Ziasiot

Instructions

Intelligent digital display temperature transmission controller

TT301

CE attestation

Please read this instruction manual carefully before installation

www.ziasiot.com
400-821-0137
info@ziasiot.com

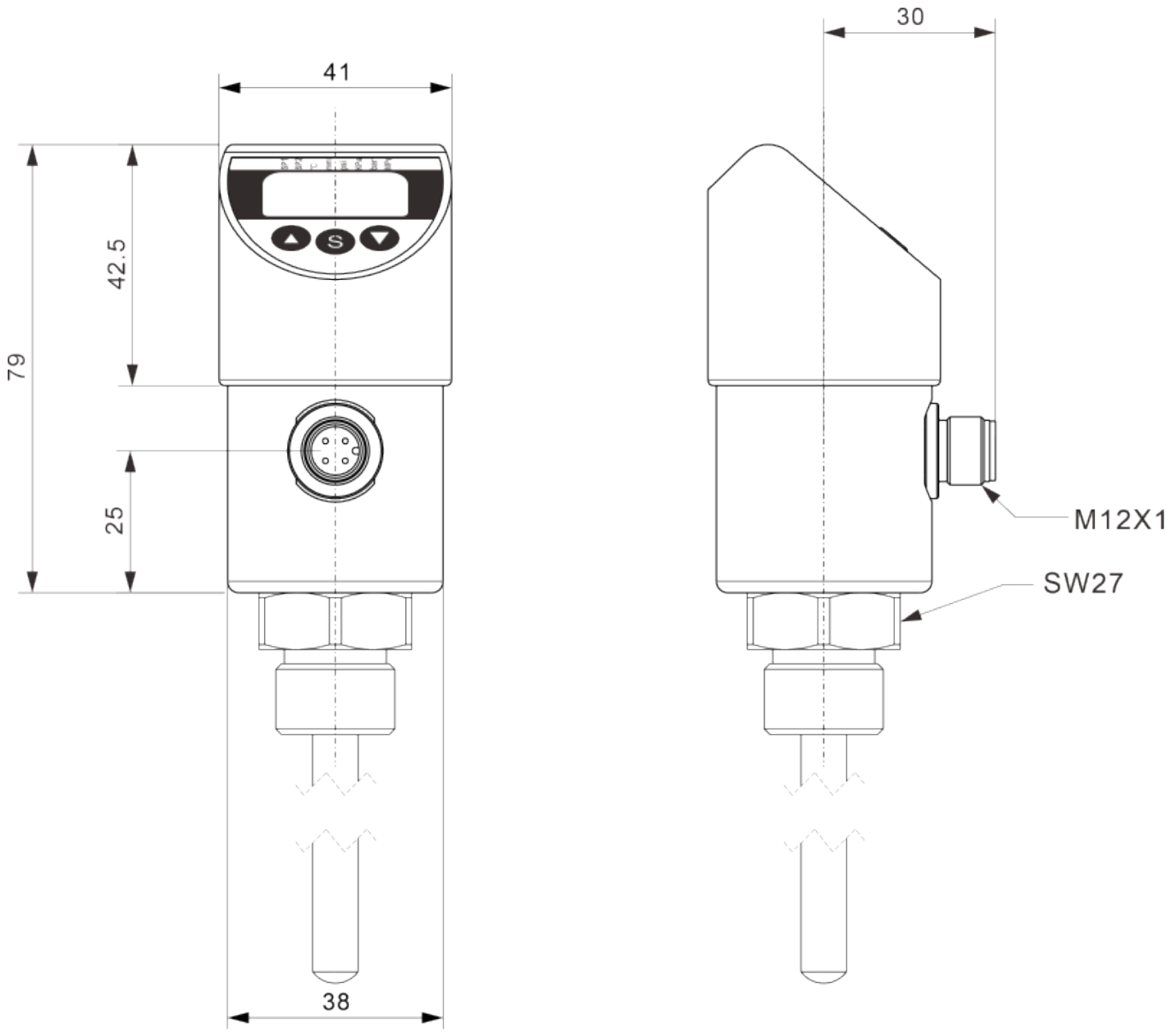
Product overview

Intelligent digital display temperature transmission controller adopts all stainless steel structure, using imported high precision platinum resistance, high precision, good stability, using stainless steel casing, corrosion resistance, overload resistance, widely used in petroleum, chemical, metallurgy, power, aviation, shipping, food and other industries, can be with digital display instrument, recording instrument, regulator, DCS system use, composed of various temperature measurement control system.

Technical Parameters

Measuring range	Pt 100 thermal resistance: -200℃ ~850℃ B, R, S, T, N, J, K, E type thermocouple: -200℃ ~1600℃
Accuracy class	0.5
Load resistance	≤(U-12)/0.02Ω
Stability	≤0.1% /year
Power Supply Voltage	12~30VDC (recommend 4VDC)
Output form	1channel PNP+4~20mA 2channel PNP 2channel PNP+4~20mA
Switch load capacity	＜1.2A (24V.DC)
Load resistance	≤(U-12)/0.02Ω
Switch life	unrestricted; unbridled (PNP)
Response time	≤5ms
Temperature effect	At the specified operating temperature, the output is ± 0.05% of the ambient temperature
Levels of protection	IP65 (customizable IP68)
Relative humidity	0~90% Not condensation
Ambient temperature	-30℃~+70℃
Storage temperature	-40℃~+80℃

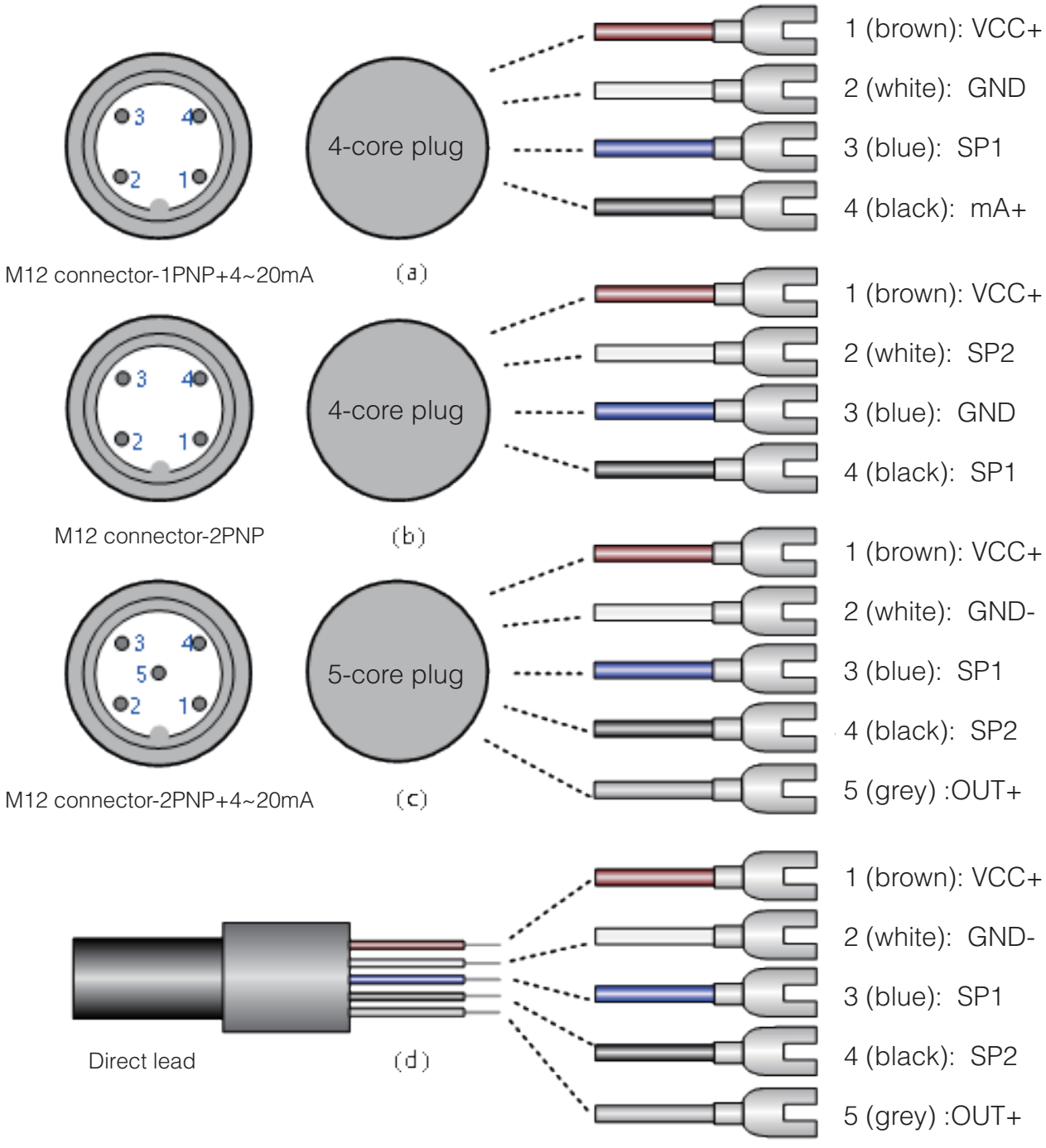
Overall dimensions and attention



Electrical wiring and Settings

1. The pin definition

The temperature transmission controller uses the M12 sensor special connector with high protection level. The mode of each pin of 4 of M12 connector is defined as shown in Figure 4-1.



2. Electrical wiring (this wiring diagram is a schematic diagram, and the field wiring shall be subject to the actual product type)

The four-wire wiring diagram is shown in Figure 4-2 and 4-3. The schematic diagram of the five-wire wiring is shown in Figure Figure 4-4 respectively.

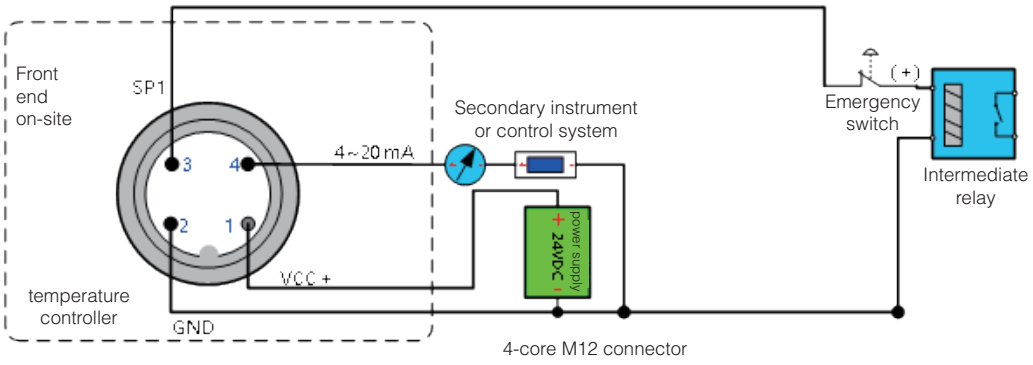


Figure 4-2　1-way + 4 ~ 20 mA analog signal output (4 lines)

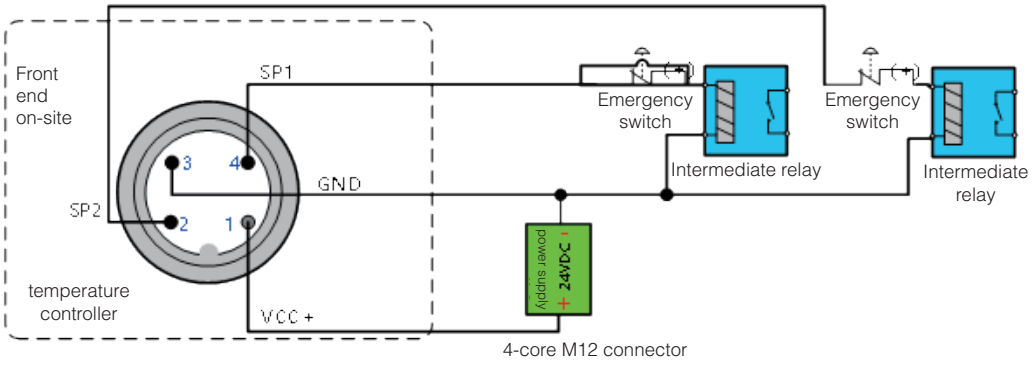


Figure 4-3 2 switch output, no analog signal (4-line)

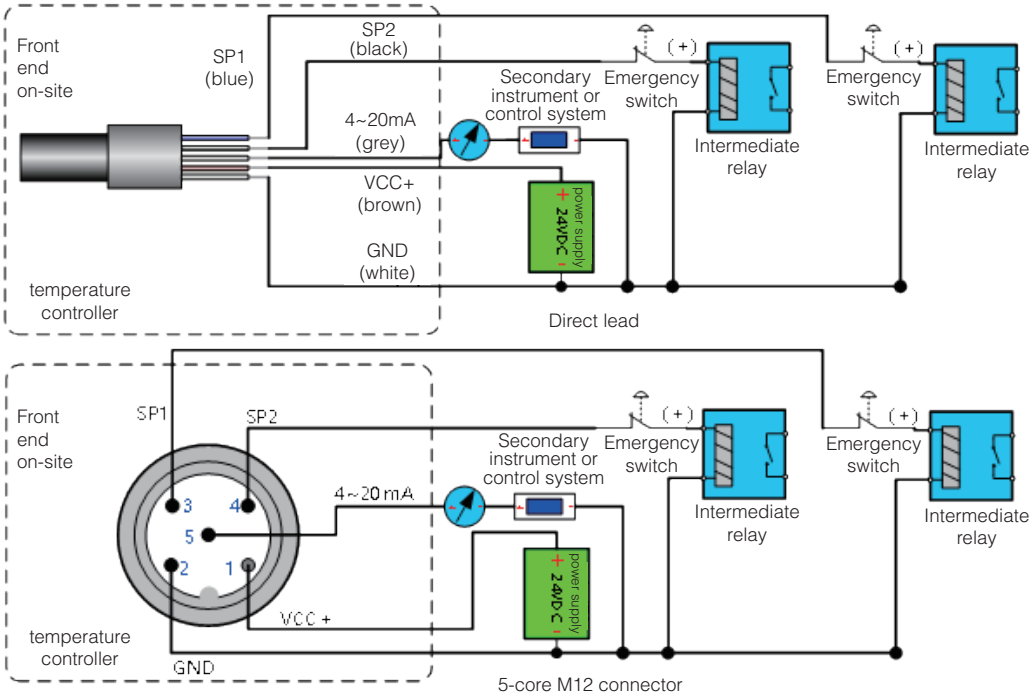


Figure 4-4　2-way+ 4 ~ 20 mA analog signal output (5 lines)

Matters need attention

Please note that when installing the transmitter controller, the selected cable should not be lower than the protection level of the transmitter. The cable should be connected correctly with reference to the wiring diagram, connect the shielded layer to the shielded end and ensure reliable connection. If used, in the case of strong interference, install the DC power supply to the cable, separate the cable separately from the strong current cable, and try to avoid close parallel routing.

Operation and maintenance

Working; circulate:
(1) The user does not require any adjustments to the transmitter controller to operation. Check whether the installation and electrical connection are correct before operation, and connect the power supply and put it into operation after correct inspection.
(2) The transmitter controller can work on the power supply, but the output signal is stable and reliable after 15 minutesof preheating during the test.

Maintenance:
The controller is a kind of high-precision measuring instrument. In the daily use and maintenance, we should often check whether the cable sheath is aging and broken, and whether there is water intake phenomenon.

Appendix description

Note：
The intelligent digital display transmission controller shall store a dry ventilation room with ambient temperature of-40~80℃ and relative humidity not more than 95%, and no corrosive gas in the indoor air.