Description of intelligent temperature transmitter module

Abstract

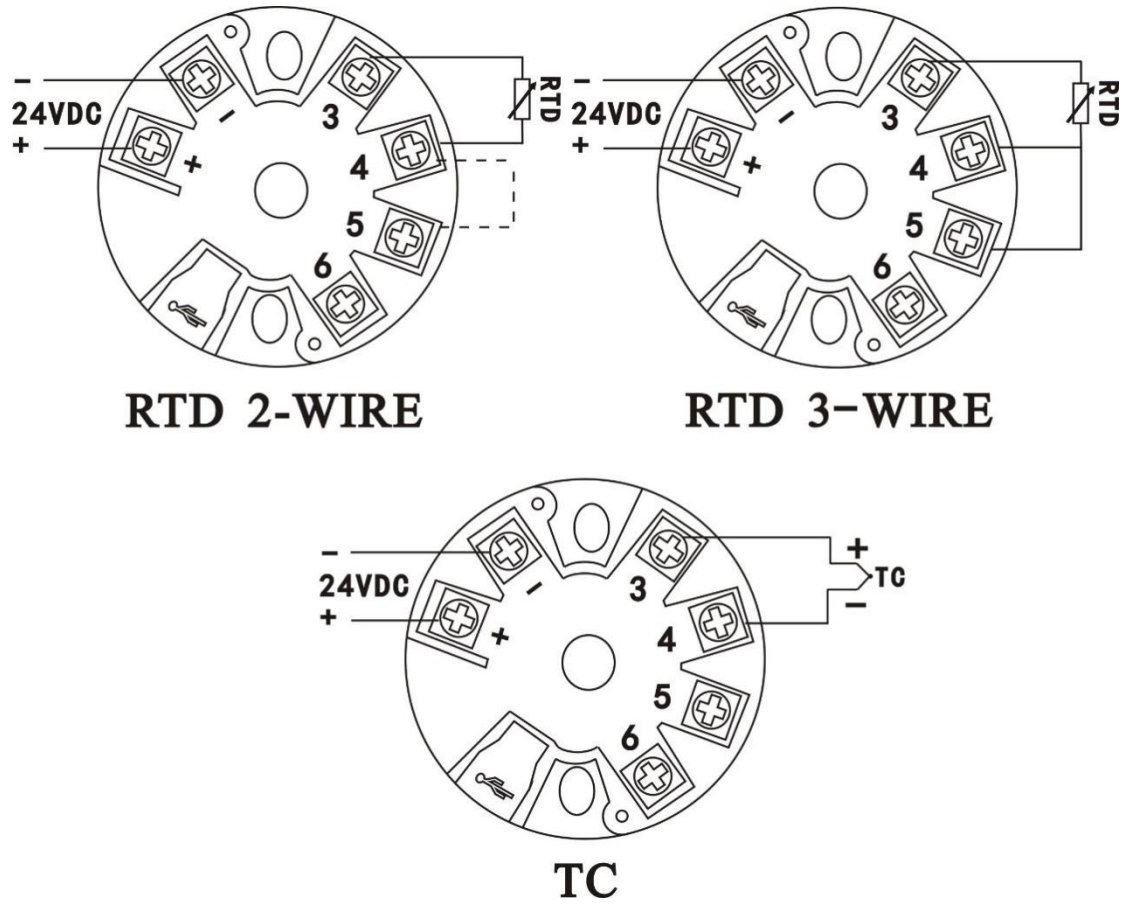
The intelligent temperature transmitter is a high performance product, compatible with more than 10 types of thermocouple and thermal resistance signal transmission. Using 24 Σ - delta sampling chip, ensures high precision measurement; Anti-surge and anti-reverse connection design is adopted to avoid misinstallation and misoperation in engineering installation. Adopt enhanced software security design, including independent watchdog, low-voltage monitoring reset, multi-task scheduling optimization and other functions. All imported components are used to ensure long service life and stability. Can use computer or mobile phone configuration Settings, convenient and fast.

Technical parameters

Power	12 - 35VDC	**Output**	2-WIRE 4 - 20mA
Precision	RTD 0.1%; TC 0.2%	**Current Limit**	20.8mA
Excitation	0.2mA	**Sensor**	RTD TC
Load	≤500Ω	**Stock Temperture**	-40 - 120℃
Drift	≤25ppm/℃ F.S	**Shell Material**	PA66
Working Temperature	-30 - 80℃	**Mounting Screw**	M4*2

Connection mode

a)

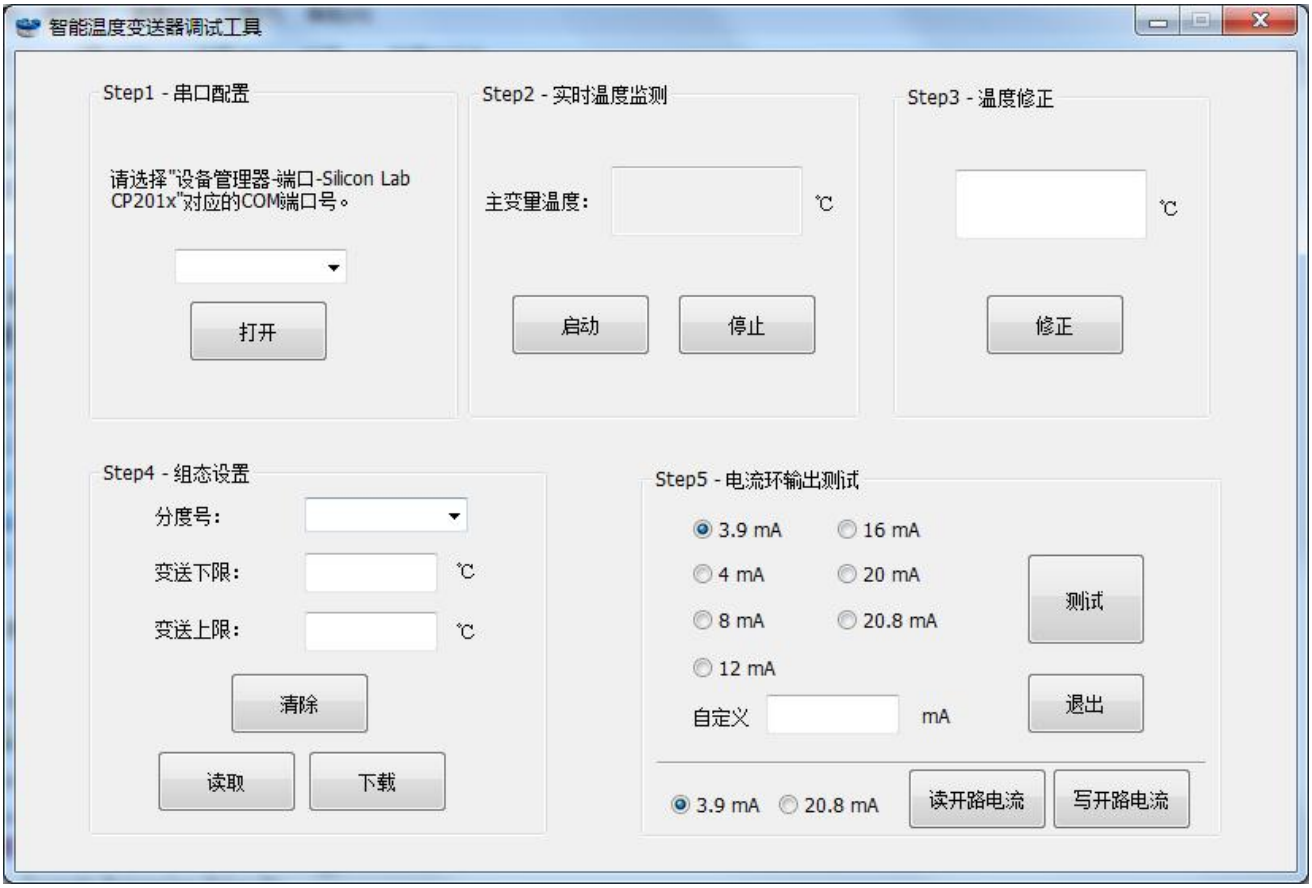


Terminal 1 and terminal 2 are 24V power supply positive and negative respectively, and the circuit board has anti-reverse connection function.

b) The thermal resistance connection supports two - wire system and three - wire system. The connection mode is as shown in the figure above. The solid wire is the lead wire of the sensor, and the dotted wire is the short wire, which requires the user to connect with the short wire by himself (the factory can also connect the short wire internally according to the customer's needs).

c) The positive pole of thermocouple is connected to the no. 3 terminal, and the negative pole is connected to the no. 4 terminal.

Application method of upper computer software



a) Install USB communication line driver and program running environment;

b) One end of the communication line is connected to the computer USB port, and the other end is connected to the intelligent module, which does not need 24V power supply;

c) Double-click the lqt202.exe file to enter the setup software;

d) Click the serial port number drop-down list to select the serial port number corresponding to the connection line, and click ok;

e) Click the configuration Settings in the upper left corner to set the configuration.

Mobile phone debugging software usage

a）Install the software "temperature transmitter mobile phone debugging software 2.0.apk" into the mobile phone；

b）Turn on the OTG function switch；

c）The communication line is connected to the mobile phone connection line. The other end of the mobile phone connection line is connected to the USB port of the mobile phone. The other end of the communication line is connected to the smart module；

d）Click the "connect" button in the software interface；

e）Select the dividing number, input the upper and lower limits of temperature, and click "download" to set the configuration；

Instructions and warranty

a）The instrument is suitable for storage and use in the environment where the temperature is -30℃-80℃ and the humidity is less than 80%；

b）The USB communication line used by the upper computer is specially customized for our company. Please do not use other communication lines to connect with the module；

c）When the meter is connected to the power supply, it should operate according to the wiring method in section 3. After confirming the operation is correct, the meter can be connected to the power supply for operation。

d）Under the condition that the user complies with the usage specification, from the date of delivery, we provide the user with a one-year warranty and lifelong technical support service. Welcome customers to inquire, we attach importance to your any valuable advice.