

WE SENSE DISASTER...
AND NOW YOU ARE IN CONTROL...

A 4-20mA Current-to-Voltage Converter



The 4-20 mA signal converter is used to integrate the sensorProbe with a 4-20 mA transmitter. 4-20 mA technology is used to communicate analog signals over long distances where electrical interference is a problem. This solution is often used in the process control industry to collect the analog values from a wide array of remote sensors.

Current signals are much less susceptible to noise than voltage signals. A voltage signal can be converted to current and then broadcast over a long distance before it is converted back to voltage and read by the sensorProbe.

4-20 mA transmitters are common in the industry for use with high quality sensors. With the 4-20 mA converter these sensors can now be integrated into the sensorProbe enhancing their value with the addition of graphing, web interface, email interface, thresholds, and limits.

Specifications

Input Current Range	+4 mA to +20mA
Output Voltage Range	+0.8V to +4.0V
Linearity	$\pm 0.09\%$ Full Scale, Maximum
Accuracy	$\pm 0.15\%$ Full Scale ($\pm 0.3\%$ Full Scale Maximum)
Power Supply	+5 VDC
Power Consumption	25mW
Operating Temperature	-40° C to 85° C
Input Connector	Two Terminals lin(+) and lin(-), for Current Loop
Output Connector	RJ 45 Jack to Converter using UTP Cat 5 wire
Mechanical Dimensions	65(W) x 62(H) x 150(D)mm
Weight	80 grams

Features

- Converts current levels from 4-20 mA to 0.8-4.0 V voltage levels
- Maximum linearity of $\pm 0.09\%$
- Maximum accuracy of $\pm 0.3\%$
- Operates from a single +5 V DC Power Supply which is powered by the sensorProbe
- Fully Rated Over the -40°C to 85°C Industrial Temperature Range
- 2 LED show status of the current loop and the power supply

Supported by: