



## ZT-2043

Wireless 14-channel Isolated Digital Output Module

### Features

- ISM 2.4 GHz Operating Frequency
- Fully Compliant with 2.4G/ 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
- 14 Digital Output Channels for Open Collector
- Short Circuit Protection
- Surge and ESD Protection
- Configurable Power-on Value and Safe Value Settings
- DIN-Rail Mounting



### Introduction

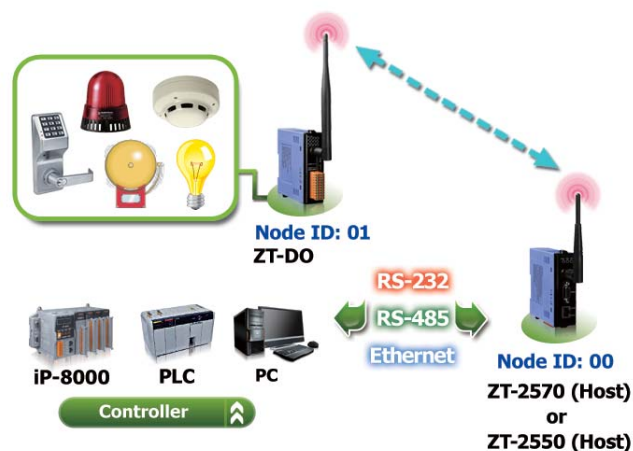
The ZT-2043 offers 14 sink type digital output channels with short circuit protection. All channels feature photo-couple isolation. The ZT-2043 includes 14 LED indicators to display the DO channel status. 4 kV ESD protection and 3750 VDC intra-module isolation are the standard. Users can easily configure the module address, protocol, checksum, ZB-PID and ZB-channel settings using a combination of rotary and DIP switches.

### System Specifications

Communication Interface	
Wireless Standards	ZigBee 2007 Pro
Transmission Power	11 dBm (FCC Certified) (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
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	14 LEDs, Red
Isolation	
Intra-module Isolated, Field-to-Logic	3000 VDC
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for Power Line, Communication Line and each Channel, ±8 kV Air for Random Point
EFT (IEC 61000-4-4)	±4 kV for Power
Surge (IEC 61000-4-5)	±3 kV for Power
Power	
Input Voltage Range	+10 VDC ~ +30 VDC
Power Consumption	0.84 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 ~ +75°C
Storage Temperature	-30 ~ +80°C
Relative Humidity	10 ~ 90% RH, Non-condensing

### Applications

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



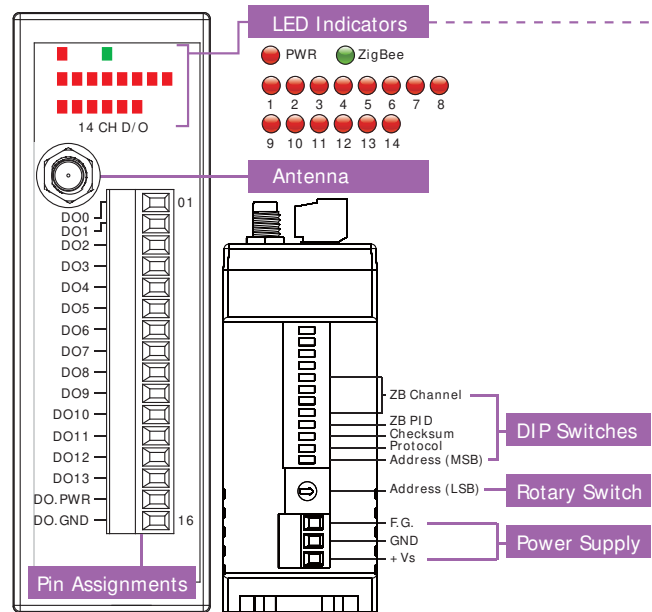
### I / O Specifications

Digital Output	
Output Channels	14 (Sink)
Output Types	Isolated Open Collector
Max. Load Current	700 mA/channel
Load Voltage	+5 VDC ~ +50 VDC
External Power Reversed Protection and Short Circuit Protection	Yes
Current Limited Protection	1.1 A
Power-on Value	Yes
Safe Value	Yes

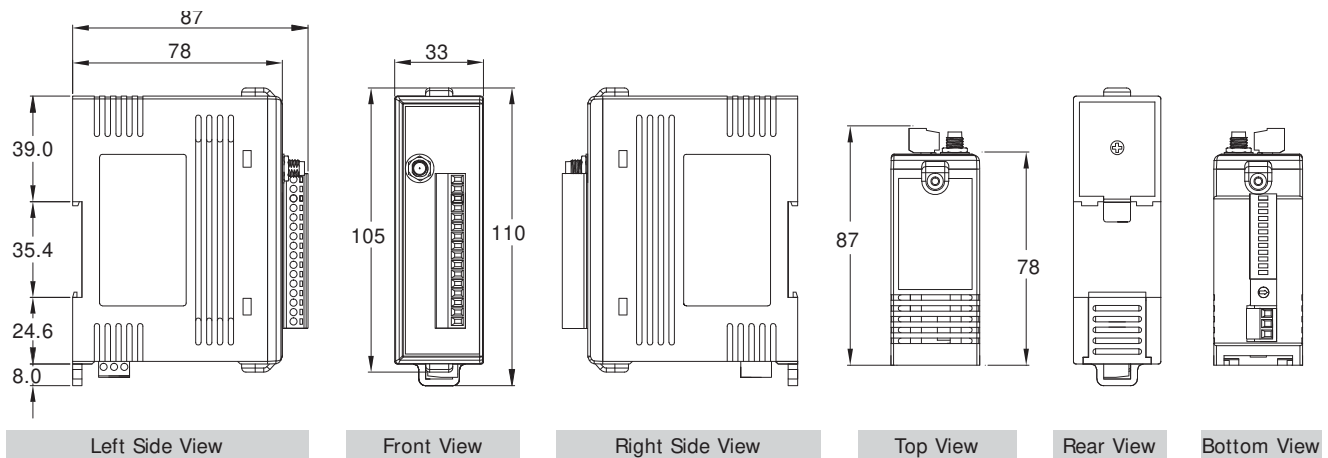
## Wiring

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

## Appearance



## Dimensions (Units: mm)



## Ordering Information

**ZT-2043 CR** Wireless 14-channel Isolated Digital 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 x Meter Long RP-SMA (male) to RP-SMA (female)