TR11 Series Temperature and Humidity Transmitter

TR11 Series Temperature and Humidity Transmitter Series Remote Probe Temperature and Humidity Transmitter The TR11 enables accurate humidity and temperature measurements in cleanroom, harsh HVAC, and light industrial applications. Remote probe with IP65 housing and complete field interchangeability. The probe can be easily removed and replaced with a new probe without adjusting the transmitter. The transmitter can be connected to the PC for single-point or multi-point calibration on site.

Product features

- Humidity and temperature transmitters for accurate measurement in clean rooms, harsh HVAC, and light industrial applications.
- ± 1.5% RH accuracy.
- Easily interchangeable probes in the field.
- Multiple choices of calculation parameters.
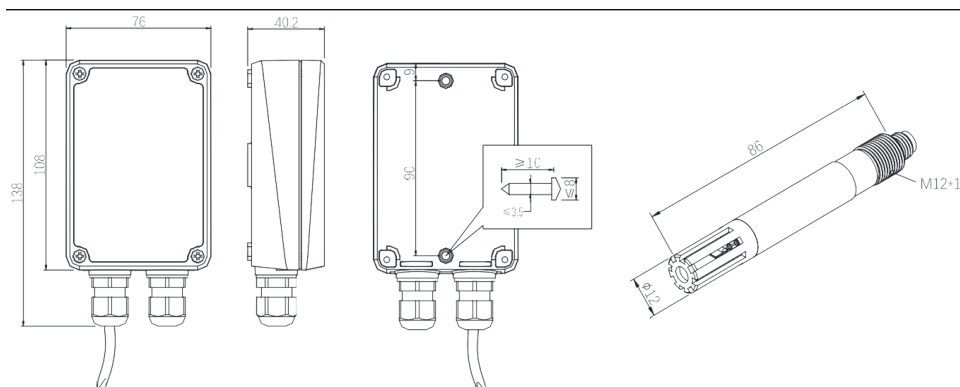- Two-wire current (loop 4). 20 mA) or Modbus RTU output selectable.

Product parameters

	Temperature sensor	PT1000/PT100 RTD F0.1 IEC 60751
	Measuring range	-40...80℃
	Accuracy at + 20 ° C	±0.2℃/±0.1℃
	Temperature coefficient	±0.01℃/℃
	Relative humidity sensor	Polymer capacitive
	Humidity range	0...100%RH
Measurement parameters	Humidity accuracy (10%). 30℃)	±1.5%RH (0...90%RH) ±2.5%RH (90...100%RH)
	Stability in Typical HVAC Applications	± 0.5% RH/year
	Calculated humidity parameter	Dew/frost point, absolute humidity, wet bulb temperature, enthalpy
	Measurement range of dew point temperature and wet bulb temperature	-40...60℃
	Measurement range of enthalpy	-40...460kJ/kg
	Dew point accuracy (20 ℃)	±0.5℃
	输入	18...28 VDC<1W
Input and output	电压输出	4...20 mA（2线制回路供电)
	外部回路电压	10.L28V（R =0Ω) 2D...28V（R =500Ω)

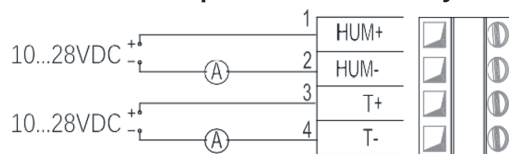| Mechanical and environmental parameters | Transmitter operating temperature | -40... 60 ℃ without display screen |
		-20... 60 ℃ with display screen
	Probe operating temperature	-40...80℃
	Shell material	PC+GF （UL94-V0)
	Probe material	Stainless steel 316
	Filter material	ABS grille + filter membrane/stainless steel 316
	Connect the cable	Standard 3m/Custom
	Transmitter degree of protection	IP65
	Maximum wire diameter	Screw terminal 0.5.. 1.5mm^2
	Electromagnetic compatibility standard	Complies with EMC standard EN61326-1 for industrial environments

Product size (mm)

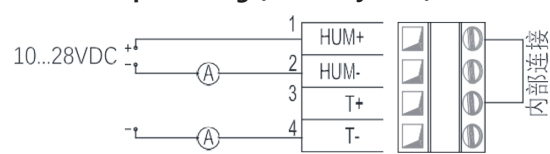Transmitter wiring housing dimensions and mounting dimensions   Probe size

Wiring link diagram

TR11 temperature and humidity transmitter current output wiring (2-wire system)
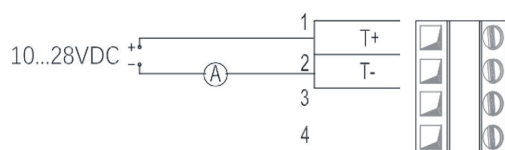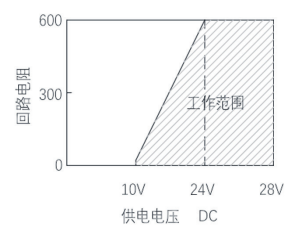

4-wire connection

3-wire connection

TR11 single temperature transmitter current output wiring (2-wire system)

TR11 Relationship between supply voltage and loop resistance

Selection table

温湿度变送器		TR11							
1、安装方式	远程探头，带 3 米电缆		3						
	远程探头，带 5 米电缆		5						
	自定义长度		X						
2、测量参数	温度			T					
	温度和相对湿度			H					
	其他：温度和露点、湿球温度、绝对湿度、焓值等			X					
3、输出信号	4…20mA,2 线制				1				
	其他				X				
4、量程范围	-40 … 60℃					J			
	-20 … 80℃					K			
	其他（含 RS485 输出）					X			
5、液晶显示	有						1		
	无						0		
6、过滤器	塑料栅格+滤膜							1	
	不锈钢 316 过滤器							2	
7、安装附件	管道安件								A
	NPT1/2 螺纹接头								B
	变送器壳体防雨罩和探头防辐射罩								C
	无								0
选型示范		TR11	3	H	1	J	0	1	0