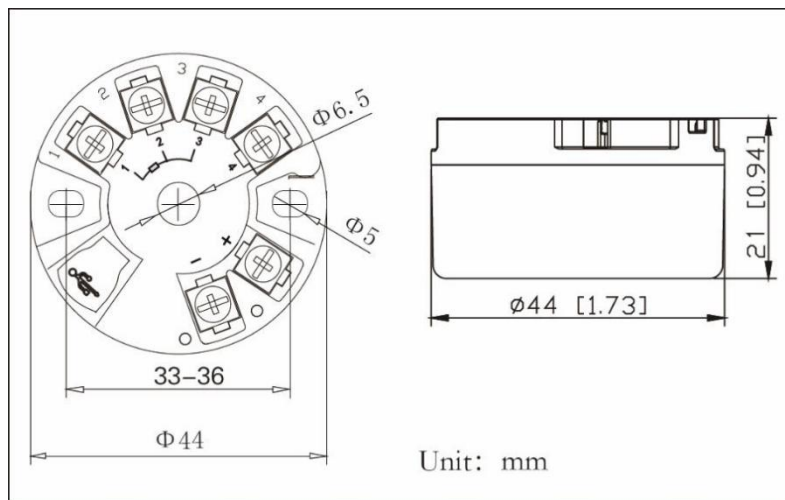


Operating Manual

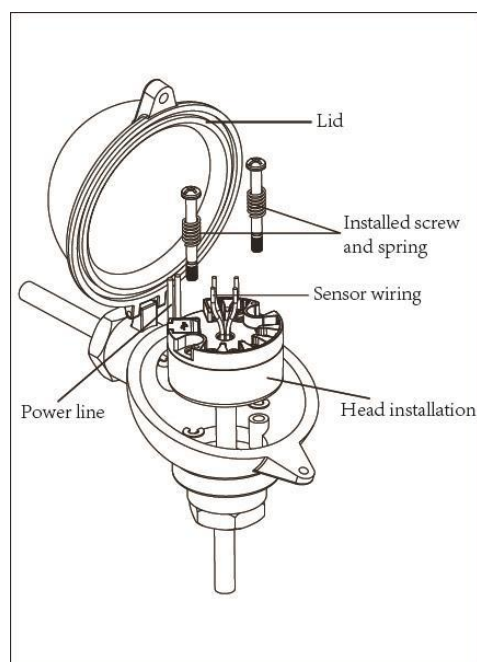
Overview

HT213M head-mounted intelligent temperature transmitter (round card) is used for the signal input of resistance temperature detector (RTD) and thermocouple (TC), linear resistance input, and 4 - 20mA analog output of the two-wire system. It is installed inside the sensor (Diagram 2).

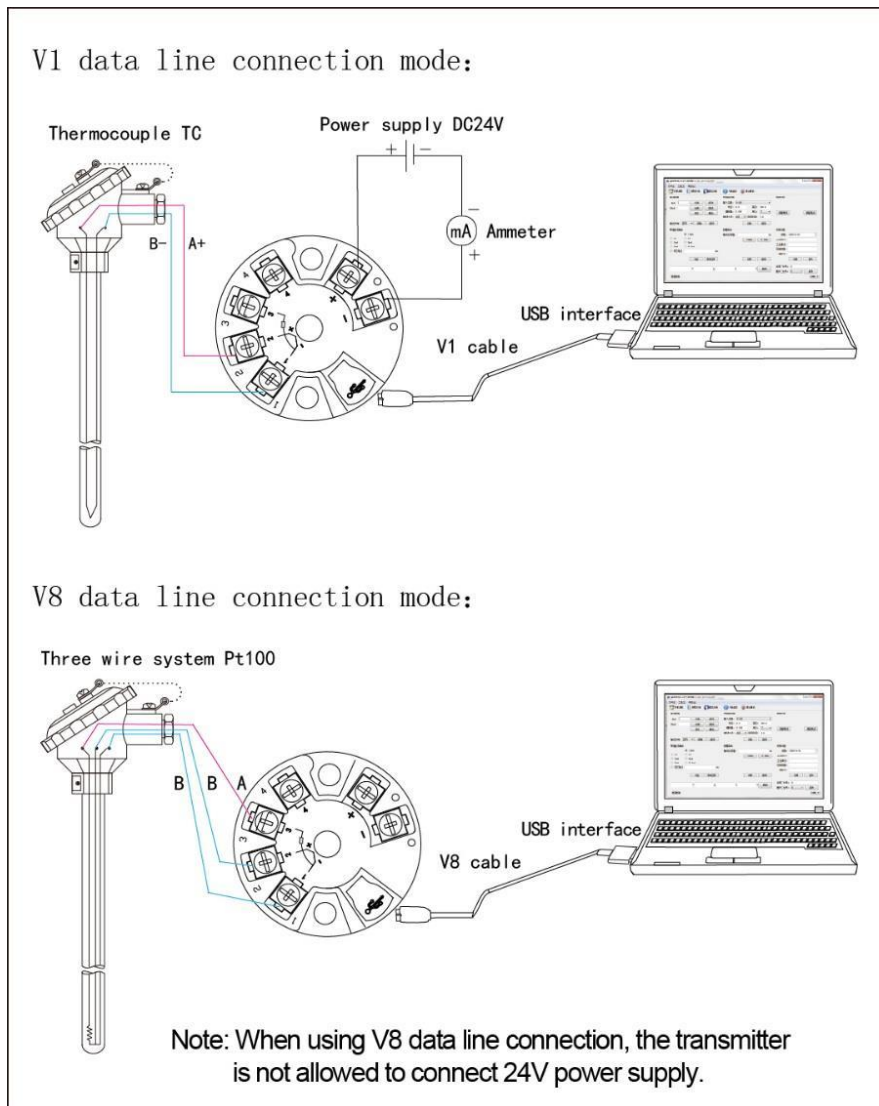
1. Structure Diagram



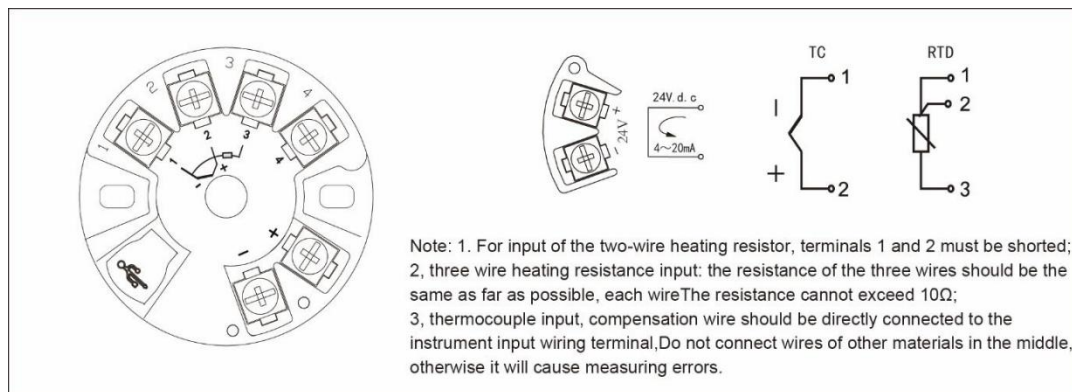
2. Installation Schematic Diagram



3. Configuration Schematic Diagram



4. Wiring Diagram



5. Technical Parameters

Input signal	Resistance temperature detector (RTD), thermocouple (TC),
Cold-junction compensation temperature scope	-20~60 °C
Compensation precision	±1 °C
Output signal	4-20mA
Load resistance	$R_L \leq (U_e - 12)/0.021$
Output current of upper and lower limit overflow alarm	I _H =21mA 、 I _L =3.8mA
Supply voltage	DC12-40V
Temperature drift	0.02%FS/°C
Response time	Reach to 90% of the final value for 1s
Used environmental temperature	-40~80 °C
Storage temperature	-40~100 °C
Aseismicity	4g/2~150Hz
Installation angle	Unlimited
Installation area	B-type top cassette installation
Electromagnetic compatibility	Conform to GB/T18268 industrial equipment application requirements (IEC 61326- 1)

Input type and transmission accuracy:

Model	Type	Measurement scope	Minimum measurement scope	Conversion accuracy (larger value)
Resistance temperature	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

detector (RTD)				
Thermocouple (TC)	B	100~1820°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
	Wre3-25	0~2315°C	500°C	±0.1%range Or±1.5°C
	Wre5-26	0~2310°C	500°C	±0.1%range Or±1.5°C

Notes:

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