

→ Introductions

The temperature transmit module delivers a temperature signal from a thermocouple or thermal resistance signals and converts it to 4 ~ 20 mA current signals.

Power supply: 12VDC  
 Protection grade: Ex ia IIC T4/T6 Ga

Temperature range: T6: -40 ~ +85 °C  
 Power supply: 12VDC (loop powered)  
 Rated voltage: 12VDC (loop powered)

**Input:**  
 TC: K, E, S, B, J, T, R, N, WRe5 - WRe26  
 2/3/4-wire RTD: Pt100, Cu100, BA1, BA2  
 The input signal needs to be determined by the order and can also be programmed.

**Output:** 4 ~ 20 mA  
**Load resistance:**  
 $R_L \leq [(U-12)/0.022] \Omega$  U: Loop power supply

**Transmission characteristics (25 °C ± 2 °C):**

Input	Range	Accuracy
K/E/J/N/T	< 300 °C	± 0.3 °C
	≥ 300 °C	± 0.1% F.S.
S/B/R/WRe-series	< 500 °C	± 0.5 °C
	≥ 500 °C	± 0.1 % F.S.
Pt100/Cu100 Cu50/BA1/BA2	< 100 °C	± 0.1 °C
	≥ 100 °C	± 0.1 % F.S.

**Response time:** ≤ 1 s  
**Temperature drift:** 50 ppm/°C  
**Cold junction compensation accuracy:** ± 1 °C (Preheated for 10 minutes)  
**Cold junction compensation range:** -40 °C ~ +85 °C  
**Electromagnetic compatibility:** Accordance to IEC 61326-3-1  
**Dielectric strength (1 mA leakage current, 1 minute test time):**

≥ 1500 VAC (Input /Output)  
**Insulation resistance:** ≥ 100 MΩ (Input /Output)

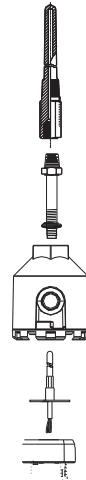
**Ambient conditions:**  
 Operation temperature: -40 °C ~ +85 °C  
 Relative humidity: 10% RH ~ 90% RH (40 °C)  
 Atmosphere pressure: 80 kPa ~ 106 kPa  
 Storage temperature: -40 °C ~ +85 °C

NTM2 Series  
 Temperature Transmit Module



Nanjing New Power Electric Co., Ltd.

- Maximum torque of the M3-screw 0.5 N.m.



- Wire size 0.2 mm<sup>2</sup> ~ 2.5mm<sup>2</sup>.

#### → configuration

There are two ways to programming or calibration to choose for this product:

1. About The Site Handheld Programmer: Chinese menu, large liquid-crystal screen make the function programming more completed and the measurements calibrating more convenient, having a friendly human-machine interface.
2. Figuration software: Matching with special protocol converter make it more flexible. Besides, it is relatively more affordable.
3. For this product uses the special structure of the digital and take the ambient temperature compensation, zero auto-calibration and other advanced technology, it can ensure the accuracy within prescribed limits all the year round, without frequent calibration.

- The devices were designed for use in pollution degree 2 and overvoltage category III as per IEC/EN 60664-1. If used in areas with higher pollution degree, the devices need to be protected accordingly.
- Installation position shall not be affected by strong mechanical vibration; impact and electromagnetic induction from signal terminal and power supply, should conformity with the requirements on electromagnetic interference resistance of products in Class 3 industrial field atmosphere stipulated in IEC 61000-4; the atmosphere shall be free from gases that are corrosive to metal and plastic components.
- The apparatus must be installed, connected and adjusted by qualified personnel in non-hazardous area according with the instruction manual.
- The operator must strictly comply with the relevant local safety standards and guidelines.

#### → Supplementary instructions

- Our company reserves the right to change the product information without prior notification to the user. If the contents of the description are different from website or sample, this description shall prevail.