T/TT12,13,15 Industrial Temperature Sensor/Transmitter/Controller **TEREN**

T/TT12

T/TT13

T/TT15

Applications & Features

- Apply for critical temperature measurement and control in clean rooms and various industrial applications
- Apply for various industrial applications including duct mount (T/TT12), wall mount(T/TT13), remote mount(T/TT15) or immersion mount with install well
- High accuracy temperature sensor and digital circuit with strong EMI capability which meets industrial EMI level 3
- 100% interchangeable sensor without re-calibration
- Wide working temperature range and fast response, multiple outputs selection, over voltage and reverse polarity protection
- Optional relay for alarm or ON/OFF control
- LCD & function keys can set parameters and calibrate output
- High protection rate up to IP65

Specifications

T12, T13, T15 Temperature sensor:
Sensor: passive PT100/1000(Class A)
Accuracy: PT100/1000,Class A,DIN EN60751,±0.2°C @25°C
Output: RTD, see models and resistance table
Work Temp.: -40~85°C, 0~95%RH (Non cond.)

TT12, TT13, TT15 Temperature transmitter/controller:
Sensor: high precision (Class AA) digital temperature sensor
Accuracy: ±0.2°C@−40~100°C, ±0.3°C@−55~150°C
Response time(T63): 5~10s (10~15s with install well)
Drift: ≤±0.03°C (300hours, 100°C)
Range: 0~50/0~100/0~150/-40~60°C, select by switch
Output: 4~20mA (2 wires), 0~5/10VDC, RS485/Modbus, relay
Transmitter output accuracy: linear accuracy ± 0.1% FS
Transmitter output temperature coefficient: ±0.01%FS/°C
Output Load: ≤500Ω(current), ≤5mA(voltage)
Relay: 1×SPST, 3A/30VDC, 3A/250VAC
Communication: RS485/Modbus, R/W enable, 9600 bps, terminal resistance settable
Display and Keys: Optional large LCD, resolution 0.1 °C (or °F, switchable), 47x27mm, figure H 16mm, with unit, backlight (N/A for 4~20mA output) and 3 touch buttons,
Power: current 18.5~35VDC(R$_L$=500Ω),8.5~35VDC(R$_L$=0Ω); voltage 16~28VAC/16~35VDC; power consumption 1VA

Work Temp.: -40~85°C (LCD: -20~70°C), 0~95%RH (Non cond.)
Storage Temperature: -40~85°C (LCD: -30~85°C)

Medium Temperature: -40~100°C(-40~150°C,remote mount)
Housing: fire retardant PC(UL94V-0), SS probe (φ6mm)
Cable(T/TT15): white, silicone, 4*0.2mm², 2m length, -60~180C, R$_{con}$=0.069Ω/m, R$_{ins}$ >100MΩ(25°C)
Protection: IP65(IP68 for T/TT15's probe,1m water depth)
Weight: T12/T15: 285g; T13: 200g; TT12: 325g; TT13: 225g; TT15: 310g
Approval: CE, meet EN61326-1 for industrial equipment

Models

T12, T13, T15 Temperature sensor

Model	T12			Duct mount temp. sensor
	T13			Wall mount temp. sensor
	T15			Remote mount temp. sensor
RTD		3		Pt1000 Class A DIN EN60751, TC:3850ppm/°C
		4		Pt100 Class A DIN EN60751, TC:3850ppm/°C
Probe Length (T12)			0	75mm
			1	125mm
			2	200mm
			7	Others

TT12, TT13, TT15 Temperature transmitter/controller

Model	TT12					Duct mount temp. transmitter
	TT13					Wall mount temp. transmitter
	TT15					Remote mount temp. transmitter
Output		1				0~10VDC
		2				4~20mA(2 wires)
		E				0~5VDC
		8				RS485/Modbus RTU
Relay			0			N/A
			1			1×SPST(need LCD and keys)
LCD & Keys				0		N/A
				1		LCD (N/A for 4~20mA output)
				2		LCD and touch buttons
Probe Length (TT12)					0	75mm
					1	125mm
					2	200mm
					7	Others

Install Well (for T12/TT12)

Model	A-T		Stainless Steel Well
Probe Length		0	75mm
		1	125mm
		2	200mm