

ZT-2052

Wireless 8-channel Isolated Digital Input Module with 16-bit Counters

Introduction

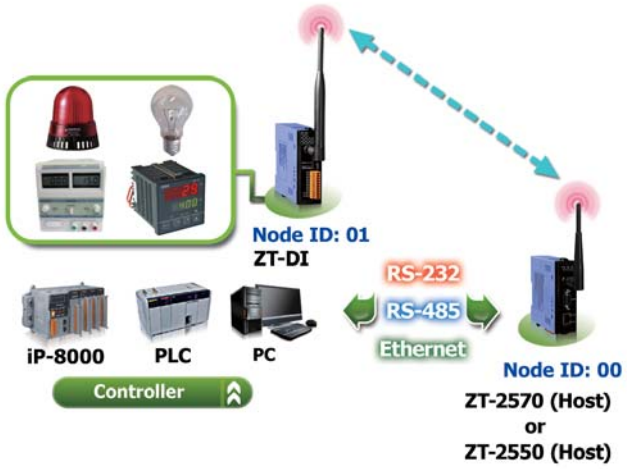
The ZT-2052 offers 8 digital input channels, each of which features photocouple isolation. In addition, you can choose either sink-type or source-type input via wire connections. All channels are able to be used as 16-bit counters. The ZT-2052 has 8 LED indicators to display the channel status and also 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.

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
- External DIP and Rotary Switches for easy Configuration
- 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.



System Specifications

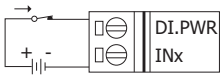
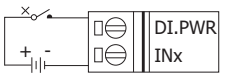
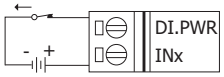
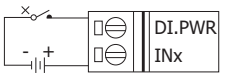
Communication Interface	
Wireless Standards	ZigBee 2007 Pro
Transmission Power	10 dBm to 19 dBm (EIRP) (Adjustable via Utility)
Antenna	2.4 GHz - 5 dBi Omni-directional Antenna
Transmission Range (LoS)	300 m to 700 m (Depending on the RF power setting)
Certification	CE/FCC, FCC ID
Max. Slaves in a ZigBee Network	255
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
Digital Output	8 LEDs, Red
Isolation	
Intra-module Isolated, Field-to-Logic	3000 Vrms
Power	
Input Voltage Range	+10 VDC ~ +30 VDC
Power Consumption	1 W Max.
Mechanical	
Flammability	Fire Retardant Materials (UL 94V-0 Level)
Dimensions (L × W × H)	87 mm × 33 mm × 110 mm
Installation	DIN-Rail
Environment	
OperatingTemperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Humidity	10 ~ 90% RH, Non-condensing

I/O Specifications

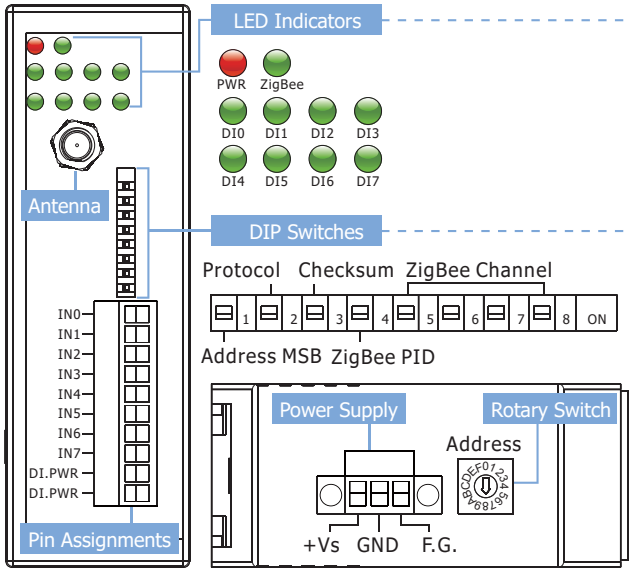
Digital Input/Counter		
Channel		8
Types		Wet Contact (Slink/Source)
ON Voltage Level		+3.5 VDC ~ +30 VDC
OFF Voltage Level		+1 VDC Max.
Counters	Max. Count	16-bit (65535)
	Max. Input Frequency	100 Hz
	Min. Pulse Width	5 ms
Input Impedance		3 kΩ, 0.33 W
ESD Protection		±4 kV contact for each channel

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

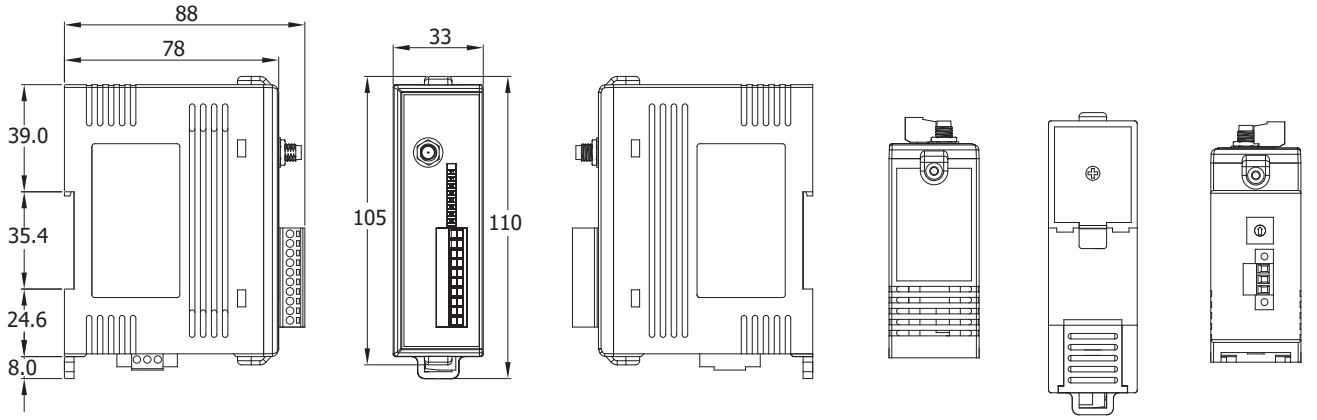
Wiring

Input Type	ON State Readback as 1	OFF State Readback as 0
Wet Contact (Sink)	Voltage > 3.5V	Voltage < 1V
		
Wet Contact (Source)	Voltage > 3.5V	Voltage < 1V
		

Appearance



Dimensions (Units: mm)



Left Side View | Front View | Right Side View | Top View | Rear View | Bottom View

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 CR	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 × Meter Long RP-SMA (male) to RP-SMA (female)

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000