



ZT-2005-C8

Wireless 8-ch Thermistor Input Module

Introduction

The ZT-2005-C8 is an 8-channel thermistor input module of ZigBee. It based on the IEEE802.15.4 standard that allows users to measuring temperature via a thermistor in a personal area ZigBee network. The typical transmission of ZT-2005-C8 is 700 meters (LOS, line of sight), with a transmission frequency range of between 2.405 GHz and 2.48 GHz, separated into 5 MHz sectors, providing 16 channels. Users can easily configure the module address, protocol, checksum, ZB-PID and ZB-channel settings using a combination of rotary and DIP switches. ZT-2005-C8 has 4 kV ESD protection and 1000 Vdc intra-module isolation.

System Specifications

Communication Interface	
Wireless Standards	ZigBee 2007 Pro
Transmission Power	11 dBm (FCC Certificated) (Max 19 dBm)
2.4 GHz Antenna	5 dBi Omni directional
Transmission Range (LoS)	700 m (Typical)
Certification	FCC ID
Max. Slaves in a ZigBee Network	255
Protocols	Supports DCON and Modbus RTU Protocols
Hot Swap	Rotary and DIP switch
LED Indicators	
ZigBee Net	Green
ZigBee Rx/D	Yellow
Power	Red
Isolation	
Intra-module Isolation	1000 Vdc
EMS Protection	
ESD	4 kV Contact for Power Line, Communication Line and each Channel
EFT	1 kV for Power Line
Surge	1 kV for Power Line
Power	
Input Voltage Range	+10 Vdc ~ +30 Vdc
Power Consumption	1 W(Max.)
Mechanism	
Flammability	Fire Retardant Materials (UL94-V0 Level)
Dimensions (L x W x H)	110 mm x 33 mm x 87 mm
Installation	DIN-Rail
Environment	
Operating Temperature	-25°C ~ +75°C
Storage Temperature	-30°C ~ +80°C
Relative Humidity	10 ~ 90% RH (non-condensing)

Features

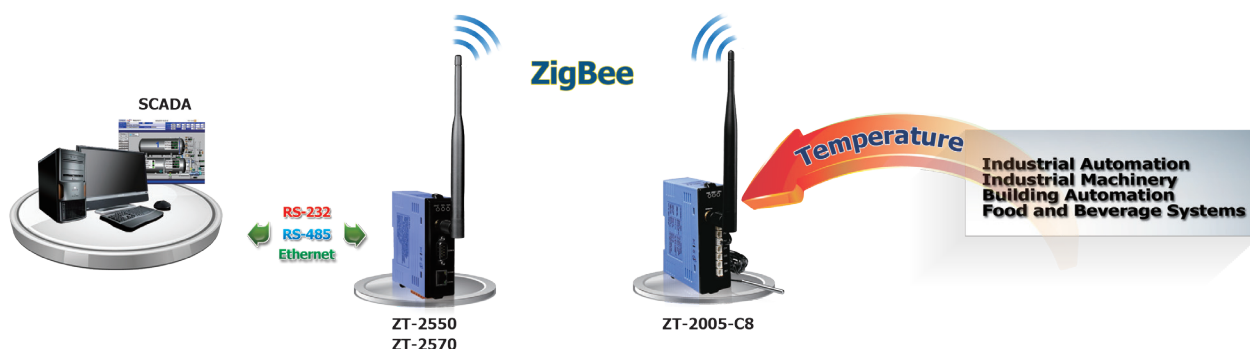
- ISM 2.4 GHz Operating Frequency
- Fully Compliant with IEEE802.15.4/ZigBee Specifications (ZigBee Pro/ZigBee 2007)
- Wireless Transmission Range up to 700 meters (Line of Sight)
- Supports ZigBee Repeater Function
- 8-Channel Thermistor Input
- Resolution: 12 bits
- Surge and ESD Protection
- DIN-Rail Mountable
- Operating Temperatures, -25 °C ~ +75 °C



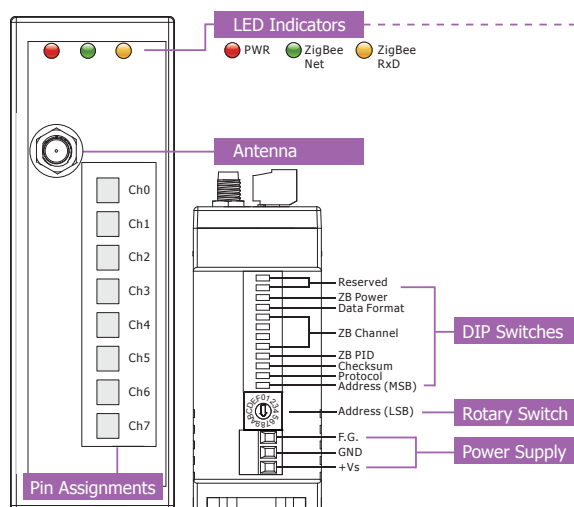
I/O Specifications

Analog Input	
Input Channels	8
Types	Thermistor
Sampling Rate	10 Hz total
Accuracy	±1°C
Resistance	R25=10K(Ω)±1%
B Constant	R25/85=3435(K)±1%
Dissipation Factor	≥3(mW/°C)
Thermal Time Constant	≥15 (sec)
Measuring temperature range	-40 ~ 100°C

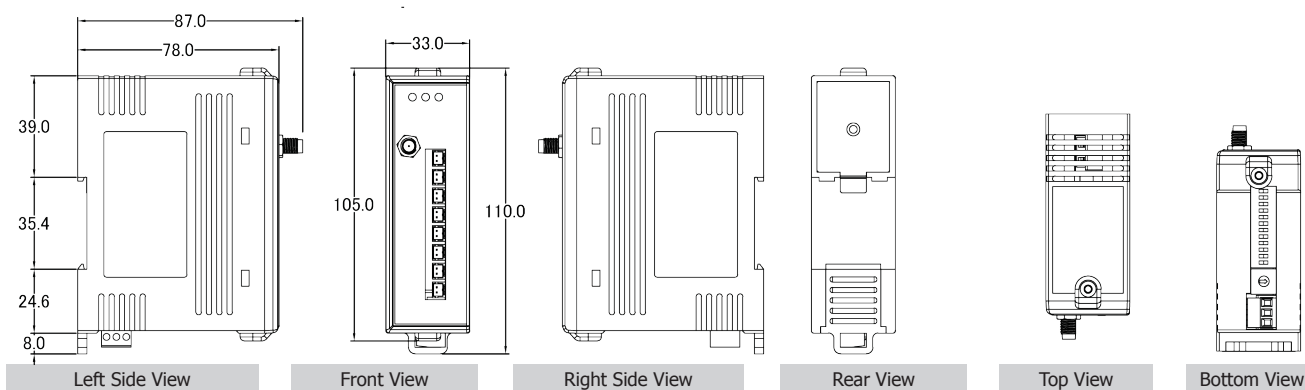
Applications



Appearance



Dimensions (Units: mm)



Ordering Information

ZT-2005-C8 CR

Wireless 8-ch Thermistor Input Module

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 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-2550 CR	RS-485/RS-232 to High Power Amplifier ZigBee Converter (Host) (RoHS)
ZT-2570 CR	Ethernet/RS-485/RS-232 to High Power Amplifier ZigBee Converter (Host) (RoHS)
ZT-2550 CR	RS-485/RS-232 to High Power Amplifier ZigBee Converter (Host) (RoHS)
ZT-2510 CR	ZigBee Repeater (RoHS)
External Antenna	2.4GHz External Antenna, RP SMA Male (Plug)
Extension Cable	3500x-1, RG58A/U x Meter Long RP-SMA male to RP-SMA Female