

Product Features

- Programmable input: T/C, RTD, mV, mA
- 2 or 3-wire Pt100 input with linearized output
- 2-wire loop powered 4-20mA/20-4mA output
- · Cold junction compensation for thermocouples
- Configuration with a PC via TxConfig interface

Description

MP200i series comes factory calibrated but is a fully customer re-programmable temperature transmitter. In-the-field configuration of input type and working range can be achieved by means of a cable and an RS232 port from a PC.

Table 1 – MP200i series input sensor

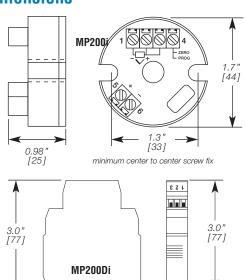
| Sensor Typ | e (Code) | Range | | Min. SPAN |
|------------|----------|---------------------------|-------------------|-----------|
| T/C K | (K) | -150 to 1370°C | (-238 to 2500 °F) | 100°C |
| T/C J | (J) | -100 to 760 °C | (-148 to 1400°F) | 100°C |
| T/C R | (R) | -50 to 1760 °C | (-58 to 3200°F) | 400°C |
| T/C S | (8) | -50 to 1760 °C | (-58 to 3200°F) | 400°C |
| T/C T | (T) | -160 to 400 °C | (-256 to 752°F) | 100°C |
| T/C N | (N) | -270 to 1300 °C | (-454 to 2372 °F) | 100°C |
| T/C E | (E) | -90 to 720 °C | (-130 to 1328°F) | 100°C |
| T/C B | (B) | 500 to 1820 °C | (932 to 3308°F) | 400°C |
| Pt100 | (P) | -200 to 600 °C | (-328 to 1112°F) | 40 °C |
| Voltage | (AV) | 0 to 50 mV | | 5mV |
| Voltage | (BV) | *0 to 10 V (MP200Di only) | | 1 V |
| Current | (AC) | 0 to 20 mA (MP200Di only) | | 2mA |
| Current | (BC) | 4 to 20 mA (MP200Di only) | | 2mA |

Specifications

| Sensor Input : | User defined. The supported sensors are listed in Table 1, along with their max. ranges. | |
|-------------------------|--|--|
| Thermocouples : | Types J, K, R, S, T, N, E, B according to IEC 60584 (ITS-90). Impedance >> $1 M\Omega$ | |
| Pt100 : | Excitation: 180 uA. 2 or 3-wire connection (for 2-wire sensors, tie terminals 2 and 3 together). $\alpha = 0.00385$, according to IEC 60751 (ITS-90). | |
| Current : | 0 to 20mA, 4 to 20mA. Impedance 15.0Ω (+ 1.9 VDC). | |
| Voltage : | 0 to 50 mVdc. Impedance >> 1M * Note: 0-10 VDC input type requires an internal jumper switching. | |
| Total accuracy : | Better than 0.3% of the maximum range for thermocouples and 0.2% for Pt100 and voltage | |
| Response Time : | < 500 ms | |
| Output : | 2-wire 4-20 mA or 20-4 mA, linear with respect to the measured temperature. | |
| Isolation: | 1000 VAC for 1 minute between sensor input and the 4-20 mA loop. | |
| Resolution : | 0.001mA (14 bits). | |
| Temperature effect : | 0.003% of maximum SPAN/°C | |
| Power supply : | 12 to 35 VDC, across the transmitter | |
| Maximum load (RL) : | RL (max.)= $(V_{supply} - 12)/0,02 [\Omega]$ | |
| Operating Temperature : | -40°C80°C (-40°F176°F) | |
| Housing Material : | ABS UL94-HB. | |
| Housing Dimensions : | MP200i : 44 mm (dia.) x 25 mm (height). | |



Dimensions



Custom Builder

| Model | Input Code | Range |
|---------|--|-------|
| MP200i | P, AV, BV K, J, R, AC, BC, S, T, N, E, B | (/) |
| MP200Di | P, AV, BV, K, J, R, AC, BC, S, T, N, E, B | (/) |

2.8"

Ex.: MP200i - P - (0/100°C)

- Information furnished by Intempco is believed to be accurate and reliable. However, no responsability is assumed by Intempco for its use.
- Specifications subject to change without notice.

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MP200Di: 72 mm (H) x 78 mm (D) x 19 mm (W)