



Temperature transmitter

NTM 310

- TC or mV input
- HART protocol, FDT and DTM support
- High accuracy
- Excellent EMC performance
- 1500V AC dielectric strength
- Configurable input types and ranges



Technical data

Power supply:	12 V DC~28 V DC (Reverse power protection)
Input signal:	K, E, S, B, J, T, R, N, etc millivolt signal (-10mV~120mV)
Output signal:	4~20mA
Load resistance:	$RL \leq [(U-12)/0.022]\Omega$; U is loop powered voltage

Range and Conversion accuracy list (25°C±2°C, not contain cold junction compensation) :

Type	Range	Min.span/Accuracy	
K	-200°C~+1372°C	<300°C, ±0.3°C	≥300°C, ±0.1% F.S.
E	-100°C~+1000°C	<300°C, ±0.3°C	≥300°C, ±0.1% F.S.
J	-100°C~+1200°C	<300°C, ±0.3°C	≥300°C, ±0.1% F.S.
N	-200°C~+1300°C	<300°C, ±0.3°C	≥300°C, ±0.1% F.S.
S	-50°C~+1768°C	<500°C, ±0.5°C	≥500°C, ±0.1% F.S.
R	-50°C~+1768°C	<500°C, ±0.5°C	≥500°C, ±0.1% F.S.
T	-20°C~+400°C	<300°C, ±0.3°C	≥300°C, ±0.1% F.S.
B	+400°C~+1820°C	<500°C, ±0.5°C	≥500°C, ±0.1% F.S.
mv	-10mV~120mV	<10mV, 0.01mV	>10mV, ±0.1% F.S.

Compensation accuracy: 1°C (Temperature compensation range:
-40°C ~ +85°C)

Temperature drift:	25ppm/°C
Response time:	≤ 1s
Electromagnetic compatibility:	IEC 61326-1
Dielectric strength:	≥ 1500V AC (Input/Output)
Insulation resistance:	≥ 100MΩ (Input/Output)
Operation temperature:	-40°C ~ +85°C
Storage temperature:	-40°C ~ +85°C
Dimension:	Ø 44×25.5mm
Wire size:	1.5mm ²
Screw terminal torque:	0.5Nm

Wiring diagram

