Temperature Transmitter

Datasheet

RRE-TR100

RRE-TR100 is a head mount temperature transmitter with a single input. The single input accepts thermocouples, RTD, resistance or voltage source. All inputs are linearized and converted in to an industrial standard 4 to 20 mA output for transmission to your system.

FEATURES

Highlights

- Can convert all inputs to 4-20 mA
- Input: thermocouples, RTD, resistance or voltage
- Configuration directly via PDA or PC
- Built-in Cold Junction Compensation
- Available with screw-in temperature probe

TECHNICAL DATA

Specifications

Accuracy	≤0.1%FS
Power supply	12-40V
Signal input	RTD TC resistance mV
Signal output	4-20mA 1-5V(customized)
Digital communication	Hart protocol
Response time	≤1s
Working temperature	-40-85
Ingress protection	4g^2-150Hz
Cold Junction Compensation	Build-in
Configuration	PAD or PC

RTD temperature probes

Description	Measuring range ℃		Minimum measuring range	Connection type
PT100	-200	850	10K	Three-wire
Cu50	-50	150	10K	Three-wire

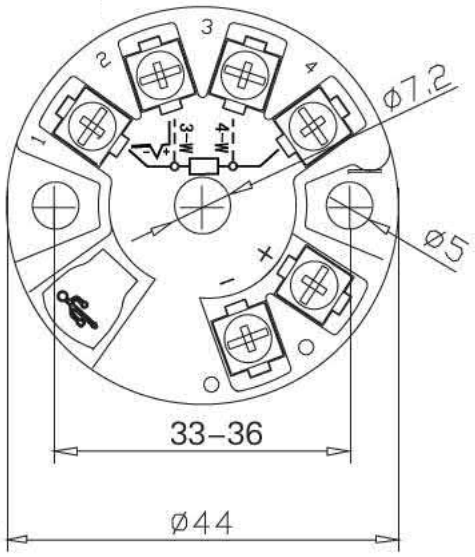
Thermocouples

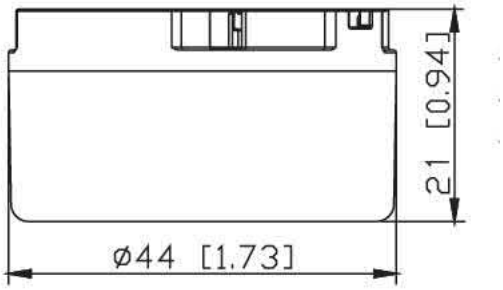
Description	Measuring range ℃		Connection type	Minimum measuring range
B	400	1820	Two-wire	500K
E	-100	1000	Two-wire	50K
J	-100	1200	Two-wire	50K
K	-180	1372	Two-wire	50K
N	-180	1300	Two-wire	50K
R	-50	1760	Two-wire	500K
S	-500	1760	Two-wire	500K
T	-200	400	Two-wire	50K

RTD tempera ture probes

Description	Measuring range Ω		Minimum measuring rang	Connection type
Resistance transmitter	0	4500	500K	Two-wire

Block Diagram

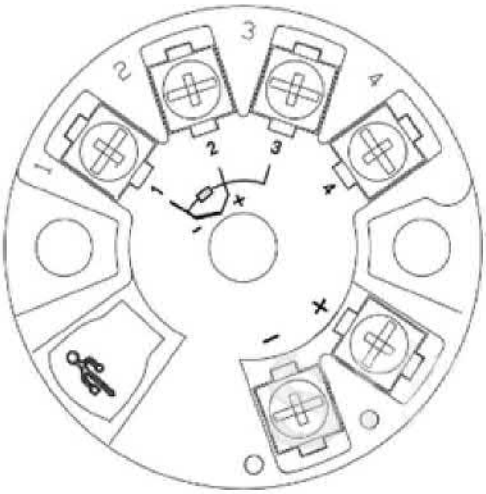


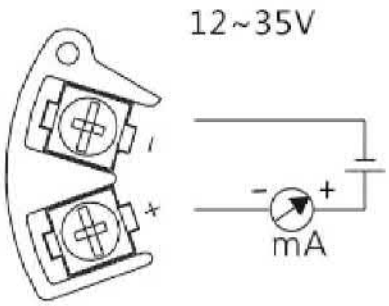


: Mm(in)

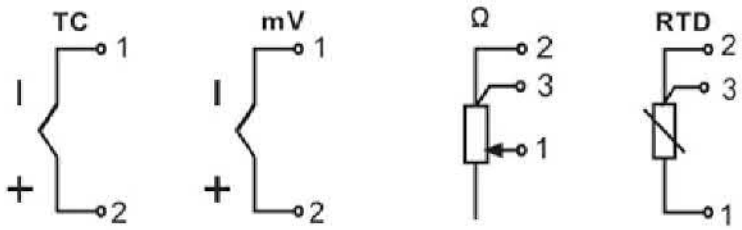
Wiring

■ *Note*: *When mounting on a sensor head, do not overtighten the screws.*
Take necessary measure to avoid corrosion or damage of cables and wires.





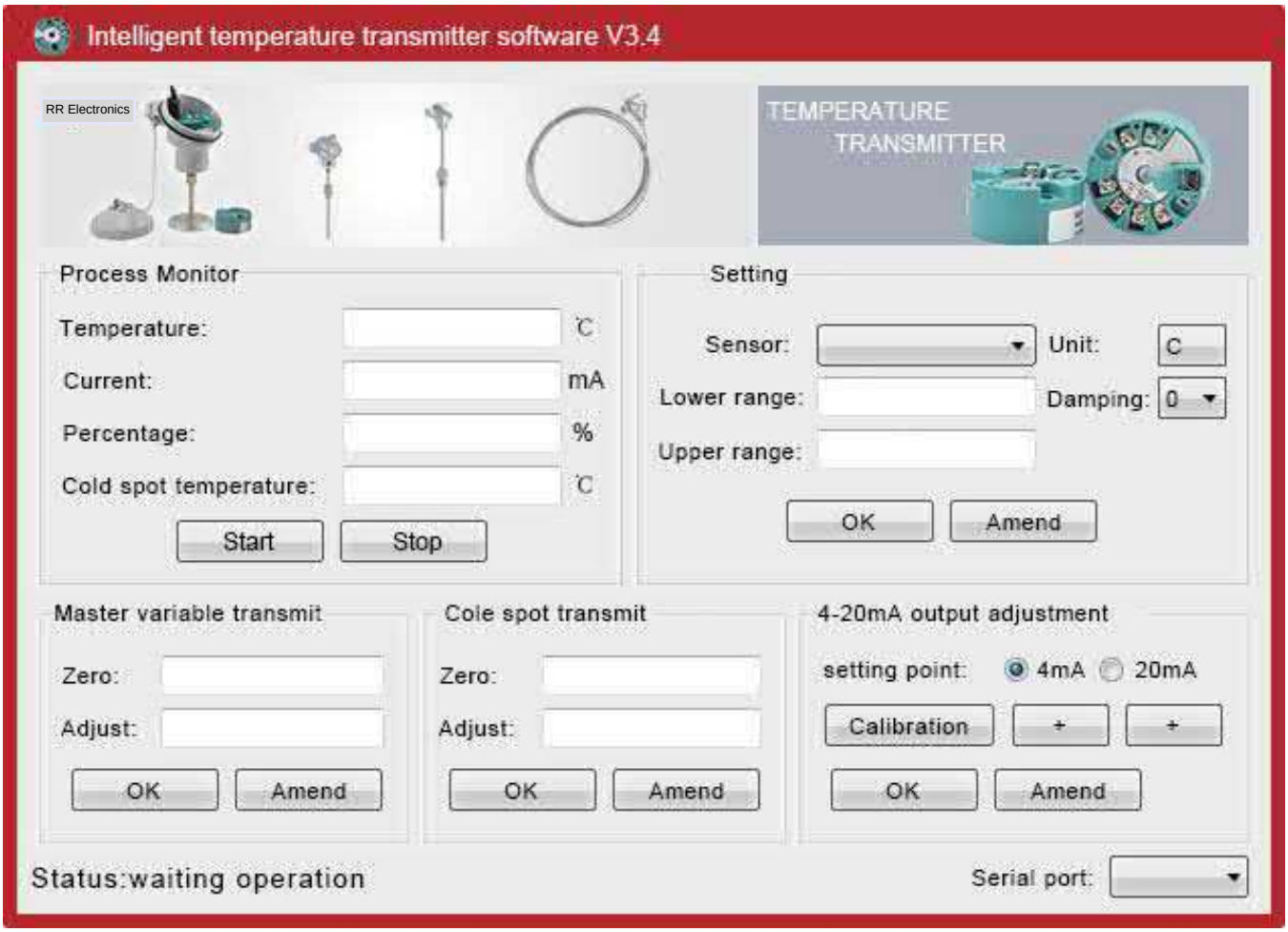
12 to 35VDC
4 to 20 mA



CONFIGURATION INTERFACE

Function

- Install the driver
- Connect the transmitter with PC, open the software
- Choose the sensor type and temperature unit
- Set the temperature range accordingly
- Click ok or amend if need modify and then finish
- Other parameters are dufult and no need to set normally




12~40V DC
4~20mA(dc)
+
-