

# INSTRUMENTS

## **THERMOCOUPLE & RTD Product Guide**

REOTEMP 300S INSTRUMENTS LOOP POWERED INDICATOR  $(E)(A)(\forall)$ 

REOTEMP is a globally recognized ISO 9001 manufacturer of temperature and pressure instrumentation. REOTEMP sells through a mature distribution network that reaches all 50 states and 30 countries worldwide.

Our reputation is built on high quality products, quick standard lead times, and exceptional customer support. We're dedicated to providing our customers with complete satisfaction, from the first phone call to the design and quality of the instrument they receive.

## Measuring your world since 1965



www.reotemp.com

casung your world

MADE IN THE USA

# The REOTEMP Difference...

### LEAD TIMES

### 5-7 Days - Standard Lead Time

#### **Expedites Available**

Note: 5-7 days is std. lead time for most products. Call for specific lead times.

### **ONLINE PRODUCT CONFIGURATORS**

Pricing, Lead Time, Photos, Drawings, Quotes



### **CUSTOMER SUPPORT**

- · Direct Access to Product Managers, Engineers, and Product Specialist
- Friendly and knowledgeable inside sales team

## **APPLICATION SPECIFIC SOLUTIONS**



### **MARKETS/MAJOR CLIENTS**



**ICON GUIDE** 

**Online Product** 

# HEAD ASSEMBLIES



- Large Head Selection (explosion proof, corrosion resistant, ecomonical, ATEX, etc.)
- A transmitter can be added inside the head (HART or 4-20mA)
- LED display available



Hi-Accuracy

Hi-Vibe

Transmitters (HART, Profibus, Fieldbus or 4-20mA)



# **STEM ASSEMBLIES**



• Comes in a wide variety of styles and terminations.

5-7 DAY

 Customize them to your process or application.

Cut-to-Length Sensors

- Field Cuttable
- Cut to length using tube cutter.

# **DUAL MODE THERMOMETERS**



- Mechanical reading locally and an electrical reading remotely
- Redundant temperature sensing increases safety



This product is available in a mil-spec approved model that is build to withstand tough shock and vibration environments (MIL-STD-167-1A and MIL-S-901D).







Hi-Vibe is an optional feature on many of our RTD sensors.

It's a proprietary sensor design that significantly improves lifespan and helps to maintain calibration in high vibration environments.

Look for the Hi-Vibe Logo.



Hi-Accuracy is an optional feature on many of our RTD sensors.

Reotemp uses high-end fixed point calibration cells to determine precise coefficients for the sensor you purchase. You will later input these values into your transmitter.

Once the precision coeffients are entered, your sensor will be roughtly 5 times more accurate!

> Look for the Hi-Accuracy Logo.



States *Standard Lead Time* for this product



*Expedite* typically available

"I wanted to state how impressed I am with the quality and turn-around time on these, they look fantastic."

# WELD PAD THERMOCOUPLES



- Full line of standard and custom weld pad thermocouples.
- Allows a temperature sensor to be welded directly onto piping or other metal surfaces.

### STORY FROM THE FIELD



During a maintenance shut down, a power plant in Ohio needed over 5 miles of sensors in less than 2 weeks.

REOTEMP delivered on time!

5-7 DAY

Max Temp.

2.700° F

3,400° F

Metal Sheath Materials:

**Ceramic Sheath Materials:** 

304SS

316SS Carbon Steel

Mullite

Alumina

Inconel 600

# **PROTECTION TUBES**

Knife Edge



4

Ceramic protection tubes are used in high temperature applications where a traditional thermowell would not be able to withstand the extreme temperatures.

Metal tubes are used in applications where corrosion is a concern. They are also used for their economical price point when compared to thermowells.

• Large stock of Noble Metals (R & S)

# HANDHELD PROBES



REOTEMP Handheld Probes come in a wide varitey of shapes and styles. Reotemp has made a number of probes for specific applications or to meet a customers unique needs. PIERCING PROBES

Magnetic Thermocouple Non-Invasion Temperature Sensor

"REOTEMP has shown the ability to create & deliver custom quality products. I'm very satisfied with the quality of the probes."



5-7 DAY

TRANSMITTERS



The Z-Temp is perfectly suited for applications where an explosion-proof sensor with a digital readout is required, but all of the extra features are not.

#### Features/Benefits:

- The core functionality of a fully featured smart transmitter at a fraction of the cost.
- Bright red, easy-to-read LED display
- Explosion proof housing
- FM, CSA, ATEX, EExd
- 4-20 mA output
- HART available

# SlimLine

#### TRANSMITTERS

Hi-Vibe O



**REOTEMP's SlimLine Temperature Transmit**ter is a compact, rugged transmitter perfectly suited to applications where space is limited.

#### Features/Benefits:

- Minimal installation space required
- High vibration & shock resistance

5-7 DAY

- Hermetically sealed (To NEMA 7, IP67)
- All-Welded 316SS construction

## SANITARY HEAD ASSEMBLIES



**REOTEMP's Sanitary RTDs are designed for temperature sensing in** food, dairy, beverage and pharmaceutical applications where sensor corrosion and product contamination are critical factors.

Features/Benefits:

- Ideal for CIP (clean-in-place) or SIP
- All wetted parts highly polished to exceed 3A requirements
- Tri-clamp design
- · Variety of stem and termination options



## ReoClick



- Disconnect/re-connect temperature sensor with the click of a button.
- Can be placed directly in a calibration bath.
- Maintains process pressure when disconnected.

Patent Pending

## ReoCube

5-7 DAY

REOTEMP's ReoCube Isolation Bottles are used to monitor the temperature of ultralow freezers or refrigerators. By submerging the temperature sensor(s), the ReoCube ensures the temperature readings will not be thrown off when the freezer door is opened and ambient air rushes in.

"The configurator is awesome. Never worked with something so easy and user friendly. I like this"

# **MULTI-POINT SENSORS**

**REOTEMP** manufactures multi-point sensors for chemical silos, scrubbers, storage tanks and a host of other process applicatons where a temperature profile is beneficial.

In a multi-point sensor, the temperature sensors are spread out along the length of the stem at strategic locations. This data creates a temperature cross section of the process. A multi-point sensor gives the operator more data points, which allows them to optimize their process and identify hot spots.

### Why are Multi-Points used?

- Identify hot spots
- Discrete temperature mapping
- Temperature averaging across large areas
- To better understand and optimize process efficiency

#### **Common Applications**

- Scrubbers/NOX/SCR
- Chemical Silos
- Crude Oil Distillation
- Ovens
- Ducts
- Exhaust Stacks
- Grain Silo
- Beverage Processing
- Storage Tanks



# **TURBINE SPECIFIC SENSORS**

REOTEMP provides a wide-range of turbine specific sensors to the power generation industry. Below are some of the more common types of turbine sensors **REOTEMP** manufactures. Contact us with your specific application and needs.

Durable Design

**Bearing Thermocouples** 

#### **REOTEMP Turbine Sensors Characteristics:** Vibration Resistant

Long Life Span

Flashback Thermocouples

Blade Path Thermocouples





# THERMOWELLS

- Online configurator provides you detailed drawing of a matched thermowell & sensor.
- Custom and standard thermowells
- Large Stock

Threaded



### **Available Options**

- Wake Frequency
- Hydrostatic test
- Full penetration welding
- NACE certified



Hi-Vibe Ni-Accu

# ECOPROBE SYSTEM

### (wireless temperature monitoring for the compost & waste water industries)

Many waste water treatment plants compost de-watered biosolids on site. The compost must maintain minimum internal temperatures high enough to kill pathogens and other harmful elements for an extended period of time. Reotemp's EcoProbe System allows these facilities to wirelessly collect that temperature information, saving them time and reducing their operating costs.

### Features/Benefits

- Reduced labor
- Reduced Processing Time (typical)
- PLC Integration or PC based software Remote Access/Alarm Notification
- RECEIVER ANTENNA PLC-Based System TEMPERATURE PROBES RECEIVER PLC 早 ~ COMPOST CONTROL BUILDING

"Not one of the thermocouples you have supplied to date for our Power Plant has failed"

# ACCESSORIES



# **CALIBRATION SERVICES**

REOTEMP uses a combination of fixed point calibration cells and fluid-filled calibration equipment to perform sensor calibrations from -196° C to 1,300° C. We provide calibrations for metrology and industrial customer in most industrial markets. Our friendly and knowledgeable calibration technicians will ensure your sensors have the accuracy required for your application.



# **CERTIFICATION SERVICES**

**Certificate of Conformance (General conformance to published specs)** 

Certificate of Calibration (Includes logged points and sticker)

**3A Sanitary Certificates** 

Compliance and material certs for all wetted components

# CONTACT US

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