



ZB-2026-T

Wireless 4-ch Voltage Input, 2-ch Voltage Output,
2-ch Digital Input and 2-ch Digital Output Module

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)
- 4 AI, 2 AO, 2 DI and 2 DO
- Individual Channel Configuration
- Overvoltage Protection is up to 240 V_{rms}
- Surge and ESD Protection
- DIN-Rail Mounting



Introduction

The ZB-2026-T offers 4-ch differential analog inputs, 2-ch analog output, 2-ch digital input and 2-ch digital output ZigBee wireless module that provides programmable analog input and output range. Each analog input channel is allowed to configure an individual range and has 240 V_{rms} high over voltage protection. There are options for power on value and Safe Value for your consideration. 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

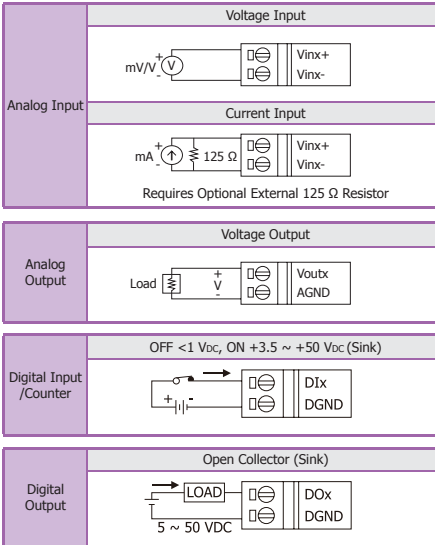
Analog Input	
Input Channel	4 Differential
Input Type	+/-10 V, +/-5 V, +/-1 V, +/-500 mV, +/-150 mV, -20 mA ~ +20 mA (Requires Optional External 125 Ω Resistor)
Resolution	16-bit
Sampling Rate	10 Samples/Second (Total)
Accuracy	+/-0.1% of FSR
-3dB Bandwidth	15.7 Hz
Zero Drift	+/-20 μV/°C
Span Drift	+/-25 ppm/°C
Common Mode Rejection	86 dB
Normal Mode Rejection	100 dB
Input Impedance	>2 MΩ
Overvoltage Protection	240 V _{rms}
Individual Channels Configurable	Yes
Analog Output	
Output Channels	2
Output Type	+/-10 V _{oc} , +/-5 V _{oc} , 0 ~ 10 V _{oc} , 0 ~ 5 V _{oc}
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 and Safe Value	Yes
Digital Input	
Input Channels	2 (Sink)
On Voltage Level	3.5 V _{oc} ~ 50 V _{oc}
Off Voltage Level	1 V _{oc} max.
Input Impedance	10 KΩ
Event Counters	Channels : 2
	Max. Counts: 16-bit (65535)
	Max. Input Frequency : 50 Hz
	Min. Pulse Width : 10 ms

Digital Output	
Output Channels	2 (Sink)
Output Type	Isolated Open Collector
Max. Load Current	700 mA/channel
Load Voltage	+5 V _{dc} ~ +50 V _{dc}
Short Circuit Protection	Yes

System Specifications

Communication Interface	
Wireless	ZigBee, IEEE 802.15.4 Standard
Antenna	2.4 GHz-3 dB 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
Isolation	
Intra-module Isolated, Field-to-Logic	2500 V _{oc} (for AI, AO, DI and DO)
EMS Protection	
ESD (IEC 61000-4-2)	4 kV Contact for Power Line, Communication Line and Each Channels, 8 kV Air for Random Point
EFT (IEC 61000-4-4)	4 kV for Power Line
Power	
Input Voltage Range	+10 V _{oc} ~ +30 V _{oc} (Reverse Polarity Protection)
Power Consumption	2.1 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

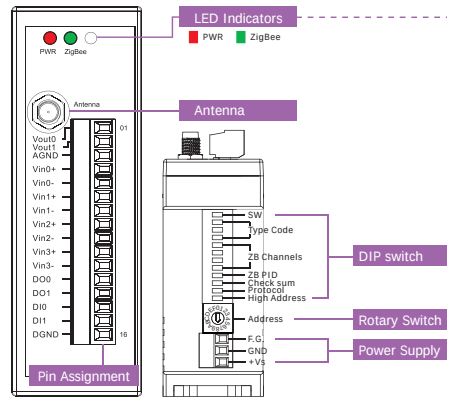


Applications

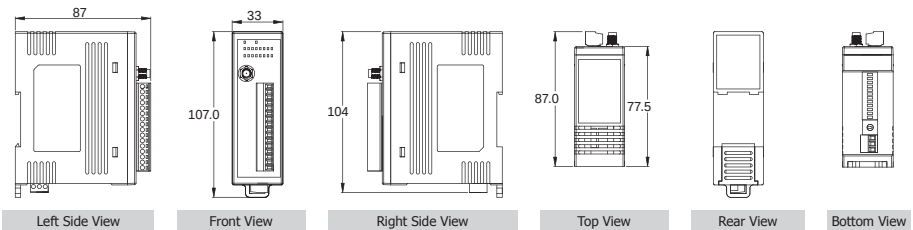
Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote diagnosis, Testing Equipment.



Appearance



Dimensions (Units: mm)



Ordering Information

ZB-2026-T CR	Wireless 4-ch Voltage Input, 2-ch Voltage Output, 2-ch Digital Input and 2-ch Digital Output Module (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)