



Introduction

The ZT-2052 offers 8 digital input channels, each of which features photocouple isolation. In addition, you can choose either sink-type or source-type input via wire connections. All channels are able to be used as 16-bit counters. The ZT-2052 has 8 LED indicators to display the channel status and also includes 4 kV ESD protection and 3000 VDC intra-module isolation. Users can easily configure the module address, protocol, checksum, ZB-PID and ZB-channel settings using a combination of rotary and DIP switches.

System Specifications

Model	ZT-2052
Communication Interface	
Wireless Standards	ZigBee, IEEE 802.15.4
Transmission Power	11 dBm
2.4 GHz Antenna	5 dBi Omni directional
Transmission Range (LoS)	700 m (Typical) 1 km (Max.)
Certification	-
Max. Slaves in a ZigBee Network	255
Protocols	Supports DCON and Modbus RTU Protocols
Hot Swap	Rotary and DIP switch
LED Indicators	
Power	1 LED, red
ZigBee Communication	1 LED, green
Digital Input	8 LEDs, green
Power	
Input Voltage Range	+10 Vdc ~ +30 Vdc
Power Consumption	1 W Max.
Mechanical	
Flammability	Fire Retardant Materials (UL94-V0 Level)
Dimensions (W x L x H)	33 mm x 88 mm x 110 mm
Installation	DIN-Rail
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Relative Humidity	10 ~ 90% RH, Non-condensing

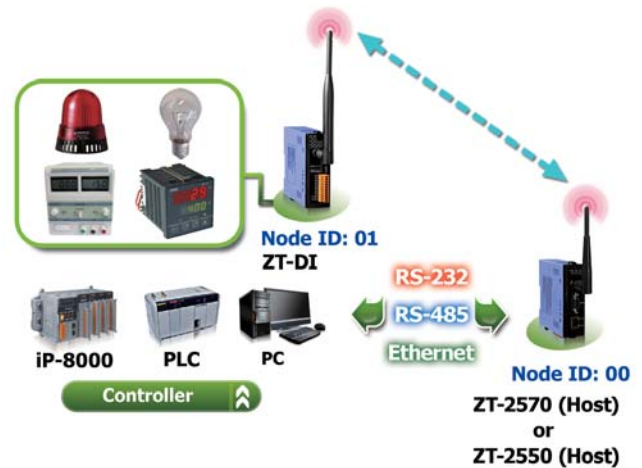
Features

- ISM 2.4 GHz Operating Frequency
- Fully Compliant with 2.4G IEEE 802.15.4/ZigBee Specifications
- Wireless Transmission Range up to 700 m (Default)
- Adjustable RF Transmission Output Power
- GUI Configuration Software (Windows Version)
- Supports AES-128 Encryption for the Wireless Communication (Passive)
- Supports ZigBee Repeater Function
- 8 Wet Contact Digital Input Channels
- Supports 16-bit Counters for Digital Input Channels
- Surge and ESD Protection
- DIN-Rail Mountable



Applications

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



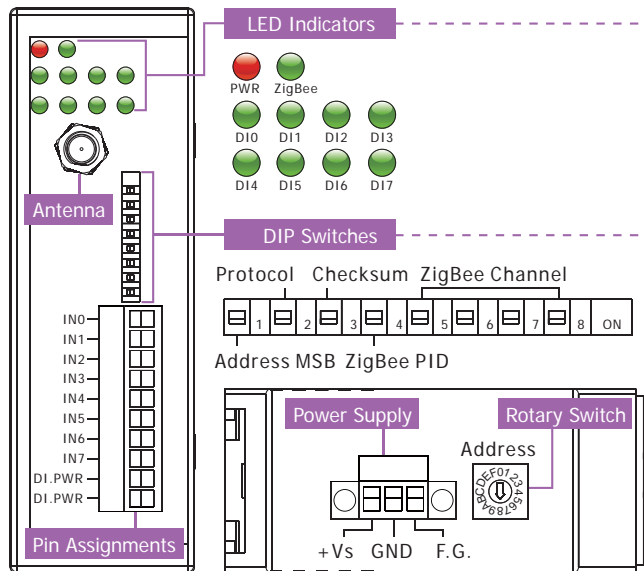
I/O Specifications

Model	ZT-2052	
Digital Input		
Input Channels	8	
Wet Contact (Sink/Source)	On Voltage Level:	+3.5 Vdc ~ +30 Vdc
	Off Voltage Level	+1 Vdc Max.
Input Impedance	3 kΩ, 0.33 W	
Counter	Channels	8
	Max. Count	16-bit (65535)
	Max. Input Frequency	100 Hz
	Min. Pulse Width	5 ms
Intra-module Isolation, Field to Logic	3750 Vrms	
ESD Protection	+/-4 kV contact for each channel	

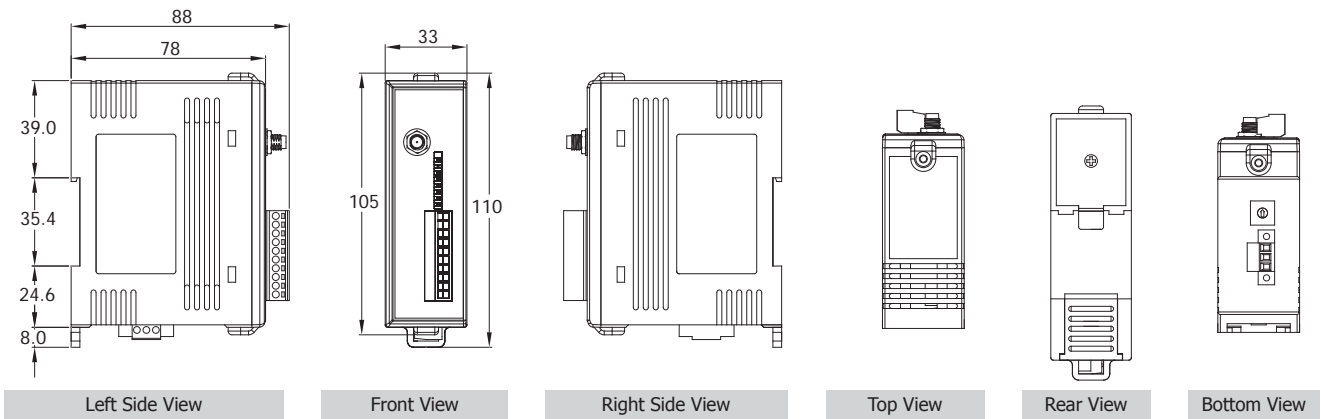
Wiring

Input Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
TTL/ CMOS Logic	Voltage > 3.5V 	Voltage < 1V
	Relay ON 	Relay OFF
Open Collector	Open Collector ON 	Open Collector OFF

Appearance



Dimensions (Units: mm)



Ordering Information

ZT-2052 CR	Wireless 8-channel Isolated Digital Input Module with 16-bit Counters (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 or 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 ZigBee Converter (Host)
ZT-2570 CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Host) (RoHS)

5
3
ZigBee Products