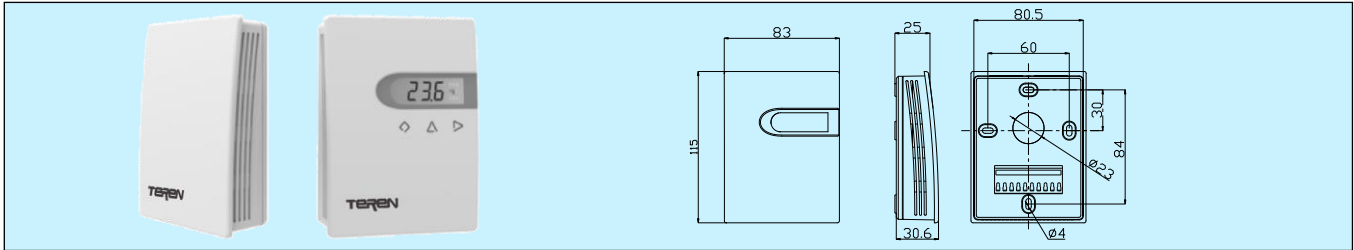


TTD1N Room Digital Temperature Transmitter/Controller



Applications & Features

- TTD1N series are designed for indoor environment temperature measurement and control
- High performance digital temperature sensor and digital technology applied, ensure accurate measurement, fast response & good long term stability
- Multiple outputs, over voltage and reverse polarity protection, high reliability and anti-interference capability
- Optional relay for alarm or ON/OFF control
- Light and state of art housing, easy installation
- Wide working temperature range and fast response
- All electrical terminals are on the inside bottom, avoid any possible destroy to PCB when wiring
- LCD & function keys can set parameters and calibrate output, thus the product becomes a stand alone controller

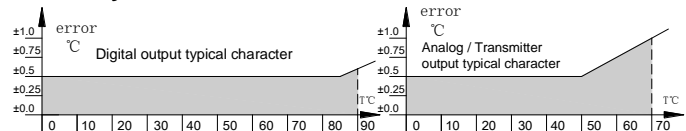
Specifications

Sensor: Digital temperature sensor
Range: See models
Output: 4~20mA (3 wires) & 0~10VDC, RS485/Modbus^{Note 1}
Output Load: ≤500Ω (current), ≥ 2KΩ (voltage)
Relay: 1×SPST, 3A/30VDC, 3A/250VAC
Accuracy: ≤±0.5°C@0~85°C, see accuracy curve
Power: 16~28VAC/16~35VDC
Display & Keys: Optional LCD display and function keys, see details on LCD & Keys operation
Display Resolution: 0.1°C
Work Temp.: 0~70°C, 0~95%RH (Non cond.)
Storage Temperature: -30~70°C
Housing: ABS+PC
Protection: IP30

Approval: CE

Optional Accuracy: 0.25°C @ -20 ~105°C (Add "H" after part number)

Accuracy curve:



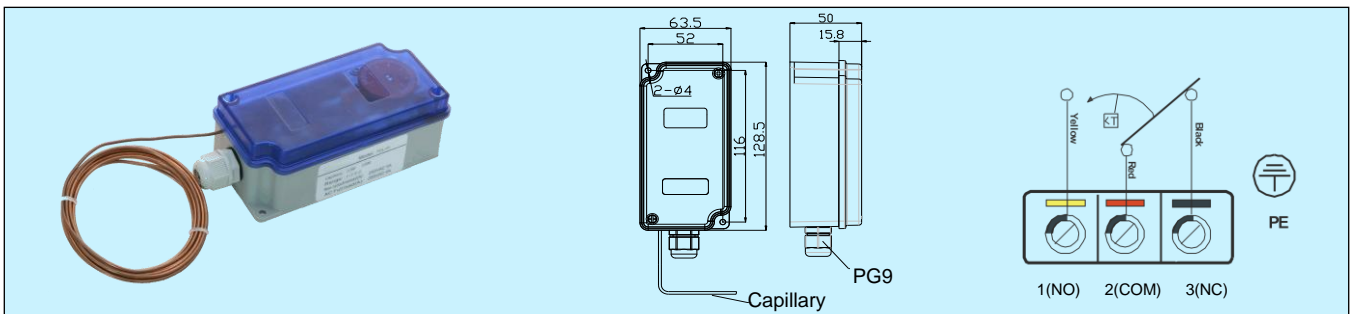
Models

Model	TTD1N				Room Temp. transmitter/ controller
Output		1 B			4-20mA&0-10VDC 4-20mA&0-10VDC, RS485/Modbus ^{note 1}
Range		1 2 7			0~50°C 0~100°C Others
Relay			0 1		N/A 1*SPST ^{note 2}
LCD & Keys				0 1 2	N/A LCD LCD & Keys

Note 1: the communication protocol is Modbus RTU

Note 2: Refer to working environment ambient guide GB/T4200 and WBGT etc, the relay default settings are ON-30.0°C/OFF-29.5°C, and also can be set through LCD & function keys.

TCL Low Temperature Controller



Applications & Features

- TCL has a long sensing capillary filled with vapor. When any part of the component is below the temperature set point, the contact will actuate
- It is applicable to cold water coil or other surface temperature alarm for liquid pipe or air in duct
- Contact actuate quickly at the set point
- Readable scale, easy to operate the set point

Specifications

Models and parameters: See below tables

Models

Model	Switch Contact	Temp. Range °C	Dead Band °C	Capillary Length	Temp. Limit °C	Contact Capacitance	
						No inductive Load	Inductive load
TCL-1A	SPDT(low temp. open)	1.0~7.5	2.0~4.0	1.5m	80	250VAC 5A	250VAC 4A
TCL-3A	SPDT(low temp. open)	1.0~7.5	2.0~4.0	3m	80	250VAC 5A	250VAC 4A
TCL-6A	SPDT(low temp. open)	1.0~7.5	2.0~4.0	6m	80	250VAC 5A	250VAC 4A

Working environment: -10~70°C, <95%RH, non cond.

Sensitive element operating temperature range: -30~80°C

Electrical connection: screw terminal, 1.5mm² wire, PG9

Electric strength: AC1500V/1min (AC1800V/1s)

Insulation: ≥100MΩ in normal status, ≥10MΩ in moisture status

Sensitive element: copper capillary, φ2mm, 1.5/3/6m long

House: cover PC, body fireproof ABS

Protection: IP54

Contact life: ≥ 10⁵

Weight: TCL-1A:220g; TCL-3A:250g; TCL-6A:310g

Approval: CE