

Temperature Transmitter



RTD With Temperature Transmitter

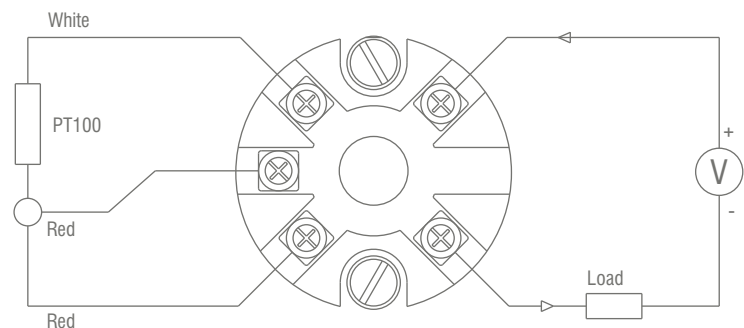
RTD temperature transmitters convert the RTD resistance measurement to a current signal, eliminating the problems inherent in RTD signal transmission via lead resistance. Errors in RTD circuits (especially two and three wire RTDs) are often caused by the added resistance of the lead wire between the sensor and the instrument. Transmitter input, specifications, user interfaces, features, sensor connections, and environment are all important parameters to consider when searching for RTD temperature transmitters.

Transmitter input specifications to take into consideration when selecting RTD temperature transmitters include reference materials, reference resistance, other inputs, and sensed temperature.

The transmitter is mounted on the Head of the temperature Sensor & converts it into a linear current loop signal of 4 to 20mA DC, capable of driving a load of up to 600 Ohms. The instrument operates in two-wire configuration.

Specifications

Input	: RTD, PT100, 3 Wires
Output	: 4-20mA, Loop powered
Range	: -200°C to 850°C
Accuracy	: $\pm 0.2^\circ\text{C}$, $\pm 0.2\%$ of reading
Response Time	: 0.5 s
Supply	: 8-30V DC
Mounting	: Head Mounted
Ambient Temp.	: -40°C to 85°C



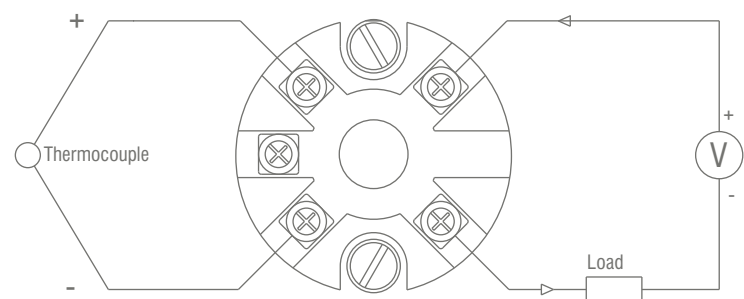
Thermocouple with Temperature Transmitter

Thermocouple temperature transmitters convert the small millivolt (mV) output of a thermocouple to a current signal (typically 4-20mA DC) that is immune to noise and voltage drops over long distances. They are used with thermocouple temperature probes, bimetallic devices that are suitable for various temperature sensing applications. Isolated

thermocouple temperature transmitters eliminate ground loop problems by isolating the transmitter input from the transmitter output. Output options include analog current, analog voltage, or relay/switch output.

Specifications

Input	: Thermocouple (Please specify the type)
Output	: 4-20mA, Loop powered
Range	: -200°C to 1760°C
Accuracy	: $\pm 0.5^\circ\text{C}$, $\pm 0.04\%$ of reading
Response Time	: 500 mS
Supply	: 8-30V DC
Mounting	: Head Mounted
Ambient Temp.	: 0°C to 70°C



General also offer PC programmable, re-rangable Temperature Transmitter.