

4-20mA Input Smart Sensor

PRODUCT OVERVIEW

The CURR-1022 Smart Sensor is a wireless current sensing device which accepts two 0/4-20 mA signals and is a component of the SensiNet wireless sensor network. It reports highly accurate, real-time measurements without wires and is FCC and CE-approved for license free operation.

The CURR-1022 has on board batteries for complete tether free operation or can be equipped with an external DC (10-30VDC) power supply which will simultaneously power two loop powered transmitters and the CURR-1022.

Smart Sensor Benefits

Simple- Install and turn on...the system does the rest. Over the air configuration through standard web browsers eliminates complicated software. Sensors can even receive firmware updates over the network.

Robust- Rugged electronics combined with extensive self diagnostics provide a rock solid measurement system which continually monitors and reports system health such as battery voltage and connection status.

Accurate - Self calibration and auto zero eliminates errors due to drift.

SensiNet Network Benefits

Reliable- Mesh networking provides multiple acknowledged and error checked communication paths ensuring the message always gets through while spread spectrum, frequency hopping radio technology eliminates interference effects. The network is also self healing and able to recover from interruptions by seeking alternate paths.

Flexible- Move, add or eliminate sensors and the network reconfigures itself automatically.

Universal- Multiple protocols including Modbus, OPC, SNMP, ODBC, and Web Services ensure system compatibility or operate the system as a stand alone data logging system with local or web based logging.

Scalable- The same network can start with a single point and grow to thousands without replacing any components or performance degradation.



Model: CURR-1022

SPECIFICATIONS

Radio Specifications	
Radio	IEEE 802.15.4 compliant, 2.4 GHz DFSS
Regulatory	FCC Part 15 and CE Approval
Antenna	Internal antenna
Output power	15 dBm
Range (sight)	<ul style="list-style-type: none"> Up to 700 ft/212m range (outdoor, line of sight) Up to 230 ft/70m range (typical indoor conditions)
Operating temperature	-10° C to 50° C
Operating humidity	Up to 100% non-condensing
Power options	<ul style="list-style-type: none"> AA 3.6 lithium thionyl chloride battery +10 tp +30 VDC
Battery life	1.5 years at 2 minute reporting intervals
Update interval	User selectable 10 sec to 60 minutes
Dimensions	3.75" x 5.6" x 1.375" 89mm x 140mm x 35mm
Packaging	ABS Box - IP30 rated
Mounting	<ul style="list-style-type: none"> Surface flange mount
Analog Input Specifications	
Analog channels	2 channels
Input range	0/4-20mA
Accuracy	0.1%
Resolution	12 bi (0.1%)
Zero drift	Auto-calibrating
Span drift	Auto-calibrating
Sensor terminal connection	<ul style="list-style-type: none"> #28 to 14 AWG wire gauge Clamping yoke connection