



## WiFi Wireless Remote RTD Sensor (802.11 interface to your existing WiFi network)

### Wirelessly Monitor Temperatures with this Ultra Low Power Battery-Operated Digital Temperature Sensor

ConceptOne is a revolutionary new technology in remote sensor monitoring from the Company that has provided unique, cost effective solutions since 1986. ConceptOne leverages existing WiFi networks to enable the monitoring of temperatures with an easy to install system.

The ConceptOne Ultra Low Power (ULP) WiFi RTD Sensor is a battery operated digital temperature sensor with a built-in microprocessor controlled 2.4 GHz IEE 802.11b ULP radio to transmit temperature data across your existing WiFi network. Onboard calibration tables provide a linear temperature output using an external 100-ohm Platinum RTD.

This extremely small sensor, measures only 3.3" x 3.3" x 1.3" (including mounting flange) and weighs only six ounces.

#### Main Features

- 12 mw 2.4 GHz 802.11b ULP Wireless Radio
- Communicates with most standard Access Points
- Supports 4-wire remote 100-ohm Platinum RTDs (optional extended range probe interface available)
- Onboard Calibration Table provides Linear Output
- Low Current/Duty Cycle for Reduced Self Heating
- Battery Life: Up to 3 years at 15 minute transmission intervals on two AA cells. Optional single battery model available.
- Battery Type: 3.6 V Lithium ½ AA. User replaceable.
- Unique Serial Number to identify specific sensor locations
- Supports WEP128, WPA, WPA2-PSK (AES)
- Static IP Address or Set Through DHCP
- Sensor Data Sent via UDP Packets
- Small Data Packets (<70 bytes)
- Configured via USB cable
- Includes 4-inch Stainless Steel Probe with 6-foot FEP jacketed coated cable for -50 to 125 degree C range
- Optional probe for Cryogenic applications (+200 to -200 degrees)

#### Measurement Specifications – Standard RTD Probe

• RTD Power on Duty Cycle	2% duty cycle
• Resolution	0.1 degree C
• Accuracy 60 to 125 C	+/- 0.5 degree C
• Accuracy 30 to 60 C	+/- 0.3 degree C
• Accuracy 0 to 30 C	+/- 0.1 degree C
• Accuracy -50 to 0 C	+/- 0.3 degree C
• Transmission Rate	15 minutes
• Operating Temperature	- 50 to 125 degrees C
• RTD Type	P6 P/N P2842

#### Measurement Specifications – Extended Range Probe

• RTD Power on Duty Cycle	2% duty cycle
• Resolution	0.1 degree C
• Accuracy 125 to 200 C	+/- 1.3 degree C
• Accuracy 60 to 125 C	+/- 1.3 degree C
• Accuracy 30 to 60 C	+/- 1.1 degree C
• Accuracy 0 to 30 C	+/- 0.9 degree C
• Accuracy -50 to 0 C	+/- 1.1 degree C
• Accuracy -200 to -50 C	+/- 1.3 degree C
• Transmission Rate	15 minutes
• Operating Temperature	- 200 to 200 degrees C
• RTD Type	Omega Engineering P/N PR-11-3-100-1/8-6-E