Temperature RTD Smart Sensor Weatherproof Enclosure

PRODUCT OVERVIEW

The TEMP-1022-N/1122 -N & TEMP-1024-N /1124-N Smart Sensors are wireless temperature measuring devices that accept either 2 or 4 standard RTD's and are components of the SensiNet™ wireless sensor network. They report highly accurate , real-time temperature measurements without wires and are FCC and CE-approved for license free operation.

The TEMP series is user configurable for RTD type and configuration (2,3,4 wire) and even monitors the inputs for integrity and provides alarm indication in the event of sensor or lead wire failure. They operate from on board batteries or may be DC line powered for continuous operation.

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: TEMP-1022-N..2 port (-)100 to 200 C
Model: TEMP-1024-N ..4 port (-)100 to 200 C
Model: TEMP-1122-N ..2 port (-) 20 to 540 C
Model: TEMP-1124-N ..4 port (-) 20 to 540 C

SPECIFICATIONS

Radio Specifications	
Radio	IEEE 802.15.4 compliant, 2.4 GHz DFSS
Regulatory	FCC Part 15 and CE Approval
Antenna	Internal antenna
Range	• 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 (included) • +10 to +30 VDC
Battery life	•TEMP-1022-N & 1122-N, 2 years at 2 minute intervals •TEMP-1024-N & 1124-N, 1..5 years at 2 minute intervals
Update interval	User selectable 10 sec to 60 minutes
Dimensions	6.5"W x 6"H x 5"D 165 mm x 155 mm x 125 mm
Packaging	ABS Box - IP65 rated
Mounting Options	• Surface mount ears
RTD- Specifications	
RTD terminal connection	• #28 to 14 AWG wire gauge • Clamping yoke connection •Pluggable terminal block connector
Supported RTD types	2,3,& 4 wire versions of: • 10Ω @ 25 C, Copper; 0.00427 Ω/Ω/ C • 100Ω @ 0 C, Platinum; 0.00392 Ω/Ω/ C • 100Ω @ 0 C, Platinum; 0.00385 Ω/Ω/ C
Temperature range	TEMP-1022-N & TEMP 1024-N: (-)100 C to 200 C TEMP-1122-N & TEMP 1124-N: (-) 20 C to 540 C

Wireless Sensors • 12 Old powerhouse Road • Falmouth, ME 04105
Tel: 888.928.4362 • Fax: 888.928.4362 • www.wirelesssensors.com

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