

PROGRAMMABLE ISOLATED SIGNAL TRANSMITTER

NT-D

NT-D transmitter is user configurable with the New-Flow software and interface cable URC-1020 or handheld programmer. The New-Flow is user-friendly software. The latest release version can be download free from website. Interface cable consist of interface converter and USB plug. It can be purchased separately from the New-Flow supplier. During configuration the transmitter can work alone without connecting to a power source.

Technical Data

- Microprocessor Based**
- DIN Rail Mount**
- Configurable without external Loop Power Connected**
- High accuracy in total ambient temperature range**
- Fault signal on sensor break presettable**
- Dimensions:** 75mm(W) x 87mm(H) x 18.5mm(D)
- Isolation:** 4KV for 1 minute between sensor input and the 4~20mA loop
- Electromagnetic compatibility (EMS):** EN 50081-2, EN50082-2
- Input:** V,mV,mA, PT100Ω, Thermocouple available
- Thermocouples:** Types J,K,T,E,B,R,S,N, according to IEC 60584-1 (ITS-90)
- PT100:** Excitation 180μA, 2 or 3-wire connection, α=0.00385, according to IEC 60751 (ITS-90)
- Voltage:** -60mVdc to 60mVdc or -10Vdc to 10Vdc
- Current:** 0~24mAdc
- Output:** 2-wire loop-power technology, 4~20mA or 20~4mA available
- A/D resolution:** 16 bits
- Input sampling rate:** <200ms
- Power supply:** 18~36VDC
- Max. Load:** (V-10) / 0.02Ω
- Resolution:** 0.6μA (15 bits)
- Response time:** <200ms
- Common mode rejection ratio (CMRR):** >80dB
- Operating temperature:** -40°C to 85°C
- Humidity:** 0~90% RH

Range Table

Sensor Type	Range	Minimum Measurement Span	Accuracy
TC-J	-50 ~ 1000°C	50°C	±1°C
TC-K	-50 ~ 1370°C	50°C	±1°C
TC-T	-270 ~ 400°C	50°C	±1°C
TC-E	-50 ~ 960°C	50°C	±1°C
TC-B	0 ~ 1750°C	100°C	±2°C ¹
TC-R	-50 ~ 1750°C	100°C	±2°C
TC-S	-50 ~ 1750°C	100°C	±2°C
TC-N	-50 ~ 1300°C	50°C	±2°C
PT100	-200 ~ 600°C	20°C	±0.2°C
mV	-60mV~+60mV	-----	±0.01mV
Voltage ²	-10~+10Vdc	5mV	±1mV
Current ²	0~24mAdc	-----	±10μA

NOTE

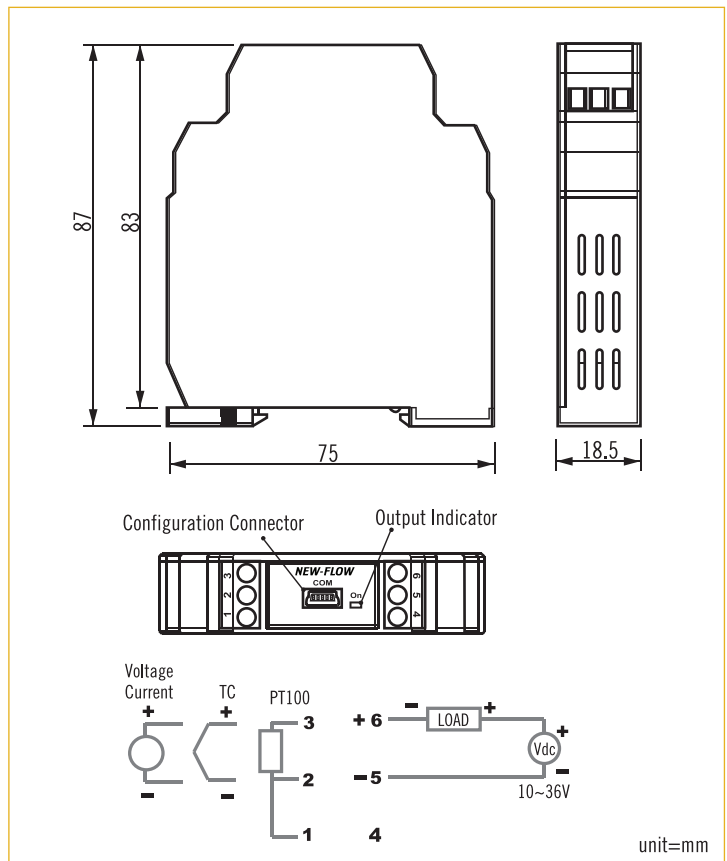
TC-Thermocouple
¹: Accuracy is not guaranteed between 0 and 400°C for type B
²: The internal DIP switch should be set



Approvals:



Dimensions



Ordering Information

NT-D	Code	Input Sensor Type
		(1) TC-J (2) TC-K (3) TC-T (4) TC-E (5) TC-B (6) TC-R (7) TC-S (8) TC-N (9) PT100 (10) mV (11) Voltage (12) Current
		Code Measurement Span
		Please fill in the requested measurement range.
		Code Output
	A	4~20mA
	B	20~4mA
NT-D		Complete Ordering Code