



General Features:

- Universal input, Support PT100, Cu50, B, E, J, K, N, R, S, T (TT-216, TT-217) PT100, Cu50, B, E, J, K, N, R, S, T, Wre3-25, Wre5-26 (TT-200)
- 2 wires 4-20mA output
- Input configurable via PC based software or handheld device
- Built-in cold junction compensation
- Can be installed in Form B connection box
- High accuracy
- We provide V8 USB cable for programming purpose (TT-200, TT-216) TT-217 connected with PC via USB to Hart modem

- TT-200, Input output non-isolation
- TT-216, Input output galvanically isolation
- TT-217, Input output galvanically isolation, with HART communication

Ordering Information

- TT-200 (General version, input/output non-isolation)
- TT-216 (Enhanced version, input/output galvanically isolated)
- TT-217 (With Hart communication, input/output galvanically isolated)

Technical Specifications

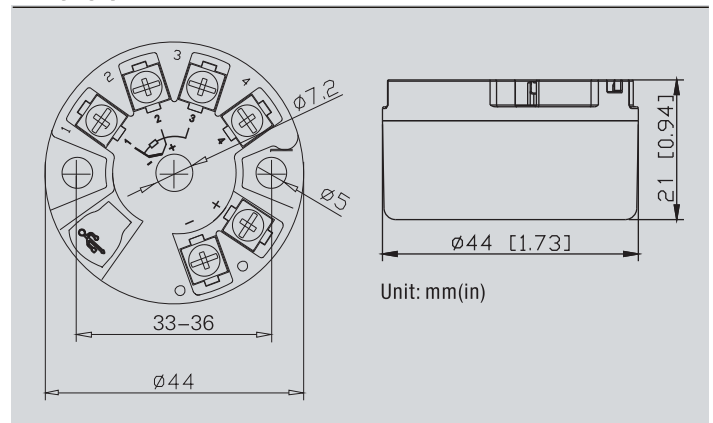
General Specifications

	TT-200	TT-216	TT-217
Sensor type	Pt100, Cu50, T, E, J, K, N, R, S, B Wre3-25, Wre5-26	Pt100, Cu50, T, E, J, K, N, R, S, B	Pt100, Cu50, T, E, J, K, N, R, S, B
Cold end junction compensate range	-40°C ~ + 80°C	-40°C ~ + 80°C	-40°C ~ + 80°C
Compensate accuracy	±1°C	±1°C	±1°C
Output	4-20mA	4-20mA	4-20mA with Hart
Load resistance	$RL \leq (Ue-12)/0.021$	$RL \leq (Ue-12)/0.021$	$RL \leq (Ue-12)/0.021$
Over range alarm value	IH=21mA IL=3.9mA	IH=21mA IL=3.9mA	IH=21mA IL=3.9mA
Input break output current value	21mA	Configurable	Configurable
Power supply	12~40VDC	12~40VDC	12~40VDC
Accuracy (ambient 20°C)	0.1% F.S	0.1% F.S	0.1% F.S
Temperature drift	0.01% F.S/°C	0.0075% F.S/°C	0.0075% F.S/°C
Response time	1ms to 90% of maximum output	0.5ms to 90% of maximum output	0.5ms to 90% of maximum output
Input/output isolation strength	Non-isolation	1500VAC 1min	1500VAC 1min
Input/output impedance	Non-isolation	≥100MΩ 500V	≥100MΩ 500V
EMC standard	IEC 61326-1	IEC 61326-1	IEC 61326-1
Working temperature	-40°C ~ + 80°C	-40°C ~ + 80°C	-40°C ~ + 80°C

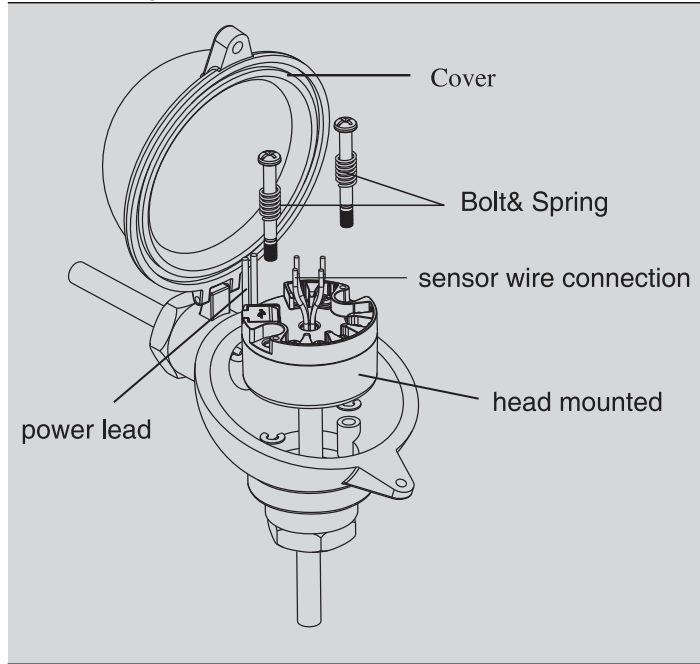
Input signal and range

Sensor type	Specific sensor type	Measuring range	Minimum measuring range
RTD	Pt100	-200.0 ~ 850.0°C	10°C
	Cu50	-50.0 ~ 150.0°C	10°C
TC	B	400 ~ 1800°C	500°C
	E	-100 ~ 1000°C	50°C
	J	-100 ~ 1200°C	50°C
	K	-180 ~ 1372°C	50°C
	N	-180 ~ 1300°C	50°C
	R	-50 ~ 1760°C	500°C
	S	-50 ~ 1760°C	500°C
	T	-200 ~ 400°C	50°C
	Wre3-25	0 ~ 2315°C	500°C
	Wre5-26	0 ~ 2310°C	500°C

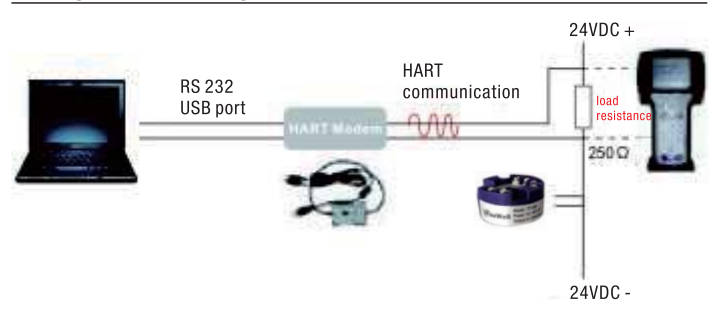
Dimension



Installation guide



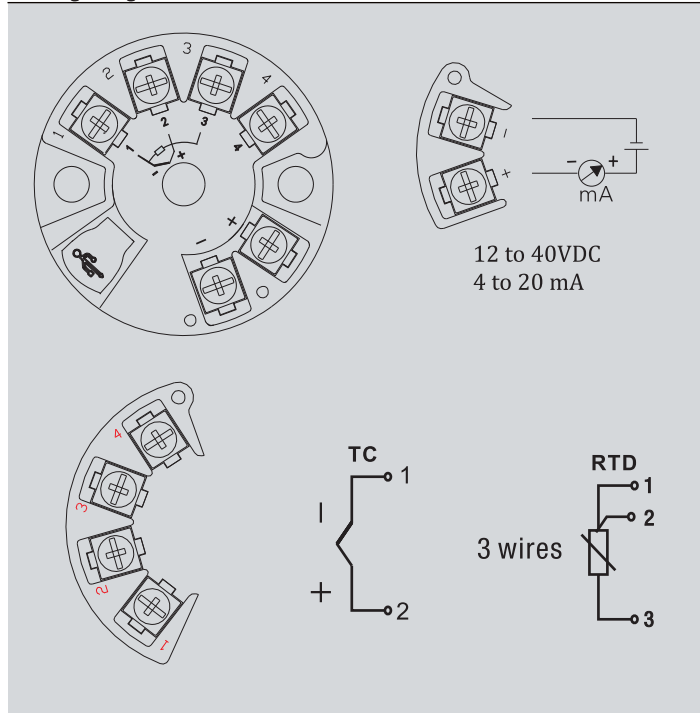
Configuration wiring details



Spare parts

V8 programming cable, bus powered cable, for TT-200 and TT-216
 SM100-C HART Modem, for TT-217
 HART 475 field configurator, for TT-217

Wiring diagram



SM100-C



HART 475 field configurator