

4-20mAmp Sensor - vC00



4-20mAmp Sensor

The 4-20mAmp signal converter is used to integrate the sensorProbe or securityProbe with a 4-20mAmp transmitter. 4-20mAmp 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.

4-20mAmp 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 or securityProbe base unit.

4-20mAmp transmitters are common in the industry for use with high quality sensors. With the 4-20mAmp converter these sensors

can now be integrated into the sensorProbe or securityProbe units, enhancing their value with the addition of graphing, web interface, email interface, thresholds, and limits.

4-20mAmp's Main Features

- **Converts current levels from 4 - 20mAmp 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 powered by the sensorProbe / securityProbe base unit. No additional power source required.**
- **Rated Over the -40°C to 85°C Industrial Temperature Range**
- **2 LED show status of the current loop and the power supply**
- **Up to two I-V converters per sensorProbe2, up to 8 per sensorProbe8 and securityProbe**
- **VC00 can be extended to your desired cable length using one of our CAT5 extension cables, CABXX, or you can provide your own cable of any length up to 15 feet.**

Technical Specifications

Input Current Range : +4mAmp to +20mAmp

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 : 25 mW

Operating Temperature : -40°C to 85°C

Input Connector : Two Terminals, lin(+) and lin(-), for Current Loop

Output Connector : RJ45 Jack to Converter using UTP Cat 5 wire

Mechanical Dimensions : 65(W) x 62(H) x 150(D) mm

Weight : 80 grams