



## Introduction

The ZB-2043-T offers 14-ch sink type digital outputs with short circuit protection. All channels feature photo-couple isolation. ZB-2043-T has 14 LED indicators for DO channel status. 4 kV ESD protection and 3750 Vdc intra-module isolation are the standard. Users can be easy to configure the module address, Protocol, Checksum, ZB-PID and ZB-ch by rotary and DIP switch.

## I/O Specifications

| Digital Output                                                  |                                  |
|-----------------------------------------------------------------|----------------------------------|
| Output Channel                                                  | 14 (Sink)                        |
| Output Type                                                     | 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                            |
| Intra-module Isolated, Field-to-Logic                           | 3750 Vdc                         |
| ESD Protection                                                  | +/-4 kV Contact for Each Channel |

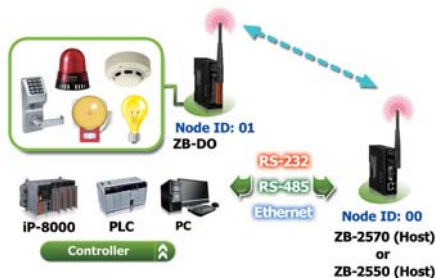
## Features

- ISM 2.4 GHz Operating Frequency
- Fully Compliant 2.4 G IEEE802.15.4/ZigBee Specifications
- Wireless Transmission Range up to 700 m (PA-Version)
- Wireless Transmission Range up to 100 m (None/T-Version)
- GUI Configuration Software (Windows Version)
- 14 Digital Output for Open Collector
- Short Circuit Protection
- Surge and ESD Protection
- DIN-Rail Mounting



## Applications

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



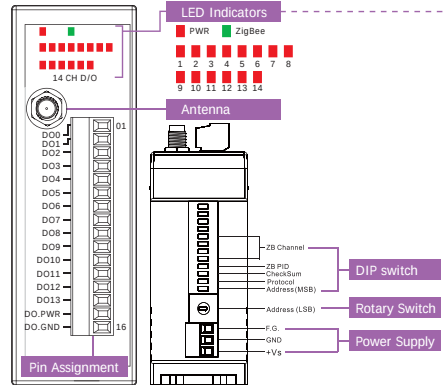
## System Specifications

| Communication Interface |                                          |
|-------------------------|------------------------------------------|
| Wireless                | ZigBee, IEEE 802.15.4 Standard           |
| Antenna                 | 2.4 GHz-3 dBi Omni-Directional antenna   |
| Protocols               | Supports DCON and Modbus RTU Protocols   |
| Hot Swap                | By Rotary and DIP switch                 |
| LED Indicators          |                                          |
| Power                   | 1 LED, red                               |
| ZigBee Communication    | 1 LED, green                             |
| Digital Output          | 14 LEDs, red                             |
| Power                   |                                          |
| Power Consumption       | 0.84 W max.                              |
| Mechanical              |                                          |
| Flammability            | Fire Retardant Materials (UL94-V0 Level) |
| Dimensions (W x L x H)  | 33 mm x 87 mm x 107 mm                   |
| Installation            | DIN-Rail                                 |
| Environment             |                                          |
| Operating Temperature   | -25 °C ~ +75 °C                          |
| Storage Temperature     | -30 °C ~ +80 °C                          |
| Humidity                | 10 ~ 90% RH, Non-condensing              |

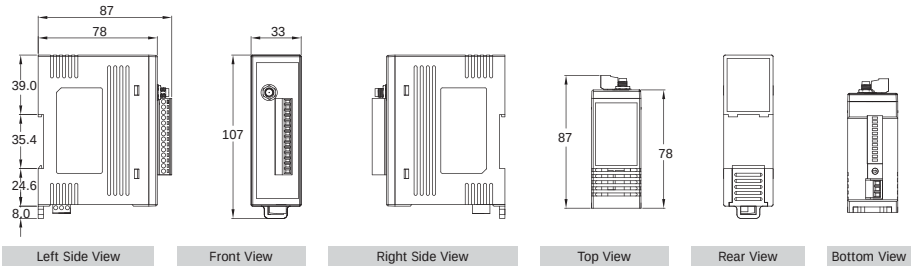
## Wiring

| Digital Output  | ON State LED ON<br>Readback as 1 | OFF State LED OFF<br>Readback as 0 |
|-----------------|----------------------------------|------------------------------------|
|                 | Relay ON                         | Relay OFF                          |
| Drive Relay     |                                  |                                    |
| Resistance Load |                                  |                                    |

## Appearance



## Dimensions (Units: mm)



## Ordering Information

|                                                                                                                                                                                                                                                                                                     |                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| ZB-2043-T CR                                                                                                                                                                                                                                                                                        | Wireless 14-ch Isolated Digital Output Module (RoHS) |
| Important Note: The ZigBee Data Acquisition modules need a ZigBee host converter to coordinate the data transmission route. Please remember to order a ZB-2550, ZB-2550-T, ZB-2550PA, ZB-2570, ZB-2570-T or ZB-2570PA ZigBee host converter when you purchase the ZigBee Data Acquisition products. |                                                      |

## Accessories

|             |                                                                               |
|-------------|-------------------------------------------------------------------------------|
| MDR-20-24   | 24 Vdc/1.0 A, 24 W Power Supply with DIN-Rail Mounting                        |
| ZB-2510 CR  | ZigBee Repeater (RoHS)                                                        |
| ZB-2510P CR | High Power Amplifier ZigBee Repeater (RoHS)                                   |
| ZB-2550 CR  | RS-485/RS-232 to ZigBee Converter (Host) (RoHS)                               |
| ZB-2550P CR | RS-485/RS-232 to High Power Amplifier ZigBee Converter (Host) (RoHS)          |
| ZB-2570 CR  | Ethernet/RS-485/RS-232 to ZigBee Converter (Host) (RoHS)                      |
| ZB-2570P CR | Ethernet/RS-485/RS-232 to High Power Amplifier ZigBee Converter (Host) (RoHS) |