

RKTT0400

Temperature Transmitter

Product Manual



ROCKAGE®

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 ($\leq 0.02\% \text{FS}/^\circ\text{C}$)
- 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	$\pm 1^\circ\text{C}$
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	$IL = 3.8\text{mA}, IH = 21\text{mA}$
Power supply	
Supply voltage	12...40VDC
Other parameters	
Temperature drift	$\leq 0.02\% \text{FS}/^\circ\text{C}$
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 ≤±1°C.