



PN – Sensor: AD-2005-RTDTEMP



AVIDSmartSensor™ Wireless 900MHz Temperature with Remote RTD 100 OHM

Features

- Supports 4-wire remote 100-Ohm Platinum RTDs
- Onboard calibration table provides linear output
- Low current/duty cycle for reduced self heating
- 30-Bit unique ID
- Integrated 100mw, 900 MHz SSFH radio for long range performance
- Range Indoor: Up to 1300 feet
- Range Outdoor: Up to 1 mile with standard antenna
- Battery lasts up to 2 years with 5 minute transmit rate
- Very small (3.25" X 3.25" X 1.375") ABS Enclosure
- Complies with part 15 of the FCC rules
- CRC-16 error checked Status, ID and thermistor data
- Conformal coated
- External ¼ wave antenna
- Standard and Extended RTD probes available
 - Standard PN – AD-2004-PROBE-STD
 - Extended PN – AD-2004-PROBE-EXT

AVIDdashboard Integration

Sensor readings are quickly viewed from the dashboard main page by adding a graphical widget to display the level. User defined Alerts can signal support resources to handle any out of control conditions.



Temperature is above normal please check load



Sensors May be Enclosed in Explosion Proof Casing for Industrial Type Applications

AVIDSmartSensors RTD Temperature sensor is a battery operated digital temperature sensor with a microprocessor controlled 900 MHz, FCC certified radio transmitter. The sensor has an on board clock that allows it to spend most of the time in a low power quiescent state. At predetermined time intervals the clock will wake up the onboard microprocessor. Onboard calibration tables provide a linear temperature output using an external 100-Ohm Platinum RTD.

This information is combined with a CRC-16 error check and transmitted in a very short data packet that results in a very short transmitter on-time. This architecture allows the AVIDSmartSensors RTD Temperature sensor to consume very low energy resulting in a battery life of up to 2 years.

A button on the top of the ABS cover permits a user to activate the service switch. When the service switch is pushed a data transmission occurs immediately and a special mark is introduced in the ID field of the transmitted data packet to indicate which sensor is in service or installation.



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Wireless Temperature with Remote RTD 100 OHM

Specifications

Parameter	Standard RTD	Extended Range RTD
Measuring Current	300 micro Amp. @ 2% duty cycle	300 micro Amp. @ 2% duty cycle
RTD Power On Duty Cycle	2%	2%
Resolution	.1° C	.1° C
Accuracy 60-125 ° C	+-.5° C	+-.1.3° C
Accuracy 30-60 ° C	+-.3° C	+-.1.1° C
Accuracy 0-30 ° C	+-.1° C	+-.9° C
Accuracy (-50)-0 ° C	+-.3° C	+-.1.1° C
Accuracy (-200)- (- 50) ° C	N/A	+-.1.3° C
Transmission Rate	Preprogrammed at factor (5 minute default)	Preprogrammed at factor (5 minute default)
Battery Life	Up to 2 years	Up to 2 years
Dimensions (enclosure)	3.25"x3.25"x1.375"	3.25"x3.25"x1.375"
Weight`	5.0 oz.	5.0 oz.
Storage Temperature	-40° to 85° C	-40° to 85° C
Probe Operating Temperature	-50° to 125° C	-200° to 125° C
Battery	3.6vdc Lithium	3.6vdc Lithium

