



## Introduction

The ZT-2026 is a wireless ZigBee module that offers 4 differential analog input channels, 2 analog output channels, 2 digital input channels and 2 digital output channels and provides a programmable analog input and output range. Each analog input channel can be configured to an individual range and each has 240 Vrms overvoltage protection. There are also options for a power-on value and a safe value. 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 Certified) ( Max 19 dBm)
2.4 GHz Antenna	5 dBi Omni directional
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)
Hot Swap	Rotary and DIP switch
LED Indicators	
Power	1 LED, red
ZigBee Communication	1 LED, green
Isolation	
Intra-module Isolated, Field-to-Logic	2500 Vdc (for AI, AO, DI and DO)
EMS Protection	
ESD (IEC 61000-4-2)	4 kV Contact for Power Line, Communication Line and each Channel, 8 kV Air for Random Point
EFT (IEC 61000-4-4)	4 kV for Power Line
Power	
Input Voltage Range	+10 Vdc ~ +30 Vdc (Reverse Polarity Protection )
Power Consumption	2.1 W Max.
Mechanical	
Flammability	Fire Retardant Materials (UL94-V0 Level)
Dimensions (L x W x H)	87 mm x 33 mm x 110 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

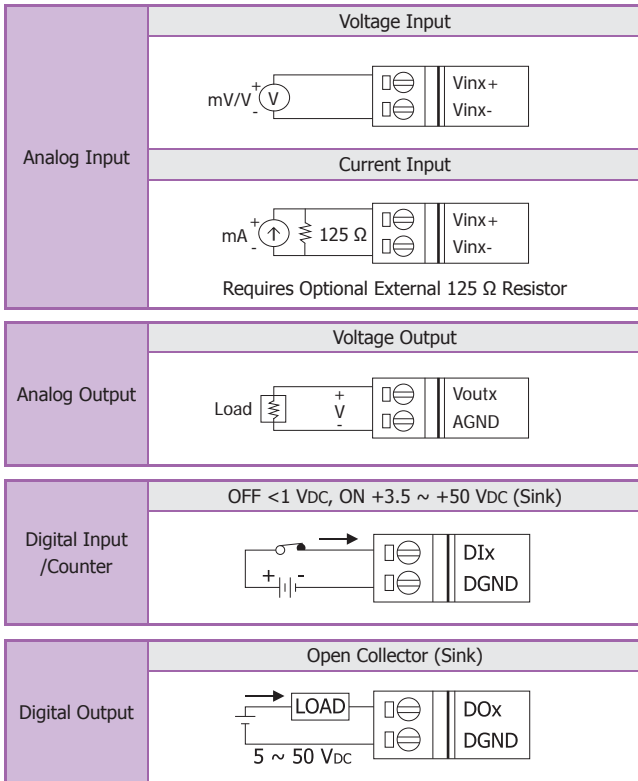
- ISM 2.4 GHz Operating Frequency
- Fully Compliant with 2.4G /ZigBee Specifications
- Wireless Transmission Range up to 700 m
- GUI Configuration Software (Windows Version)
- 4 AI, 2 AO, 2 DI and 2 DO Channels
- Individual Channel Configuration
- Overvoltage Protection is up to 240 Vrms
- Surge and ESD Protection
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- DIN-Rail Mounting



## I/O Specifications

Analog Input	
Input Channels	4 Differential
Input Types	+/-10 V, +/-5 V, +/-1 V, +/-500 mV, +/-150 mV or -20 mA ~ +20 mA (Requires Optional External 125 Ω Resistor)
Resolution	16-bit
Sampling Rate	10 Samples/Second (Total)
Accuracy	+/-0.1% of FSR
-3dB Bandwidth	15.7 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 Vrms
Individual Channel Configuration	Yes
Analog Output	
Output Channels	2
Output Types	+/-10 Vdc, +/-5 Vdc, 0 ~ 10 Vdc or 0 ~ 5 Vdc
Resolution	12-bit
Accuracy	+/-0.1% of FSR
Zero Drift	+/-30 μV/°C
Span Drift	+/-25 ppm/°C
Programmable Output Slope	0.0625 ~ 512 V/Second
Voltage Capability	20 mA @ 10 V
Power-on Value	Yes
Safe Value	Yes
Digital Input	
Input Channels	2 (Sink)
On Voltage Level	3.5 Vdc ~ 50 Vdc
Off Voltage Level	1 Vdc Max.
Input Impedance	10 KΩ
Event Counters	Channels : 2
	Max. Count: 16-bit (65535)
	Max. Input Frequency: 50 Hz Min. Pulse Width: 10 ms
Digital Output	
Output Channels	2 (Sink)
Output Types	Isolated Open Collector
Max. Load Current	700 mA/channel
Load Voltage	+5 Vdc ~ +50 Vdc
Short Circuit Protection	Yes
Power-on Value	Yes
Safe Value	Yes

### Wiring

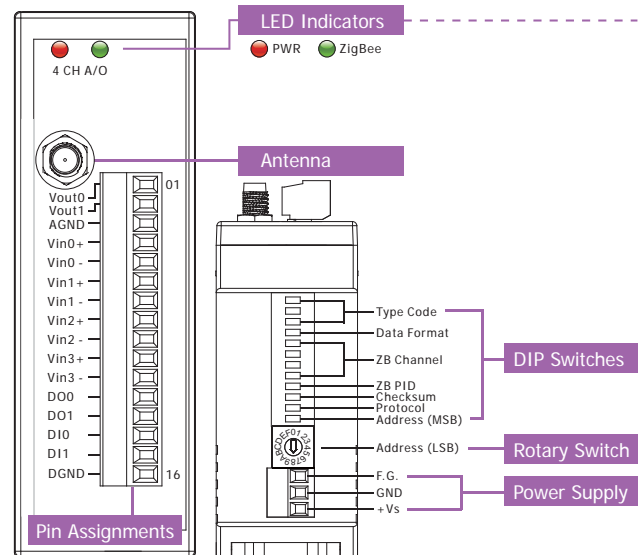


### Applications

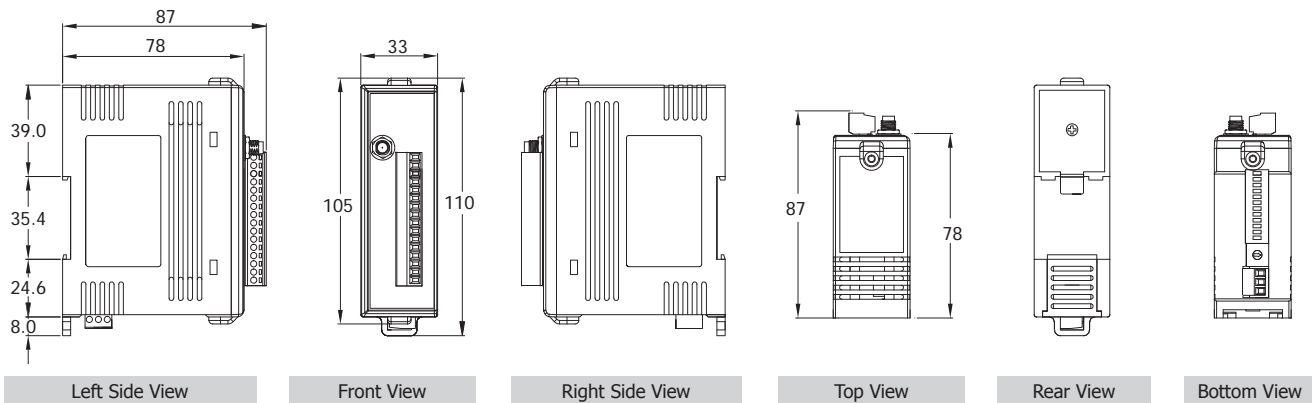
Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote Diagnosis, Testing Equipment.



### Appearance



### Dimensions (Units: mm)



### Ordering Information

ZT-2026 CR	Wireless 4-channel Voltage Input, 2-channel Voltage Output, 2-channel Digital Input and 2-channel Digital Output Module (RoHS)(Long Range)
<b>Important Note:</b> 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-2510 CR	ZigBee Repeater (RoHS)
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)