



Introduction

The ZT-2026 is a wireless ZigBee module that offers 4 differential analog input channels (Current input requires optional external 125 Ω resistor), 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 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 VDC ~ +30 VDC
Power Consumption	2.1 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°C ~ +75°C
Storage Temperature	-30°C ~ +80°C
Relative Humidity	10 ~ 90% RH, Non-condensing

Features

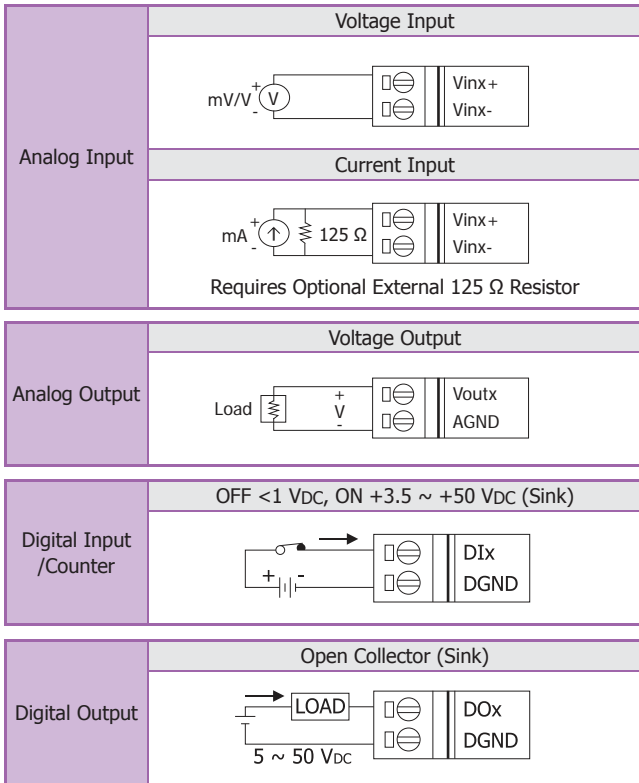
- ISM 2.4 GHz Operating Frequency
- Fully Compliant with 2.4 G / ZigBee Specifications
- Wireless Transmission Range up to 700 m
- External DIP and Rotary Switches for easy Configuration
- GUI Configuration Software (Windows Version)
- 4 AI, 2 AO, 2 DI and 2 DO Channels
- Individual Channel Configuration
- Overvoltage Protection is up to 240 Vrms
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- ±4 kV ESD Protections (Contact for each Terminal)
- 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/Sec. (Total)
Accuracy	±0.1% of FSR
-3dB Bandwidth	15.7 Hz
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
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

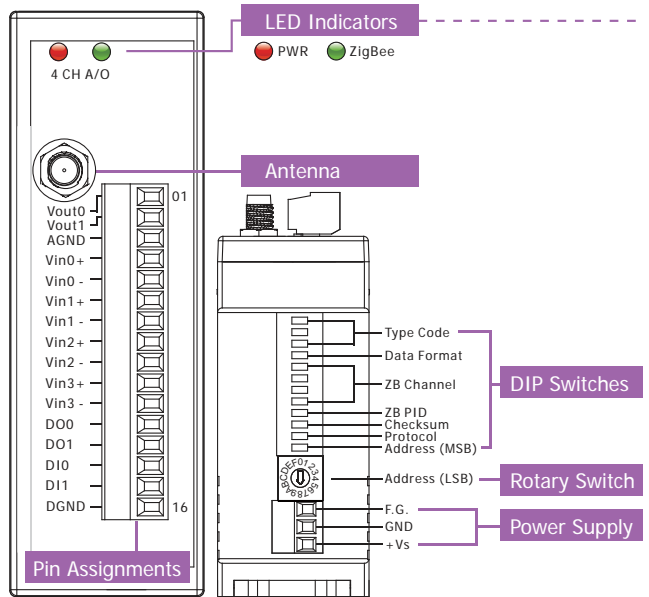


Applications

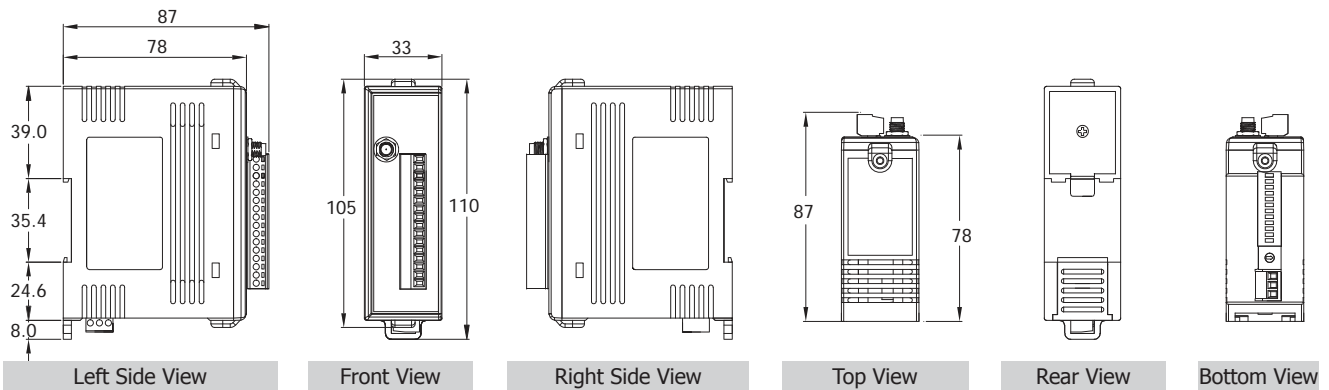
Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote Diagnosis, Testing Equipment.



Appearance



Dimensions (Units: mm)



Ordering Information

ZT-2026 CR	Wireless 4-ch Voltage Input, 2-channle Voltage Output, 2-channle Digital Input and 2-channle Digital Output Module (ZigBee Router) (RoHS)
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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 \times Meter Long RP-SMA (male) to RP-SMA (female)