

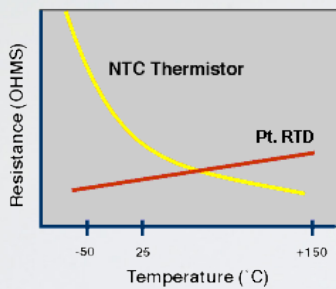


*Sensing Technologies products are proudly manufactured in the USA at our Florida and Pennsylvania plants. Each assembly is carefully designed and engineered than assembled and thoroughly tested, labeled and shipped from one of our facilities.*



Division of: MICRO CONTROL SYSTEMS

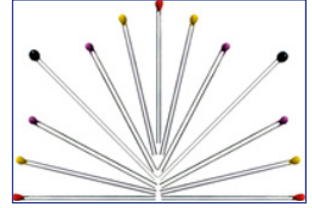
*Design and manufacture of precision temperature sensors, probes, and assemblies for a wide range of commercial and industrial applications*



# Design Process

## Step 1: Sensor Selection

At STI, we offer a wide variety of sensing elements, including epoxy coated chip and glass encapsulated thermistors, thin film and wire wound platinum RTDs, voltage to temperature transducers, and current to temperature transducers. Our sensors are used from -50°C to +500°C with accuracies as close as  $\pm 0.10^\circ\text{C}$ .

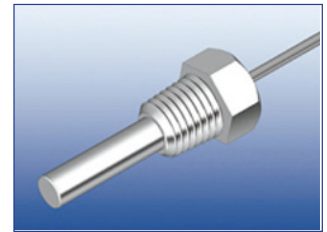


## Step 2: Housing Design

A properly designed housing is critical to sensor performance. It locates the element in direct contact with the medium to be measured and protects the sensor from damage while allowing for the fastest possible thermal response. In addition to having a large selection of standard list precision closed end tubes, we offer a wide variety of machined stainless steel, brass, copper, and plastic housings.

## Step 3: 3D Modeling and Prototyping

Throughout the design process, we use 3D modeling as our means of communicating ideas to and getting feedback from our customers. Once the model is complete and approved, we often provide prototype units for test and evaluation.



## Step 4: Testing and Final Approval

Sensing Technologies utilizes NIST traceable temperature measuring equipment to insure accuracy at tolerances down to  $\pm 0.01^\circ\text{C}$ . MIL standard testing includes shock and vibration, temperature, humidity, corrosion, and altitude.

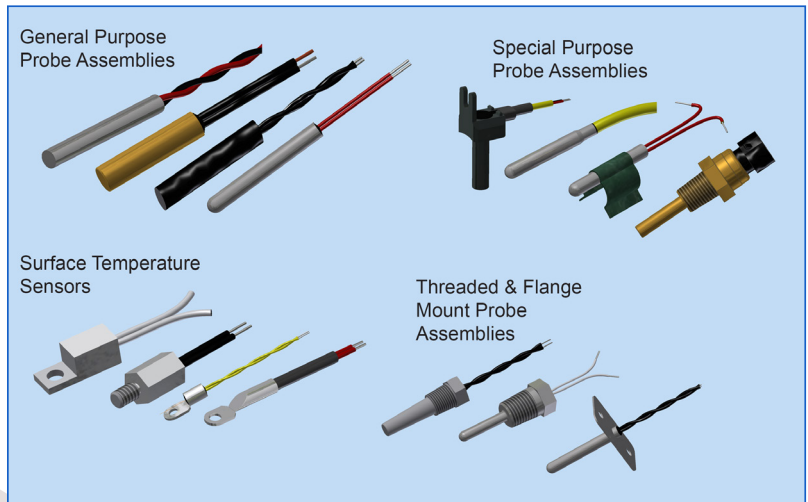
## Products

### NTC THERMISTORS

- Resistances from 1k to 100k ohms at 25°C
- Temperature Range -40°C to +150°C
- Thermally conductive epoxy coating
- Insulated lead wires available
- Other resistance values, materials available

### Platinum RTD's

- Resistances from 100 to 1000 ohms at 25°C
- Temperature Range -70°C to +600°C
- Can be welded, brazed or soldered
- Can be provided with extension lead wires
- Other resistance values, materials available



### Probes and Assemblies

Wide variety of standard and custom designs including:

- General Purpose
- Surface Mount
- Threaded and Flange Mount
- Special Purpose

Specify RTD or Thermistor sensor, wire or cable type and length, and operating temperature range.



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## Applications

From tiny medical sensing elements to heavy duty industrial probe assemblies, Sensing Technologies offers a wide range of high quality, standard list and custom designed products to meet the most demanding requirements.

### HVAC/REFRIGERATION PROBE ASSEMBLIES



- Rooftop A/C and Split systems
- Chilled water systems
- Compressor motor winding sensors
- Condenser, evaporator and duct sensors

### MEDICAL DIAGNOSTIC EQUIPMENT



- MRI / CAT scan machines
- Blood analyzers
- Gas chromatography
- Incubators and skin temperature sensors

### FOOD SERVICE



- Reach-in and walk-in refrigerator cases
- Ovens and food warming equipment
- Coffee brewers and juice dispensers
- Ice cube and ice cream machines

### POOL/SPA



- Inlet and outlet water temperature
- Outside air temperature
- Freeze protection sensors
- Solar, water and air sensors

### TRUCKS, HEAVY EQUIP., OFF-ROAD VEHICLES



- Intake and outside air temperature
- Coolant and emission sensors
- Transmission oil and engine oil temperature
- Water level sensors

### BOILERS AND HEAT PUMPS



- Oil and fuel temperature
- Cold water inlet and hot water outlet
- Geothermal systems
- Residential and commercial heat pumps

## About Us . . .



For more than thirty years, the engineers at Sensing Technologies have been working closely with customers in the HVAC, refrigeration, food service, pool/spa, medical, automotive, and military/defense markets.

Quality is our highest priority. We recognize that in this era of reduced engineering resources, many companies are looking for a way to extend their engineering talent. It is for that reason that we encourage our customers to think of us a partner in the design, development, and manufacture of high quality, precision temperature sensors and probe assemblies.



*For sales or application assistance please contact:*



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