

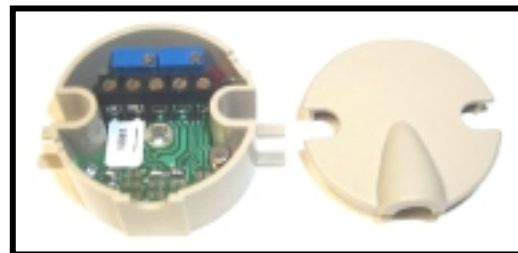
Transmit Temperature Over 4-20mA €

Model 405000

The Model 405000 transmitter converts a J-type thermocouple, K-type thermocouple, or Pt 100Ω RTD signal into a 4-20mA analog signal. This signal can then be transmitted without signal degradation over long distances using ordinary and inexpensive copper-wire, eliminating the need for expensive compensation and extension cable.

The 405000 is pre-configured to connect to a RTD Pt 100Ω for a temperature range of –60 to 120°F (0 to 100°C) and is easily modified with a soldering iron for a thermocouple or temperature ranges from –150 to 2190°F (-100 to 1200°C).

The 405000 is mounted in a NEMA 2 hood (IP-42) made of ABS plastic with a protective cover.



Features

- Cold junction compensation
- LED power-on indicator
- Compact size
- Solder pad selectable temperature range
- Supply voltage polarity protection
- Rugged ABS casing

Specifications

Input	J, K thermocouples, Pt 100Ω RTD
Output	Analog 4-20mA two-wire
Temperature Ranges	
J-type thermocouple	32 to 1470°F (0 to 800°C)
K-type thermocouple	32 to 2190°F (0 to 1200°C)
RTD Pt 100Ω	-150 to 570°F (-100 to 300°C)
RTD Pt 100Ω	-60 to 660°F (-50 to 350°C)
RTD Pt 100Ω	32 to 750°F (0 to 400°C)
RTD Pt 100Ω	210 to 930°F (100 to 500°C)
Input impedance	1MΩ
Excitation current	0.23 mA
Circuit break protect	Upscale > 30mA
Power supply	12 to 45VDC (polarity protected)
Load capability	600Ω max at 24V
Accuracy	
J or K thermocouple	0.1% full scale
RTD Pt 100Ω	0.1 to 0.25% full scale
Linearity	0.06% full scale
Calibration	Zero and span potentiometer adjustments
Zero drift	± 0.02%/°C
Voltage supply effect	± 0.002%/V
Cold junction compensation	32 to 122°F (0 to 50°C)
Operating temperature	-4 to 158°F (-20 to 70°C)
Housing and rating	ABS plastic with protective cover, NEMA 2 (IP-42)
Dimensions	1.7 inch (43mm) diameter, 1.0 inch (26mm) high
Mounting holes	1.3 inch (33mm) to 1.9 inch (49mm)
Weight	0.8oz. (25g)