

ZT-2042

Wireless 4-channel PhotoMOS Relay Output and 4-channel Open Collector Output Module

Features

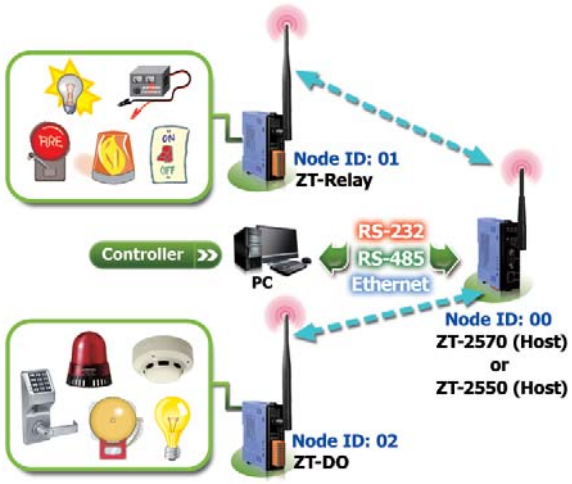
- ISM 2.4 GHz Operating Frequency
- Fully Compliant with ZigBee 2007 Pro Specifications
- Wireless Transmission Range up to 700 m (Default)
- Supports AES-128 Encryption for the Wireless Communication (Passive)
- 4 PhotoMOS Relay Output Channels and 4 Open Collector Digital Output Channels
- Configurable Power-on Value and Safe Value Settings

Introduction

The ZT-2042 offers 4 PhotoMOS relay output channels and 4 sink-type digital output channels with short circuit protection. Each channel features photo couple isolation. There are options for configuring power-on and safe digital output values. The ZT-2042 has 8 LED indicators to display the DO channel status. 4 kV ESD protection and 3000 VDC intra-module isolation are the standard. Users can easily configure the module address, protocol, checksum, ZB-PID and ZB-channel settings using a combination of rotary and DIP switches.

Applications

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



System Specifications

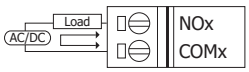
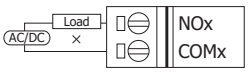
Communication Interface	
Wireless Standards	ZigBee 2007 Pro
Transmission Power	10 dBm to 19 dBm (EIRP) (Adjustable via Utility)
Antenna	2.4 GHz - 5 dBi Omni-directional Antenna
Transmission Range (LoS)	300 m to 700 m (Depending on the RF power setting)
Protocols	Supports DCON and Modbus RTU Protocols
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 VDC
EMS Protection	
Power	1 LED, Red
ZigBee Communication	1 LED, Green
Digital Output	8 LEDs, Red
Power	
Input Voltage Range	+10 VDC ~ +30 VDC
Power Consumption	1.32 W Max.
Mechanical	
Dimensions (L x W x H)	87 mm x 33 mm x 110 mm
Installation	DIN-Rail
Environment	
OperatingTemperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Humidity	10 ~ 90% RH, Non-condensing

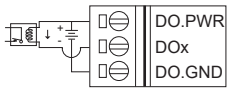
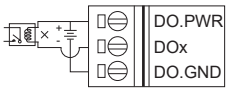
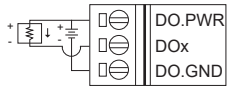
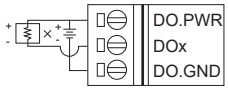
I/O Specifications

Relay Output	
Output Channels	4
Output Types	PhotoMOS Relay, Form A
Load Voltage	60 VDC/VAC
Max. Load Current	60 V/1.0 A (Operating Temperature: -25 ~ +40°C)
	60 V/0.8 A (Operating Temperature: +40 ~ +60°C)
	60 V/0.7 A (Operating Temperature: +60 ~ +75°C)
Power-on Time	5.0 ms
Power-off Time	0.5 ms
Power-on Value	Yes
Safe Value	Yes
Digital Output	
Output Channels	4 (Sink)
Output Types	Isolated Open Collector
Max. Load Current	700 mA/channel
Load Voltage	+5 VDC ~ +50 VDC
Power-off Time	0.5 ms
External Power Reversed Protection and Short Circuit Protection	Yes
Current Limited Protection	1.1 A
Power-on Value	Yes
Safe Value	Yes

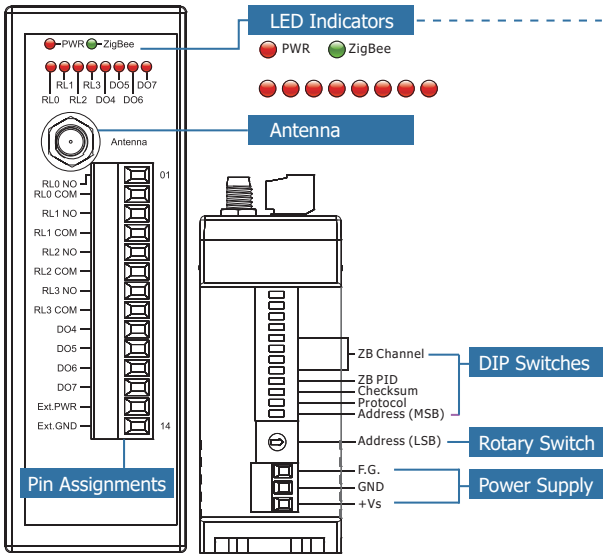
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Wiring

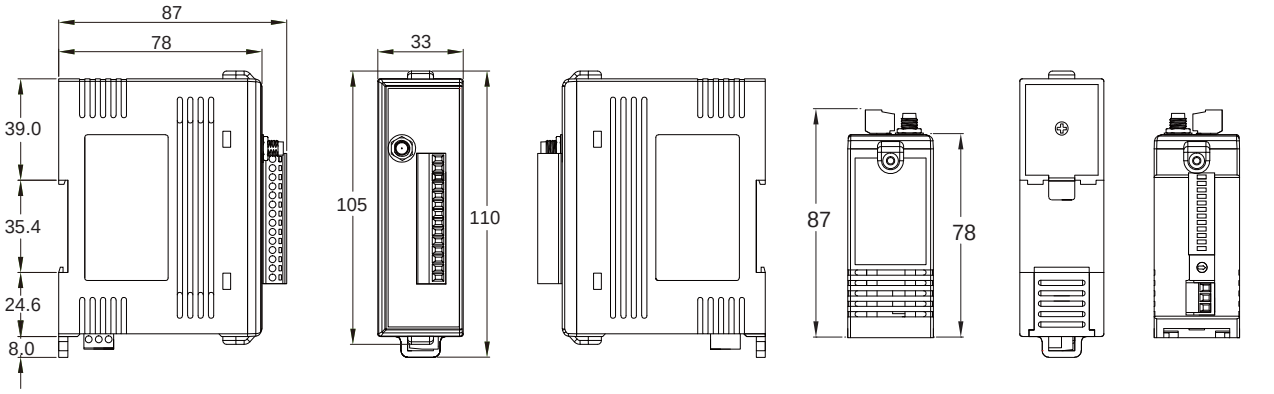
Relay Output	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
From A Relay Contact	Relay ON	Relay OFF
		

Digital Output	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Drive Relay	Relay ON	Relay OFF
		
Resistance Load	Relay ON	Relay OFF
		

Appearance



Dimensions (Units: mm)



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

Ordering Information

ZT-2042 CR	Wireless 4-channel PhotoMOS Relay Output and 4-channel Open Collector 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, and 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 × Meter Long RP-SMA (male) to RP-SMA (female)

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