General Features:

- Universal input, support RTD:Pt100, Cu50, Cu100
  Thermocouple:K,J,E,T,S,R,B,N,
  PT1000 and WRe needs to be custom made
- 2 wires 4-20mA output
- Input configurable via **PC software** and **android smart phone**
- Built-in cold junction compensation
- Can be installed in Form B connection box
- High accuracy, 0.1% for RTD, 0.2% for TC
- USB cable for configuration purpose can draw power from PC directly
  separate 24VDC power source is no need
- Surge protection, reverse connection protection

The configuration can be done via software from PC or from android smart phone

Ordering Information

TR-213 (General version, input/output non-isolation)
You can configure the input and range using PC or android smart phone
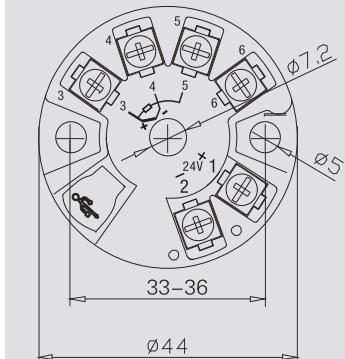
General Specifications

Item No	TR-213
Sensor type	PT100,Cu50,Cu100,K,J,E,T,S,R, B,N,PT1000 and WRe needs to be custom made
Cold end junction compensate range	-40℃~ + 80℃
Compensate accuracy	±1℃
Output	4-20mA
Load resistance	RL ≤ (Ue-12)/0.021
Over range alarm value	IH=20.8mA, IL=20.8mA
Input break output current value	21mA
Power supply	12-35VDC
Accuracy(ambient 20℃)	0.1% F.S for RTD, 0.2% F.S for TC
Temperature drift	0.01% F.S/℃
Response time	1ms to 90% of maximum output
Input/output isolation strength	Non-isolation
Input/output impedence	Non-isolation
EMC standard	IEC 61326-1
Working temperature	-40℃~ + 50℃
Mounting screw	M4*2
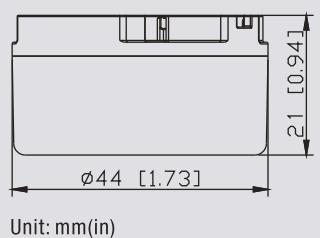
Input signal and range

Sensor type	Specific sensor type	Measuring range	Minimum measuring range
RTD	Pt100	-200.0～850.0℃	10℃
	Cu50	-50.0～150.0℃	10℃
	Cu100	-50.0～150.0℃	10℃
TC	B	400～1800℃	500℃
	E	-100～1000℃	50℃
	J	-100～1200℃	50℃
	K	-180～1372℃	50℃
	N	-180～1300℃	50℃
	R	-50～1760℃	500℃
	S	-50～1760℃	500℃
	T	-200～400℃	50℃
Need to be custom made	Wre3-25	0～2315℃	500℃
	Wre5-26	0～2310℃	500℃
	Pt1000	-200.0～850.0℃	10℃
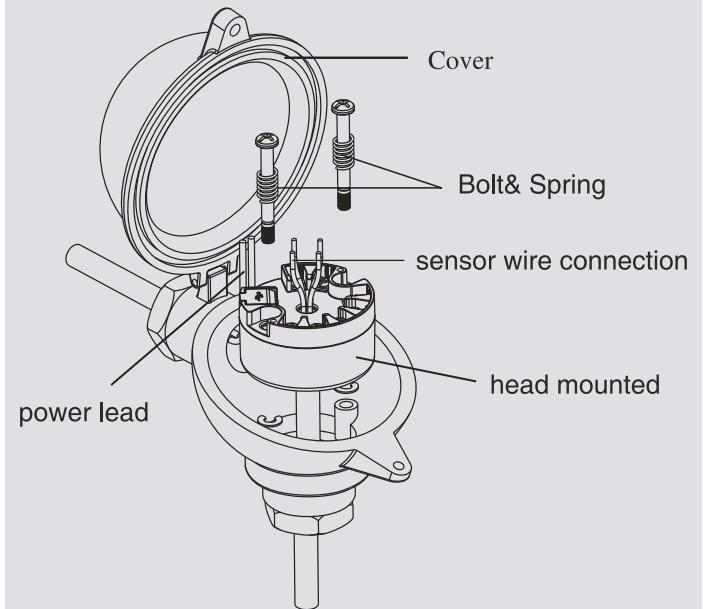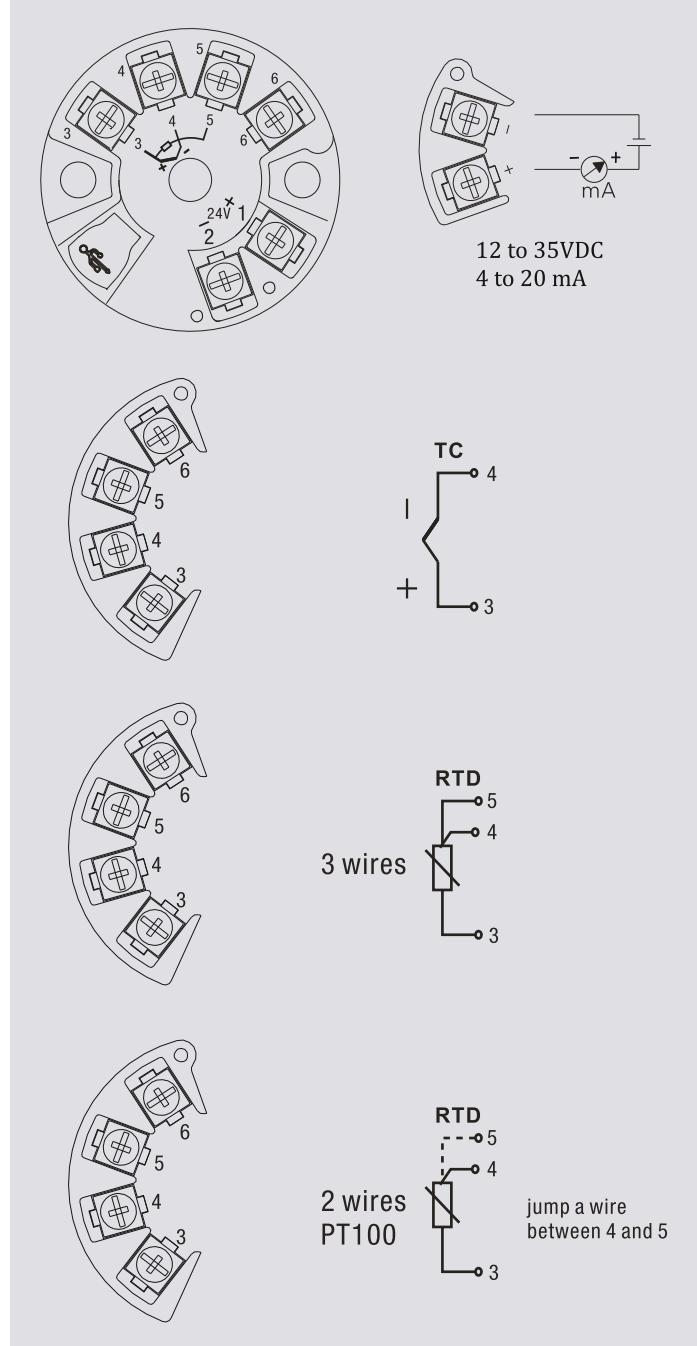
Technical Specifications

Dimension

33～36

Ø44

Ø7.2

Ø5

21 [0.94]

Ø44 [1.73]

Unit: mm(in)

Installation guide

Cover

Bolt& Spring

sensor wire connection

head mounted

power lead

Wiring diagram

12 to 35VDC
4 to 20 mA

TC

RTD
3 wires

RTD
2 wires
PT100

jump a wire
between 4 and 5
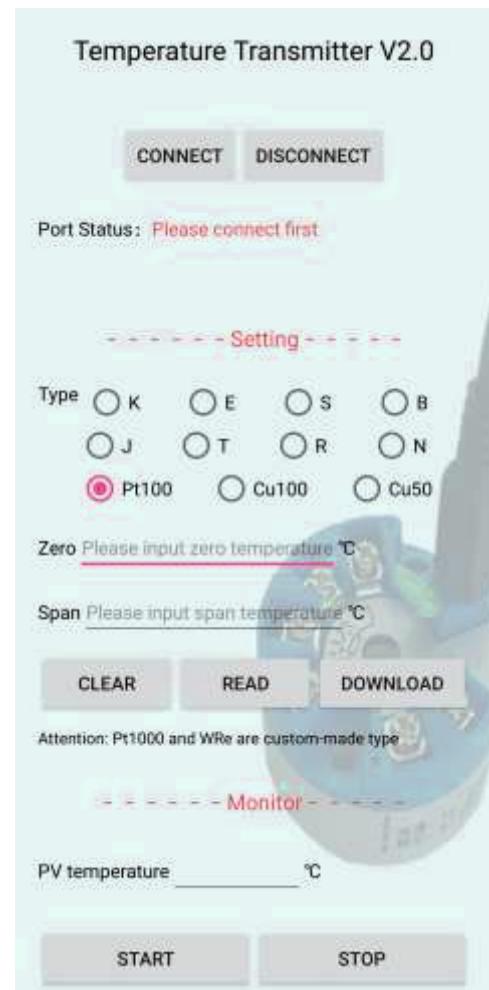
PC configuration software interface

Android OS system
configuration
software interface

Configuration guidelines

The configuration can be done via PC and android smart phone.

USB to RS-485 converter

Connect the transmitter with PC using the programming cable
please note this is a custom made programming cable, do not
use other cable otherwise the transmitter will be damaged.