



DL-100TMS-ZT

Features

- Measuring range: $-20 \sim +60^{\circ}\text{C}$ and $0 \sim 100\% \text{ RH}$
- Accuracy: $\pm 0.4^{\circ}\text{C}$; $\pm 2.0\% \text{ RH}$
- Temperature and humidity data logs can reach 510 logs
- Support Modbus RTU communication protocol (Slave)
- Support ZigBee 2007 Pro
- Wireless transmission distance up to 100 meters (Line of Sign)
- Wireless packets support AES-128 encryption
- IP66 waterproof rating



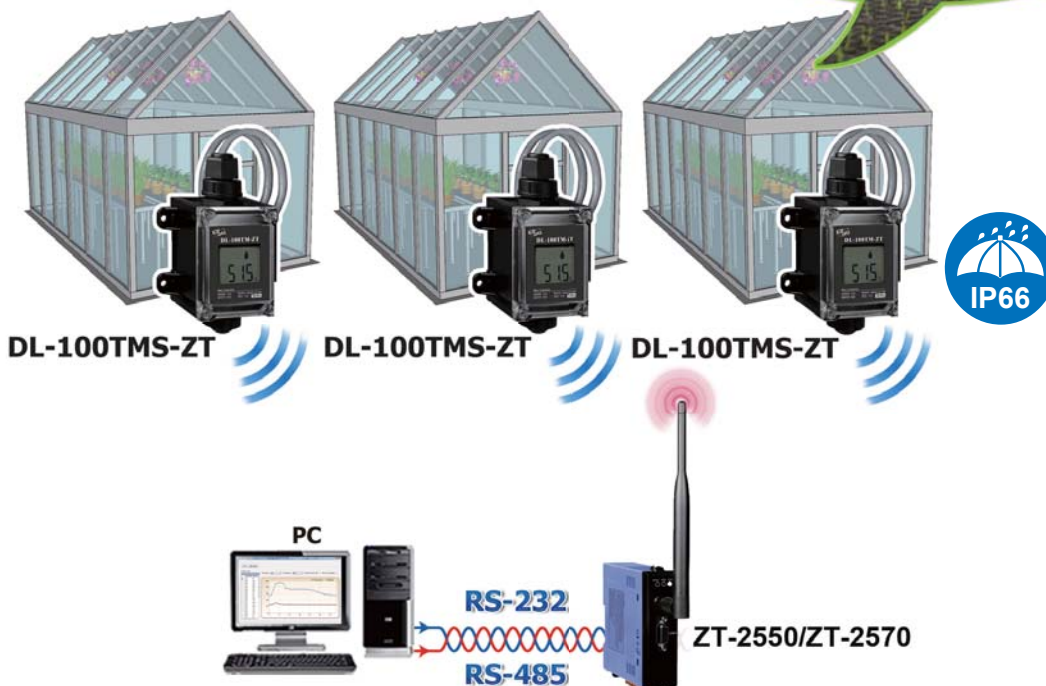
Introduction

DL-100TMS-ZT is a temperature and humidity logging module that can regularly detect and log temperature and humidity according to the parameters set by the user, and display the temperature, humidity, wireless parameters and other information sequentially on the screen.

In addition, this module supports Modbus RTU protocol, and users can use SCADA software to send Modbus commands to read back the current temperature and humidity through wireless communication of ZT-2550 or ZT-2570, or use the DL-100TMS-ZT Utility to read back the temperature and humidity information logged in the module through ZT-2550, and saves it as a CSV file (*.csv) or text file (*.txt).

Applications

Greenhouse Automation



Specifications

Model	DL-100TMS-ZT
RF	
Wireless Standards	ZigBee 2007 Pro
Transmission Power	11 dBm (Max. 19 dBm)
Antenna	2.4 GHz - PCB Antenna (3dBi, 50Ω)
Transmission Distance (LoS)	100 m
Protocols	Supports Modbus RTU
Humidity Sensor	
Measurement Range	0 ~ 100% RH (Relative Humidity)
Resolution	0.1% RH
Accuracy	Typical: ±3% RH
Precision	±0.1% RH
Temperature Sensor	
Measurement Range	-20 ~ +60°C
Resolution	0.1°C
Accuracy	Typical: ±0.4°C
Precision	±0.1°C
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
EFT (IEC 61000-4-4)	±1 kV for Power
Power	
Input Range	+10 VDC ~ +30 VDC
Power Consumption	0.5 W Max.
Mechanical	
Dimensions (W x L x H)	86 mm x 128 mm x 52 mm
Environmental	
Operating Temperature	-20 ~ +60°C
Storage Temperature	-25 ~ +75°C
Operating Humidity	10 ~ 95% RH(Non-condensing)

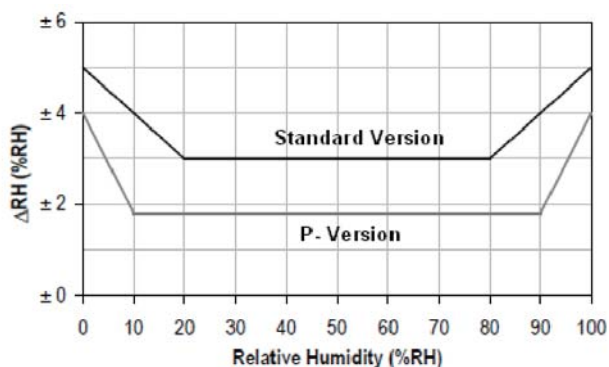


Figure 1: Maximum RH-tolerance at 25°C per sensor.

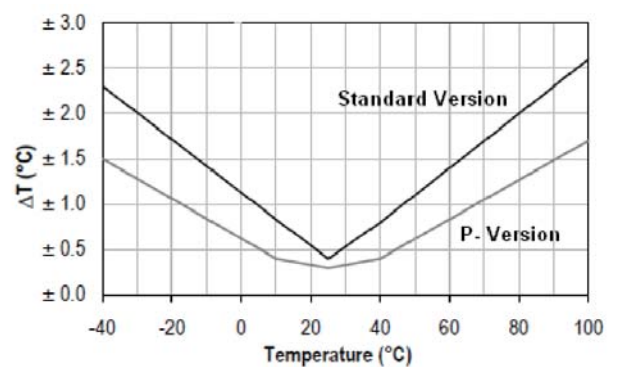


Figure 2: Maximum T-tolerance per sensor.

Installation

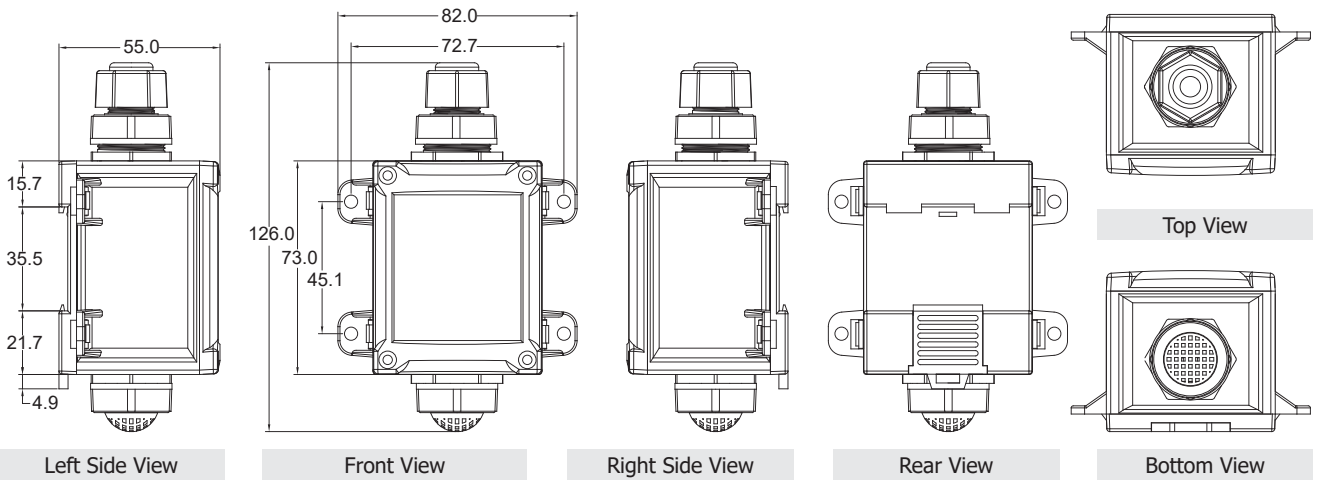


DIN-Rail Mounting



Wall mount

Dimensions (Units: mm)



Ordering Information

DL-100TMS-ZT CR	ZigBee Temperature and Humidity Module (ZigBee Router) (RoHS)
Important Note: ZigBee Data Acquisition modules require a ZigBee host converter to coordinate the data transmission path. Remember to order a ZT-2550 or ZT-2570 ZigBee host converter when purchasing ZigBee Data Acquisition Products.	

Optional Accessories

MDR-20-24	24 VDC/1.0 A, 24 W Power Supply with DIN-Rail Mounting
ZT-2510 CR	ZigBee Repeater (Slave, ZigBee Router) (RoHS)
ZT-2550 CR	RS-485/RS-232 to ZigBee Converter (Host, ZigBee Coordinator) (RoHS)
ZT-2570 CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Host, ZigBee Coordinator) (RoHS)