

# 4-20mA Input Smart Sensor Weatherproof Enclosure

## PRODUCT OVERVIEW

The CURR-1022-N 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 report highly accurate, real-time measurements without wires and is FCC and CE-approved for license free operation.

The CURR-1022-N 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

<u>Simple</u>- 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. <u>Robust</u>- 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 <u>Accurate</u> - Self calibration and auto zero eliminates errors due to drift.

#### SensiNet Network Benefits

<u>Reliable</u>- 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.

<u>Flexible</u>- Move, add or eliminate sensors and the network reconfigures itself automatically. <u>Universal</u>- 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. <u>Scalable</u>- The same network can start with a single point and grow to thousands without replacing any components or performance degradation.



Model: CURR-1022-N

#### **SPECIFICATIONS**

| SPECIFICATIONS                 |   |
|--------------------------------|---|
| Radio Specifications           | Ī   |
| 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)                  | 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                  | C Size 3.6 lithium thionyl chloride battery +10 tp +30 VDC  |
| Battery life                   | 2 years at 2 minute reporting intervals   |
| Update interval                | User selectable 10 sec to 60 minutes  |
| Dimensions                     | 6.5"W x 6"H x 5"D<br>165 mm x 155 mm x 125 mm   |
| Packaging                      | ABS Box - IP65 rated  |
| Mounting                       | Surface mount ears  |
| Analog Input<br>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     | #28 to 14 AWG wire gauge Clamping yoke connection   |