



TP02

Temperature Transmitter for DIN-Rail Type



| Features |

- Special IC for RTD ; High accuracy is assured
- TP02 with smaller volume so lesser space for installation is required
- High quality and low price
- DIN-rail type ; Quick to install

| Applications |

Monitoring for long-distance temperature signal transmission / For industries in heating / Ventilation / Air conditioning / Cooling / Water power / Electricity, etc. / For process in agriculture / Green house / Environmental engineering / Food / Pharmaceutical industry

| Specifications |

Input

| | |
|-----------------------|---|
| Input signal | RTD Pt100(3-wire) |
| Cable resistance | $\leq 50 \Omega$ (3 wires with the same resistance) |
| Pt100 sensor current | $< 0.8 \text{ mA}$ |
| ZERO adjustment range | $\pm 10\%$ |
| SPAN adjustment range | $\pm 10\%$ |

Output

| | |
|---------------------------|---|
| Output signal | DC 4 ... 20 mA(2-wire) |
| Load resistance | $\leq (\text{Supply voltage} - 8 \text{ V}) / 0.02 \text{ A } \Omega$ |
| Load resistance stability | $\pm 0.05\% / 100 \Omega$ |
| Power stability | $\pm 0.025\% / \text{V}$ |

Accuracy

| | |
|----------|---------------------|
| Accuracy | $\pm 0.1\%$ of F.S. |
|----------|---------------------|

Temperature

| | |
|-------------------------|---|
| Temperature drift | $< \pm 0.015\%$ F.S. / $^{\circ}\text{C}$ |
| Calibration temperature | 20 ... 28 $^{\circ}\text{C}$ |
| Response time | $< 250 \text{ ms}$ |

Environment

| | |
|-----------------------|-------------------------------|
| Medium | Air |
| Operating temperature | -20 ... 60 $^{\circ}\text{C}$ |
| Operating humidity | 0 ... 95%RH(Non-condensing) |

Electrical specification

| | |
|-----------------------|--|
| Power supply | DC 10 ... 30 V |
| Operating environment | -20 ... 60 $^{\circ}\text{C}$ 0 ... 95%RH(Non-condensing) |

Protection

| | |
|--|----------------------------------|
| Pt100 signal disconnection protection & output | $> 23 \text{ mA}$ |
| Pt100 signal short circuit protection & output | $< 3 \text{ mA}$ |
| Output polarity protection | Yes |
| IP rating | Housing : IP30 / Terminal : IP10 |

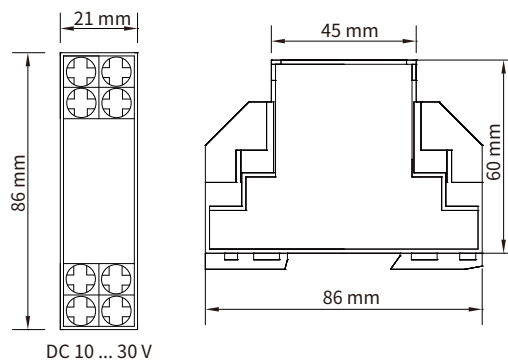
Certification

| | |
|---------------|----|
| Certification | CE |
|---------------|----|

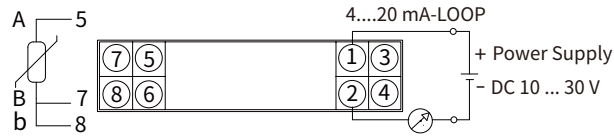
Material

| | |
|---------|--------------|
| Housing | ABS(UL94V-0) |
|---------|--------------|

| Dimension |



| Diagram |



| Ordering Guide |

| | | | | | | | | |
|----|--------------|---|-------------------------|-------------|--------|-----------------------------------|---|--|
| TP | Installation | — | Function | Input | Output | Power supply | — | Temperature range |
| | 02 | 1 | 1 | 1 | 0 | 1 | | |
| | DIN-rail way | | 1-channel Pt100(3-wire) | 4 ... 20 mA | | DC 10 ... 30 V(2-wire loop power) | | 1 : -50 ... +50°C 3 : 0 ... 50°C 4 : 0 ... 100°C 5 : 0 ... 200°C W : Special span(MOQ:10pcs) |