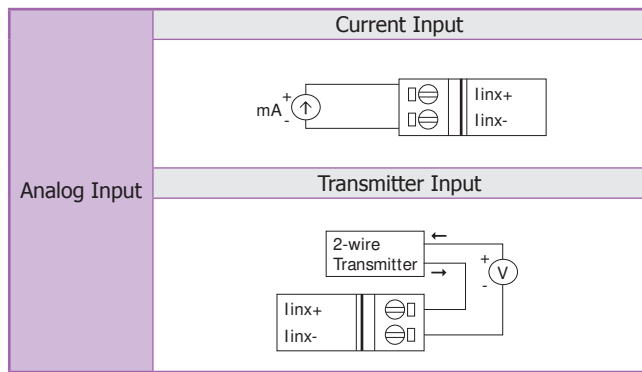
Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote Diagnosis, Testing Equipment.



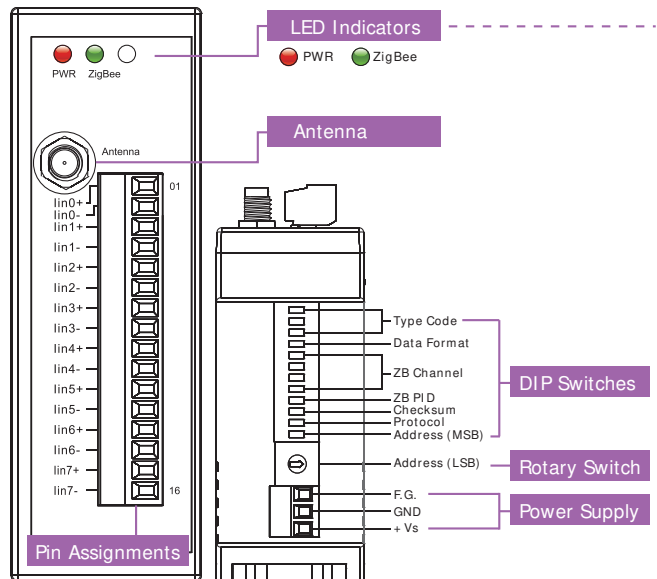
I / O Specifications

Analog Input	
Input Channels	8 Differential
Input Types	$-20\text{ mA} \sim +20\text{ mA}$, $0\text{ mA} \sim +20\text{ mA}$ or $+4\text{ mA} \sim +20\text{ mA}$
Resolution	16-bit
Sampling Rate	10 Samples/Sec. (Total)
Accuracy	$\pm 0.1\%$ of FSR
-3dB Bandwidth	15.7 Hz
Common Mode Rejection	86 dB
Normal Mode Rejection	100 dB
Input Impedance	125 Ω
Common Voltage	$\pm 200\text{ VDC}$
Overvoltage Protection	240 Vrms
Individual Channel Configuration	Yes
Open Wire Detection	Yes, $4 \sim 20\text{ mA}$
Intra-module Isolation, Field-to-Logic	3000 VDC

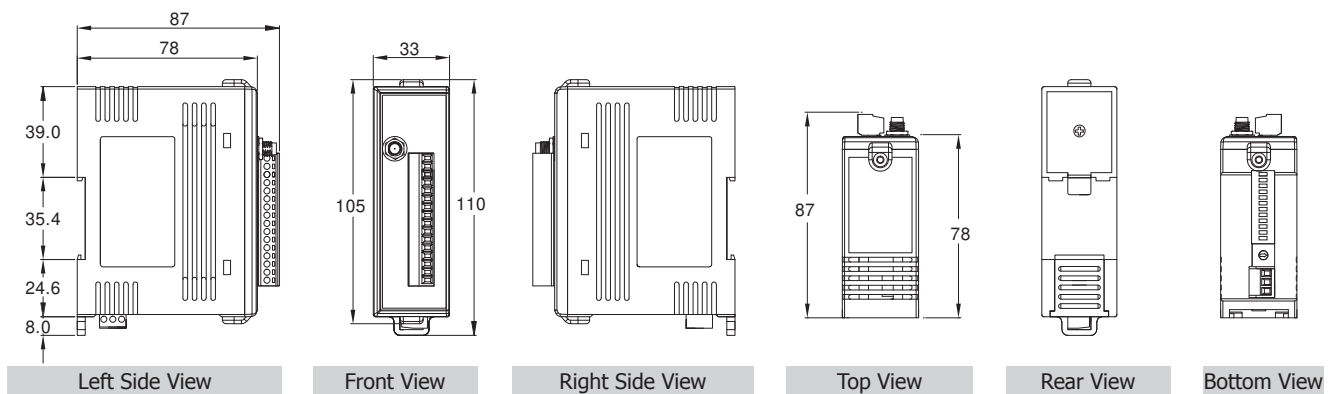
Wiring



Appearance



Dimensions (Units: mm)



Ordering Information

ZT-2017C CR Wireless 8-channel Current Input Module with High Common Voltage Protection (ZigBee Router) (RoHS)

Important Note: ZigBee Data Acquisition modules need a ZigBee host converter to coordinate the data transmission route. Please remember to order a ZT-2550, ZT-2570, or ZT-USBC ZigBee host converter when you purchase ZigBee Data Acquisition products.

Accessories

MDR-20-24	24 VDC/1.0 A, 24 W Power Supply with DIN-Rail Mounting
ZT-2510 CR	ZigBee Repeater (RoHS)
ZT-2550 CR	RS-485/RS-232 to ZigBee Converter (Host)
ZT-2570 CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Host) (RoHS)
External Antenna	2.4 GHz External Antenna, RP SMA Male (Plug)
Extension Cable	3S00x-1, RG58A/U × Meter Long RP-SMA (male) to RP-SMA (female)