



ZB-2017-T

Wireless 8-ch Analog Input Module with High Voltage Protection

Introduction

The ZB-2017-T is a 16-bit, 8-ch differential analog inputs ZigBee wireless module that provides programmable input range on all analog channels (+/-100 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V). Each analog channel is allowed to configure an individual range and has 240 V_{rms} high overvoltage protection. Users can be easy to configure the module address, Protocol, Checksum, ZB-PID, ZB-ch and type code by rotary and DIP switch.

I/O Specifications

Analog Input		
Input Channel	8 Differential	
Input Type	+/-10 V, +/-5 V, +/-1 8V, +/-500 mV, +/-150 mV, -20 mA ~ +20 mA (Requires Optional External 125 Ω Resistor)	
Resolution	Normal Mode	16-bit
	Fast Mode	12-bit
Sampling Rate	Normal Mode	16-bit, 10 Samples/Sec. (Total)
	Fast Mode	12-bit, 60 Sample/Sec. (Total)
Accuracy	Normal Mode	+/-0.1% of FSR
	Fast Mode	+/-0.5% of FSR
-3dB Bandwidth	Normal Mode	15.7 Hz
	Fast Mode	78.7 Hz
Zero Drift	+/-20 μV/°C	
Span Drift	+/-25 ppm/°C	
Common Mode Rejection	86 dB	
Normal Mode Rejection	100 dB	
Input Impedance	>2 MΩ	
Overvoltage Protection	240 V _{rms}	
Individual Channel Configurable	Yes	
Intra-module Isolated, Field-to-Logic	3000 V _{oc}	
ESD Protection	+/-4 kV Contact for Each Channel	

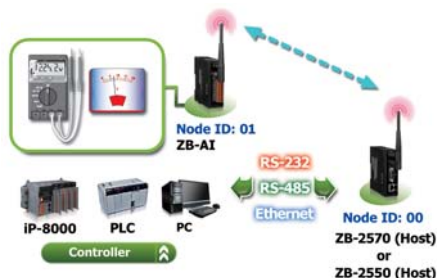
Features

- ISM 2.4 GHz Operating Frequency
- Fully Compliant 2.4 G IEEE802.15.4/ZigBee Specifications
- Wireless Transmission Range up to 700 m (PA-Version)
- Wireless Transmission Range up to 100 m (None/T-Version)
- GUI Configuration Software (Windows Version)
- 8 Differential AI (mV, V)
- Individual Channel Configuration
- Overvoltage Protection is up to 240 V_{rms}
- EFT and ESD Protection
- DIN-Rail Mounting



Applications

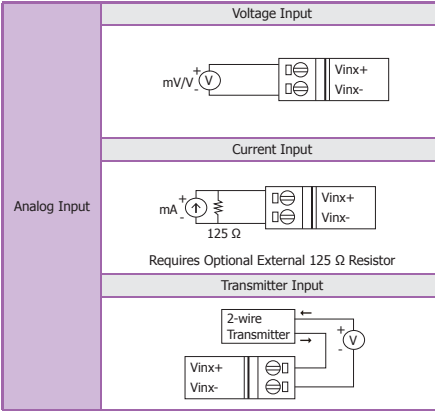
Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote diagnosis, Testing Equipment.



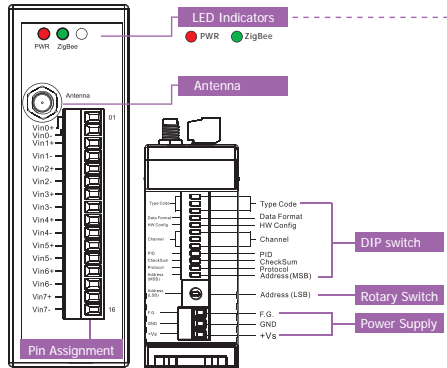
System Specifications

Communication Interface	
Wireless	ZigBee, IEEE 802.15.4 Standard
Antenna	2.4 GHz-3 dBm Omni-Directional antenna
Protocols	Supports DCON and Modbus RTU Protocols
Hot Swap	By Rotary and DIP switch
LED Indicators	
Power	1 LED, red
ZigBee Communication	1 LED, green
Power	
Power Consumption	1.7 W max.
Mechanical	
Flammability	Fire Retardant Materials (UL94-V0 Level)
Dimensions (W x L x H)	33 mm x 87 mm x 107 mm
Installation	DIN-Rail
Environment	
Operating Temperature	-25 °C ~ +75 °C
Storage Temperature	-30 °C ~ +80 °C
Humidity	10 ~ 90% RH, Non-condensing

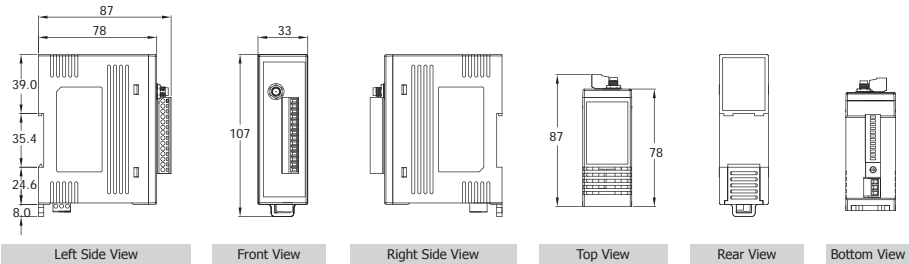
Wiring



Appearance



Dimensions (Units: mm)



Ordering Information

ZB-2017-T CR	Wireless 8-ch Analog Input Module with High Voltage Protection (RoHS)
Important Note: The Zigbee Data Acquisition modules need a Zigbee host converter to coordinate the data transmission route. Please remember to order a ZB-2550, ZB-2550-T, ZB-2550PA, ZB-2570, ZB-2570-T or ZB-2570PA ZigBee host converter when you purchase the Zigbee Data Acquisition products.	

Accessories

MDR-20-24	24 Vdc/1.0 A, 24 W Power Supply with DIN-Rail Mounting
ZB-2510 CR	ZigBee Repeater (RoHS)
ZB-2510P CR	High Power Amplifier ZigBee Repeater (RoHS)
ZB-2550 CR	RS-485/RS-232 to ZigBee Converter (Host) (RoHS)
ZB-2550P CR	RS-485/RS-232 to High Power Amplifier ZigBee Converter (Host) (RoHS)
ZB-2570 CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Host) (RoHS)
ZB-2570P CR	Ethernet/RS-485/RS-232 to High Power Amplifier ZigBee Converter (Host) (RoHS)