

GTM 200 Temperature Transmitter

Product Manual



DESCRIPTION ///

GTM200 is a high-precision intelligent two-wire temperature transmitter. The product has a compact design, easy installation, high precision and good long-term stability. It can receive thermal resistance and thermocouple signals, linearize the input signal, and output 4...20mA (two-wire) standard signal. At the same time, it can cooperate with PC programming software to configure and program the temperature transmitter. Installed in the top junction box, it is widely used in the measurement and control of temperature parameters in various industrial processes.

FEATURES ///

- High precision ($\leq 0.1\%$)
- Good stability ($\leq 0.02\%FS/^{\circ}C$)
- Fast response (1s)
- Automatic cold junction compensation (-20~+60°C)
- Various input signals (RTD, TC)
- Free configuration input (PC programming software)
- Wide voltage power supply (12...40VDC)



PARAMETERS ///

| Input | |
|--|--|
| Input signal | Resistance temperature detector (RTD), thermocouple (TC) |
| Cold-junction compensation temperature scope | -20~60°C |
| Compensation precision | $\pm 1^{\circ}C$ |
| Output | |
| Output signal | 4...20mA(two-wire) |
| Load resistance | $RL \leq (U_e - 12) / 0.021$ |
| Output current of upper and lower limit overflow alarm | $I_L = 3.8mA, I_H = 21mA$ |
| Power supply | |
| Supply voltage | 12...40VDC |
| Other parameters | |
| Temperature drift | $\leq 0.02\%FS/^{\circ}C$ |
| Response time | Reach to 90% of the final value for 1s |
| Used environmental temperature | -40~80°C |
| Storage temperature | -40~100°C |
| Installation area | Top cassette installation |

Input Type And Transmission Precision

| Type | Measuring range | Minimum measurement range | Conversion accuracy |
|-------|-----------------|---------------------------|-----------------------|
| Pt100 | -200~850°C | 20°C | ±0.1% range or ±0.2°C |
| Cu50 | -50~150°C | 20°C | ±0.1% range or ±0.2°C |
| B | 400~1800°C | 500°C | ±0.1% range or ±1.5°C |
| E | -100~1000°C | 50°C | ±0.1% range or ±0.5°C |
| J | -100~1200°C | 50°C | ±0.1% range or ±0.5°C |
| K | -180~1372°C | 50°C | ±0.1% range or ±0.5°C |
| N | -180~1300°C | 50°C | ±0.1% range or ±0.5°C |
| R | -50~1768°C | 500°C | ±0.1% range or ±1.5°C |
| S | -50~1768°C | 500°C | ±0.1% range or ±1.5°C |
| T | -200~400°C | 50°C | ±0.1% range or ±0.5°C |

NOTE:

1. The above accuracy data is obtained by testing at an ambient temperature of 20°C ± 2°C.
2. The output accuracy "%" is relative to the set range.
3. The cold junction compensation error needs to be added when the thermocouple is measured, and the internal cold junction compensation error is $\leq \pm 1^\circ\text{C}$.