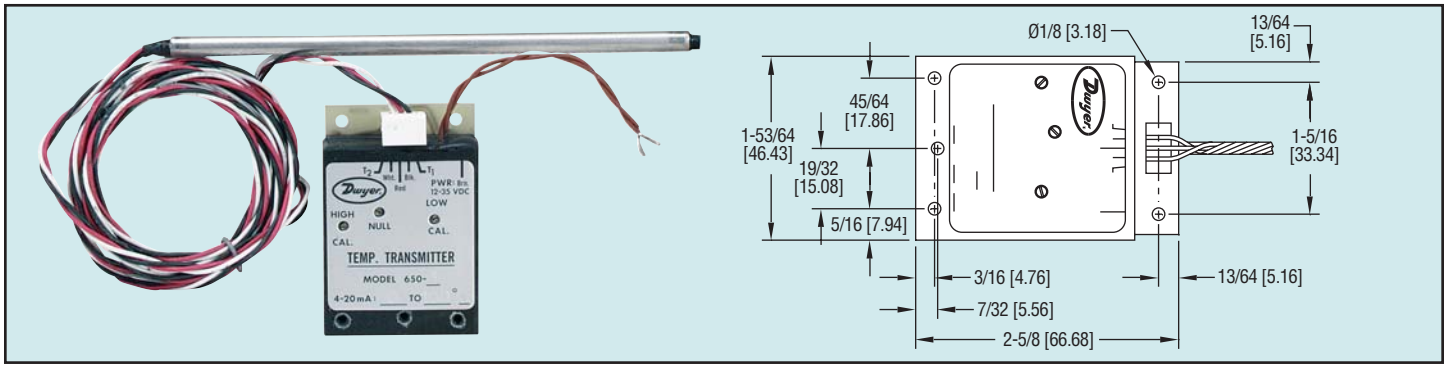
Series 650

Temperature Transmitter

4-20 mA Signal, Two Wire Operation, Temperatures from -55 to 180°C



The Dwyer Series 650 Temperature Transmitter combines low cost with small size making it ideal for a wide variety of HVAC, industrial and commercial multi-point temperature monitoring applications. Non-polarized terminals simplify connection to any 12-35 VDC power supply. Capable of operation with long cable runs, Series 650 Transmitters are well suited for monitoring air or water temperatures at remote locations. Three models are stocked in popular ranges factory calibrated within 0.3% of span. All are linear within 0.25% of span and may be recalibrated within low range and span limits shown in chart. Low Range is temperature corresponding to 4 mA output. Span is temperature difference between Low and High Ranges corresponding to 4-20 mA output signal.

All **Series 650** models listed .....
A-325 Duct Mounting Kit with flange, fitting and hardware .....

SPECIFICATIONS

Input: Silicone-junction transistor.
Output Signal: 4-20 mA DC.
Power Requirements: 12-35 volts DC.
Accuracy: ±0.3% F.S. @ 20°C (68°F).
Linearity: Within 0.25% of span
Thermal Drift: Less than 0.5% of span over ambient temperature range of 0 to 50°C (32 to 122°F).
Probe Construction: 6˝ long, 0.25˝ O.D. Type 304 Stainless Steel.
Ambient Operating Temperature: 0 to 70°C (32 to 158°F).
Temperature Limits: (Probe): 204°C (400°F).
Probe Cable Length: 7 ft (2.1mm).
Voltage Stability: Output error less than 0.01% of span over the specified supply voltage range.

STOCKED MODELS

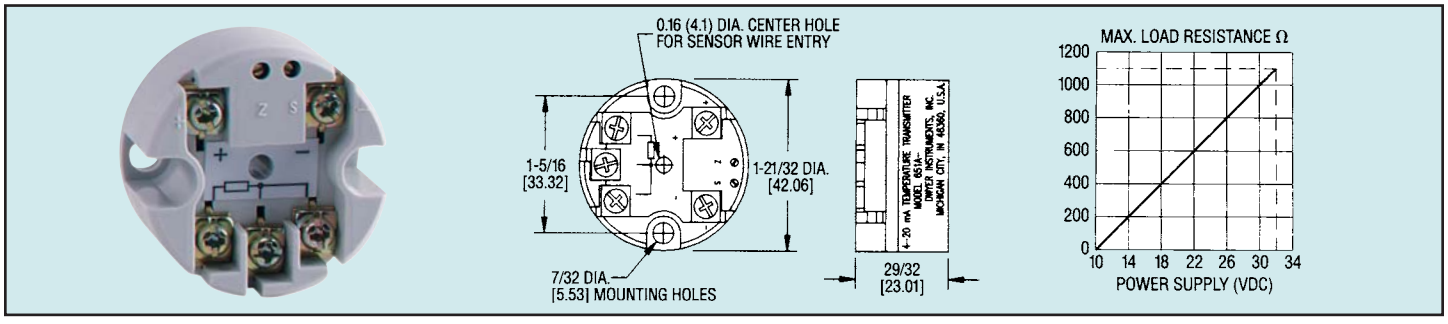
Model Number	Range As Stocked	Low Range Limits		Span Limits	
		Min.	Max.	Min.	Max.
650-1	-23° to +10°C	-32°C	-14°C	24°C	48°C
650-2	-7° to +49°C	-12°C	+6°C	37°C	150°C
650-3	0° to +100°C				

Consult factory for special ranges calibrated within the limits of -55°C and +180°C

Series 651

Temperature Transmitter

RTD or Thermocouple Input, Zero and Span Adjust, Linearized 4-20 mA Signal



Linearized output for precise temperature monitoring or control is combined with small size and quick, easy mounting. Rugged Series 651 transmitters are designed for use with 2 or 3 wire Pt100 RTDs (to DIN standard 43760 or BS1904) or ungrounded Type K thermocouples. Thermocouple models 651TC are cold junction compensated, automatic 32 to 160°F (0 to 70°C) with upscale burnout. These economical devices provide the accuracy and reliability you need at the lowest possible cost.

STOCKED MODELS in bold

Model No.	Input Type	Range, °F (°C)
651A-10	Pt100 RTD	32-212 (0-100)
651A-20	Pt100 RTD	32-392 (0-200)
651A-40	Pt100 RTD	32-752 (0-400)
651TC-01	Type K Thermocouple	32-212 (0-100)
651TC-02	Type K Thermocouple	32-392 (0-200)
651TC-04	Type K Thermocouple	32-752 (0-400)
651TC-06	Type K Thermocouple	32-1112 (0-600)

SPECIFICATIONS

Input: 2 or 3 wire Pt100 RTD (models 651A), or ungrounded Type K thermocouple (models 651TC).
Output: 4-20 mA DC, linearized. **Transmitter Type:** 2 wire.
Output Impedence: 700Ω@ 24VDC
Power Requirements: 10-32 VDC, reverse connection protected.
Accuracy: ±0.2°C plus 0.2% reading (models 651A), ±0.1% FS plus cold junction errors (models 651TC).
Temperature Drift: ZERO drift typical 0.02%/°C (0.09°F), SPAN typical 0.005%/°C (0.0036°F).
Ambient Operating Temperature: 32 to 122°F (0 to 50°C).
Maximum Storage Temperature: 160°F (70°C)
Response Time: 10-90% in 200 ms (models 651A), 70% in 2 ms (models 651TC).
Agency Approvals: CE.

Accessory

A-709, Optional enclosure for Series 651Transmitters. NEMA 1 protective housing is 3" x 2⅛" (76 x 54mm). Supplied with mounting hardware, strain relief fitting and assembly instructions.