PUSH-BUTTON TEMPERATURE TRANSMITTERS
Programmable, RTD, Thermistor or Thermocouple Input, In-Head Mounting

The Series 659 Push-Button Temperature Transmitters accept thermocouple (J, K, T), RTD (Pt100Ω) or thermistor input and provide a linearized 4 to 20 mA output. The transmitter is quickly ranged and calibrated by using a single on-board switch.

FEATURES/BENEFITS
- Push button calibration adjustment
- Reverse polarity protection
- Standard temperature sensor head enclosure mounting
- Sensor fault LED

APPLICATIONS
- Process applications where a 4 to 20 mA signal is required

MODEL CHART
<table>
<thead>
<tr>
<th>Model</th>
<th>Input Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>659TC-1</td>
<td>Thermocouple (Type J, K, T)</td>
<td>$108.00</td>
</tr>
<tr>
<td>659RTD-1</td>
<td>3-wire (RTD Pt100)</td>
<td>108.00</td>
</tr>
<tr>
<td>659TH-1</td>
<td>Thermistor (2252Ω)</td>
<td>108.00</td>
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</tbody>
</table>

SERIES 651
TEMPERATURE TRANSMITTER
RTD or Thermocouple Input, Zero and Span Adjust, Linearized 4 to 20 mA Signal

The Series 651 Temperature Transmitter is designed for use with 2 or 3 wire Pt100 RTDs or ungrounded Type K thermocouples. Thermocouple models 651TC are cold junction compensated, automatic 32 to 160°F (0 to 70°C) with upscale burnout.

FEATURES/BENEFITS
- Various preset ranges available
- Pt100 or K type thermocouple models
- Standard temperature sensor head enclosure mounting

APPLICATIONS
- Process applications where a 4 to 20 mA signal is required

MODEL CHART
<table>
<thead>
<tr>
<th>Model</th>
<th>Input Type</th>
<th>Range,°F (°C)</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>651A-10</td>
<td>Pt100 RTD</td>
<td>32 to 212 (0 to 100)</td>
<td>$126.00</td>
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<tr>
<td>651A-20</td>
<td>Pt100 RTD</td>
<td>32 to 392 (0 to 200)</td>
<td>126.00</td>
</tr>
<tr>
<td>651A-40</td>
<td>Pt100 RTD</td>
<td>32 to 752 (0 to 400)</td>
<td>126.00</td>
</tr>
</tbody>
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SPECIFICATIONS
- Input Range: Type J/T/C: -328 to 2192°F (-200 to 1200°C); Type K/T/C: -328 to 2498°F (-200 to 1370°C); Type T/T/C: -328 to 752°F (-200 to 400°C); Pt100Ω RTD: -328 to 1562°F (-200 to 850°C); Thermistor: -13 to 257°F.
- Accuracy: T/C models: ±0.04% FS., ±0.04% of reading or ±0.5°C whichever is greater; RTD: ±0.2°C ±0.1% of rdg; Thermistor: ±0.25°F (±0.1°C).
- Output: Linearized 4 to 20 mA, 2-wire loop powered.

SAMPLE RATE: 500 ms.
LOOP RESISTANCE: T/C: 700 Ω @ 24 VDC; RTD: 800 Ω @ 24 VDC; Thermistor: 24 VDC.
OUTPUT THERMAL DRIFT: Zero: 0.2µA/°C; Span: 0.5µA/°C.
TEMPERATURE LIMITS: Ambient: 32 to 122°F (0 to 50°C).
MAXIMUM STORAGE TEMPERATURE: 160°F (70°C).
RESPONSE TIME: 10 to 90% in 200 ms (models 651A), 70% in 2 ms (models 651TC).

ACCESSORIES
<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-709</td>
<td>NEMA 4X Aluminum Transmitter Enclosure</td>
<td>$33.75</td>
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</table>