ICP DAS

NEW

ZT-2570/ZT-2571

Features

- ISM 2.4 GHz Operating Frequency
- Fully Compliant with 2.4 G (IEEE802.15.4/ZigBee Specifications)
- Fully Compliant with ZigBee ZigBee Pro (ZigBee 2007)
- Wireless Transmission Range up to 700 m (Default)
- Adjustable RF Transmission Output Power
- GUI Configuration Software (Windows Version)
- RS-232/RS-485/Ethernet Interface Supported
- Source Identification for the non-address Device Data Transmission
- Supports Modbus RTU/TCP Gateway (Broadcast/Unicast)
- Supports Broadcast Transmission for the Redundancy Transmission Path
- Supports Unicast Transmission to Reduce Network Loading
- Supports Topology Utility for Network Monitoring and Improvement
- Supports AES-128 Encryption for the Wireless Communication
- DIN-Rail Mountable

CE FC RoHS

Introduction

The ZT-2570 and ZT-2571 series modules are small-sized wireless ZigBee converters based on the IEEE802.15.4 standard that allow RS-232, RS-485 and Ethernet interface to be converted to a personal area ZigBee network. The typical transmission of ICP DAS ZT series ZigBee products is 700 meters (LOS, line of sight), with a transmission frequency range of between 2.405 GHz and 2.48 GHz, separated into 5 MHz sectors, providing 16 channels and 16384 PAN IDs. ZT-2000 series is not only a long distance wireless converter but also can act a ZigBee router to extend the transmission range and improve the quality of wireless signal.

ZT-2000 series products are specification for a suite of high level communication protocols using small, low-power digital radios module, which are fitted the ZigBee 2007 (ZigBee Pro) of ZigBee Alliance. In the ZigBee network, it is only allowed one ZigBee Host and called "ZigBee Coordinator", ZT-2570 series products, are used to initialize and manager the routing. In addition, One ZigBee network are able to manager 255 ZigBee router and responsible for receiving or bypassing data from parent or child node.

A Windows compatible GUI configuration utility is available. The utility allows users to set different configurations based on the type of application, together with several of required ZigBee variables such as Pan ID. The friendly user interface is also helping user be familiar with ZT-2000 series.
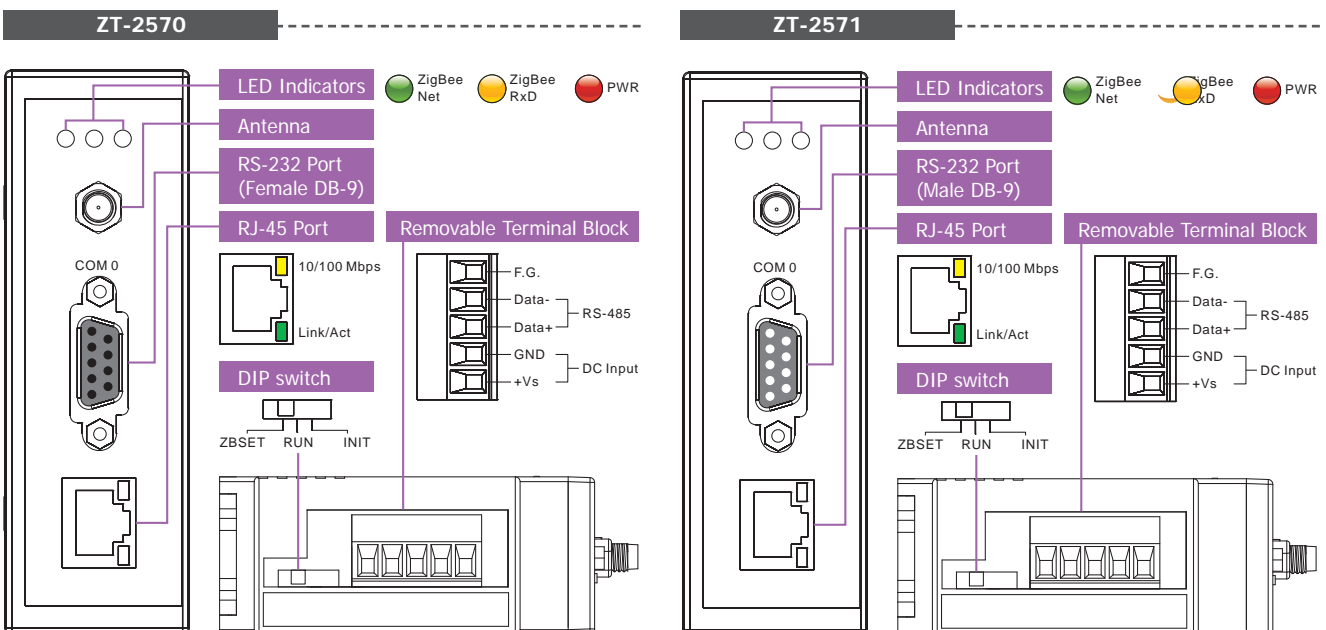
Specifications

Models	ZT-2570 (ZigBee Coordinator)	ZT-2571 (ZigBee Router)
Hardware		
CPU	80186, 80 MHz or compatible	
Temporary Buffer Size	2300 Bytes	
LED Indicators — ZigBee Net	Green	
LED Indicators — ZigBee RxD	Yellow	
LED Indicators — Power	Red	
Communication Interface (COM0)		
RS-232	RS-232 (TxD, RxD and GND);	
	D-Sub 9 Female, Non-isolated	D-Sub 9 Male, Non-isolated
RS-485	RS-485 (DATA+, DATA-; internal ASIC self-tuner); Non-isolated	
Baud Rate	1200 ~ 115200 bps	
Data Bit	7, 8	
Parity Check	Even, Odd, None	
Stop Bit	1, 2	
Communication Interface (Ethernet)		
Ethernet	10/100 Base-TX (Auto-negotiating, auto_MDI/MDI-X, LED indicators)	
Power		
Protection	Power reverse polarity protection	
EMS Protection	ESD, Surge, EFT	
Required Supply Voltage	+10 V_{DC} ~ +30 V_{DC}	
Power Consumption	2.5 W (Max.)	
Mechanical		
Casing	Plastic	
Flammability	UL 94V-0 materials	
Dimensions (L x W x H)	87 mm x 33 mm x 110 mm	
Installation	DIN-Rail	

Models	ZT-2570 (ZigBee Coordinator)	ZT-2571 (ZigBee Router)
Environment		
Operating Temperature	-25 ~ +75°C	
Storage Temperature	-40 ~ +80°C	
Relative Humidity	5 ~ 95% RH, Non-condensing	
Wireless		
RF Channel	16	
RF Transmit Power	11 dBm	
Antenna (2.4 GHz)	5 dBi Omni-Directional antenna	
Transmit Range (LOS)	700 m (Typical)	
Max. Slaves Supported	255	
EMI Certification	CE/FCC, FCC ID	

▰ Applications
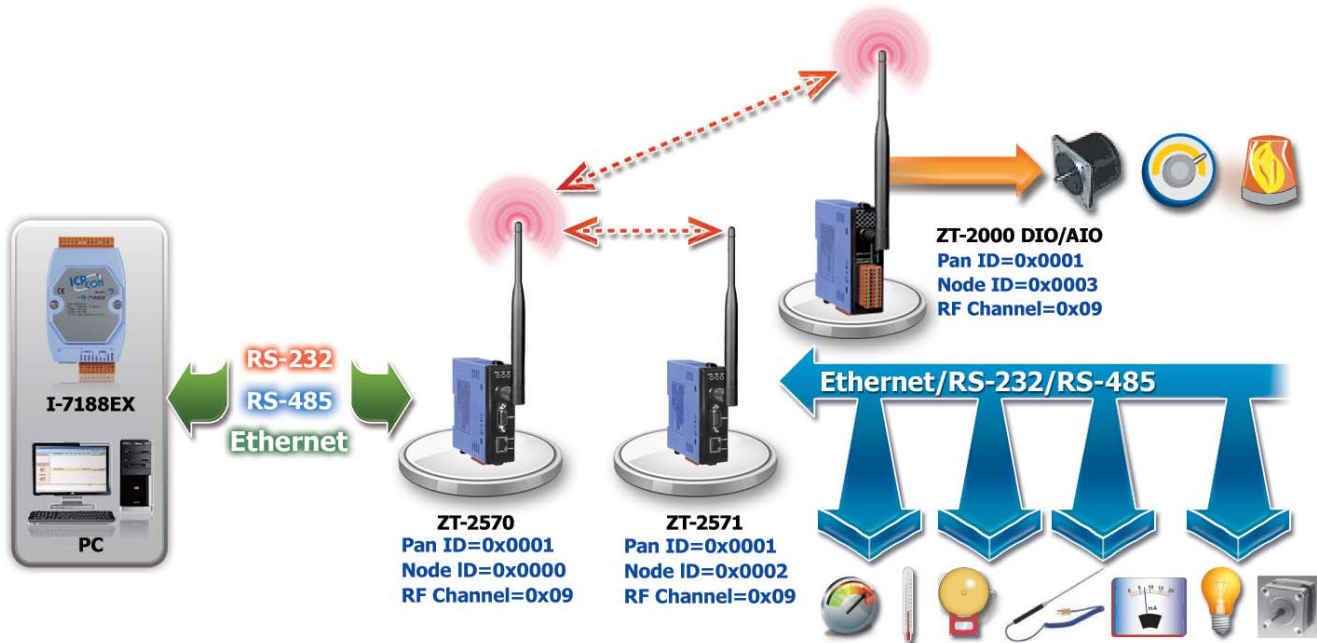
▰ Appearance

Dimensions (Units: mm)

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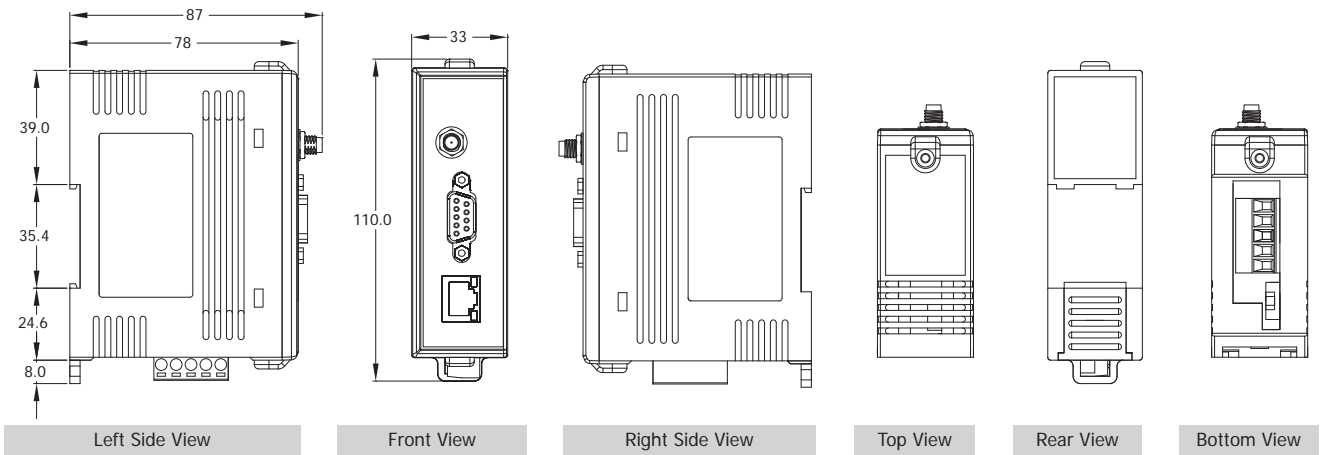
Ordering Information

ZT-2570 CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Host, ZigBee Coordinator) (RoHS)
ZT-2571 CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Slave, ZigBee Router) (RoHS)

Accessories

ZT-2550 CR	RS-485/RS-232 to ZigBee Converter (Host, ZigBee Coordinator) (RoHS)
ZT-2551 CR	RS-485/RS-232 to ZigBee Converter (Slave, ZigBee Router) (RoHS)
ZT-2570 CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Host, ZigBee Coordinator) (RoHS)
ZT-2571 CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Slave, ZigBee Router) (RoHS)
ZT-2000 DIO series	Wireless digital input and digital output ZigBee I/O device
ZT-2000 AIO series	Wireless differential analog input and analog output ZigBee I/O device