



Introduction

The ZT-2024 is a 12-bit, 4-channel analog output wireless ZigBee module that provides a programmable output range on all channels, including 0 ~ +10 VDC, -10 VDC ~ +10 VDC, 0 ~ +5 VDC, -5 VDC ~ +5 VDC, 0 ~ +20 mA or +4 mA ~ +20 mA. There are also options for configuring the power-on value and the safe value. The module address, protocol, checksum, ZT-PID, ZT-channel and type code settings can be easily configured 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	2.2 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
Humidity	10 ~ 90% RH, Non-condensing

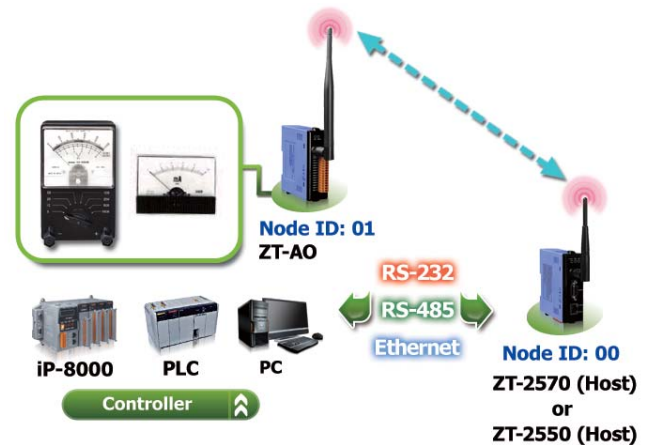
Features

- 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 Analog Output Channels (V, mA)
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- ±4 kV ESD Protections (Contact for each Terminal)
- DIN-Rail Mounting



Applications

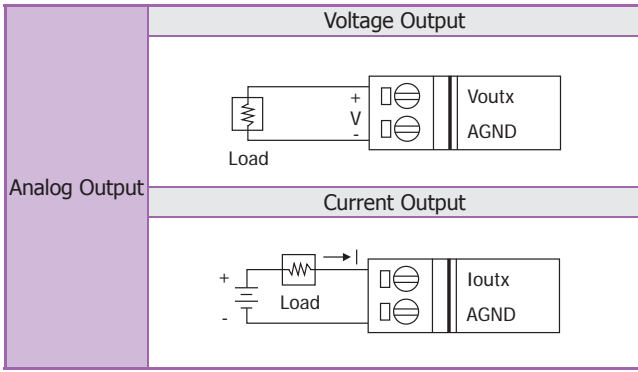
Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote Diagnosis, Testing Equipment.



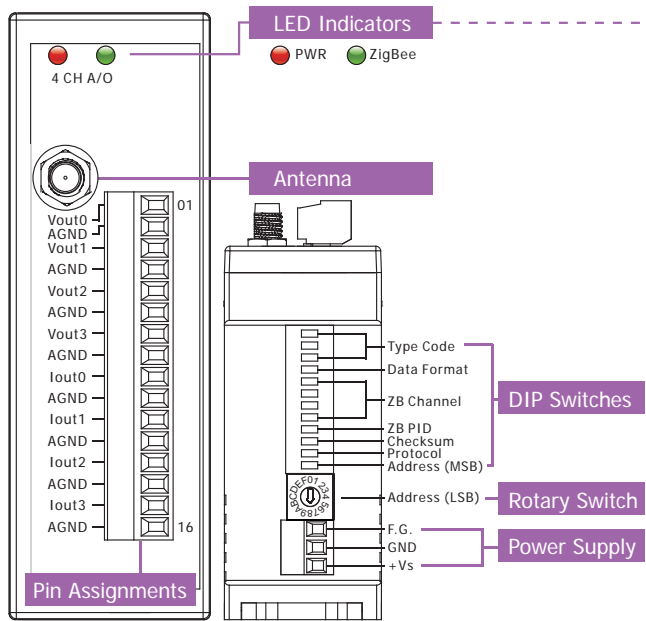
I/O Specifications

Analog Output	
Output Channels	4
Output Types	0 ~ +10 VDC, -10 VDC ~ +10 VDC, 0 ~ +5 VDC, -5 VDC ~ +5 VDC, 0 ~ +20 mA, +4 mA ~ +20 mA
Resolution	12-bit
Accuracy	±0.1% of FSR
Programmable Output Slope	0.125 to 2048 mA/ second 0.0625 to 1024 V/ second
Voltage Output Capability	10 V @ 10 mA
Current Load Resistance	External +24 V power : 1050 Ω
Intra-module Isolation, Field-to-Logic	2500 Vdc
Power-on Value	Yes
Safe Value	Yes

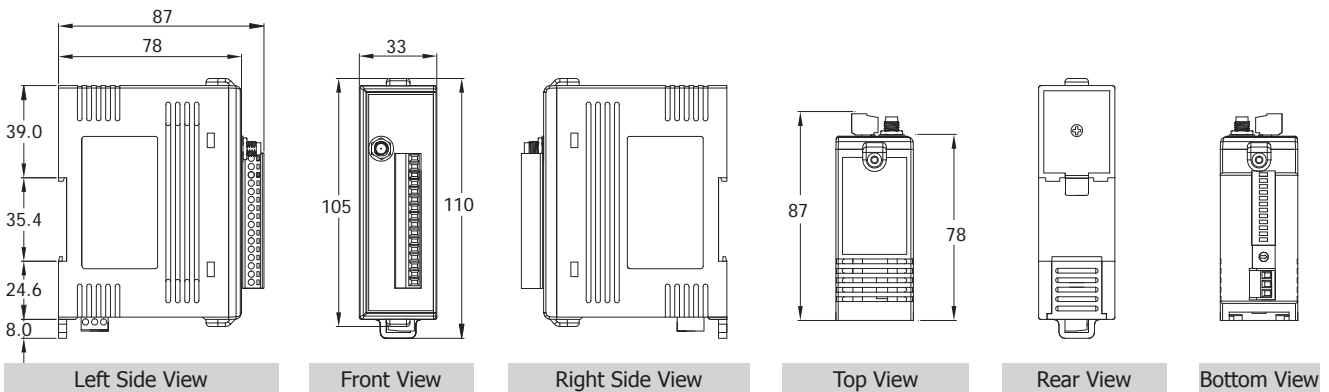
Wiring



Appearance



Dimensions (Units: mm)



Ordering Information

ZT-2024 CR	Wireless 4-channel Voltage/Current Output Module (ZigBee Router) (RoHS)
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	3500x-1, RG58A/U × Meter Long RP-SMA (male) to RP-SMA (female)