AST - Applied Sensor Technologies
A Division of United Electric Controls

- Thermocouples
- RTDs
- Thermowells & Protection Tubes
- Transmitters
- The Sensor Box™
Applied Sensor Technologies is a major manufacturer of thermocouples, RTDs, thermistors and other types of temperature sensor assemblies. ISO 9001 certified and a leading practitioner of Lean Manufacturing methods, AST focuses on building high-quality, high-reliability products for the industrial market. Our expertise covers a wide variety of applications, from lab equipment to road-making equipment, from the blast furnace to the blast chiller, and everything in between.

**INNOVATIVE DESIGN**
- Cost-effective solutions that exceed customer requirements
- Fit-for-purpose by application

**RAPID DELIVERY**
- Lean manufacturing for maximum productivity and reduced waste

**UNCOMPROMISING QUALITY**
- ISO 9001 certified
- Customer-first approach through service, delivery and value
- US manufacturing

While United Electric Controls works towards full RoHS compliance with all of our products, most equipment and applications that include UE products are in RoHS exempt Category 9. If you are planning to install UE products in equipment that needs to comply, please contact us immediately so we may assist in your compliance goals.
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**AST Product Selector** ([www.appliedsensortech.com/productselector](http://www.appliedsensortech.com/productselector))

Visit the AST website at [www.appliedsensortech.com](http://www.appliedsensortech.com)

Visit AST’s Product Selector: [www.appliedsensortech.com/productselector](http://www.appliedsensortech.com/productselector)
Series AST-WP
Thermocouples and RTDs with Weatherproof Terminal Heads

FEATURES:
• Available in aluminum, epoxy-coated, 316 stainless steel, cast iron, polypropylene, and nylon heads
• Integral terminal block wiring or transmitters available
• Sensors with fixed lengths, spring-loaded, or flexible armor
• Available for single or dual J, K, E, T, N, R, S, and B thermocouples and a variety of RTDs

Series AST-XP
Thermocouples and RTDs with Hazardous Location Terminal Heads

FEATURES:
• Available in aluminum, epoxy-coated, or 316 stainless steel heads
• Class 1, Division 1, Groups B, C, and D
• Integral terminal block wiring or transmitters available
• Sensors with fixed lengths or spring-loaded
• Available for single or dual J, K, E, T, and N thermocouples and a variety of RTDs

Visit AST’s Product Selector: www.appliedsensortech.com/productselector
Series AST-SW
Thermocouples and RTDs with sheath and stripped or terminated ends

Features:
- Variety of wire and cables available
- 316 stainless steel or Inconel sheaths
- Stainless steel armor available, with or without waterproof PVC or Teflon coating
- Terminated with stripped ends or a variety of connectors, plugs and crimped terminals
- Compression fitting or weld-pads can be added for process mounting
- Available for single or dual J, K, E, T, and N thermocouples and a variety of RTDs

Visit AST’s Product Selector: www.appliedsensortech.com/productselector

Series AST-PM
Thermocouples and RTDs with sheath and various process mounting options

Features:
- Fixed mounting via NPT fittings, washers, lugs or bayonet connectors
- Typically 316 stainless steel
- Stainless steel armor available, with or without waterproof PVC or Teflon coating
- Terminated with stripped ends or a variety of connectors, plugs and crimped terminals
- Available for single or dual J, K, E, T, and N thermocouples and a variety of RTDs
**Series AST-BT**

Beaded Thermocouples with or without terminal heads

**FEATURES:**

- 8, 14 or 24 AWG wire
- Alumina or Mullite beads
- Ungrounded, exposed or twisted-exposed junctions
- Assemblies with head and protection tube, or element only
- Available for single or dual K, R, S, and B thermocouples

**Series AST-TW**

Thermowells and Protection Tubes

**FEATURES:**

- A complete line of solid-bore thermowells and manufactured protection tubes in a variety of materials and constructions
- NPT, Flanged, weld-in, and socket-weld process mounting
- Protection Tube materials: alumina, mullite, Sialon, silicon carbide, LT1, 316 SS, 304 SS, Inconel and many other materials available

Visit AST’s Product Selector: www.appliedsensortech.com/productselector
Series AST-AC
Transmitters and various accessory items

**FEATURES:**
- Transmitters with 4-20 mA or HART® outputs.
- Replacement terminal heads and blocks
- Plugs and jacks
- Compression fittings, spring-loaded fittings and bayonet adaptors

Series AST-SB
The Unique Sensor Box™ concept

**FEATURES:**
The SENSOR BOX™ is a rugged toolbox containing all of the parts and tools to quickly and easily build the sensor you urgently need. It is:
- **Flexible** - adaptable to most process plants:
  - Power
  - Chemical
  - Refining
  - Offshore Oil Production
- **Comprehensive** - It can include a variety of sensor types and hardware of your choice.
- **Self-contained** - Everything you need to build the right product is at your fingertips.
- **Industrial** - The toolbox and tools are rugged, designed for hard duty.
- **Easy to use** - Complete, easy to follow instructions are included.

Visit AST’s Product Selector: [www.appliedsensortech.com/productselector](http://www.appliedsensortech.com/productselector)
Series AST-SPL
Unique designs to specifically meet your application

FEATURES:

- “Standard” designs not working for you? From challenge to solution, you can count on AST to listen to your requirements and use our 50 years’ of experience to come up with an answer.
- Conditions that are abrasive/erosive, corrosive, shock and/or high vibration?
- Special designs for multi-points, heat tracing, flow computer inputs and countless other applications!
- Let us work with you to solve your toughest challenges!

Visit AST’s Product Selector: www.appliedsensortech.com/productselector
Series AST-SPL Cont.

APPLICATION: GAS SENSOR FOR FLOW METERS

- 3 or 4 wire RTDs
- PVC or Teflon coating armor for weather proof installation
- Teflon compression fitting for vibration and electrical isolation

APPLICATION: HEAT TRACE RTDs

- WP and XP models
- Replaceable RTD elements
- Weld pads for numerous pipe sizes
- 90 degree bend
- Can be installed on insulated pipes

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Series AST-T
Special designs for the OEM

FEATURES:

- From concept through production, we work closely with our customers to meet their design and cost targets.
- Designed specifically for the application
- Thermocouple, RTD, thermistor and IC-based designs.

Visit AST’s Product Selector: www.appliedsensortech.com/productselector
One Series Temperature Models

features for the One Series Safety Transmitter:
• Safety Transmitter with addition of local switching
• Certified for use in safety systems per IEC61508
• Explosion-Proof housing, worldwide approvals
• Temperature models with spring-loaded, fixed length or remote sensor
• Pressure and DP also available

Visit UE’s Product Selector: www.ueonline.com/productselector

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United Electric Controls has a rich history of over 80 years in providing protection for plant assets, people and the environment. Our pressure and temperature instrumentation is designed specifically to meet the rigors of harsh and hazardous alarm and emergency shutdown applications and includes certified safety transmitters per IEC 61508. UE serves the Chemical & Petrochemical, Power, Water & Wastewater and Oil & Gas industries, as well as many other challenging OEM applications.

Call at +1 617-923-6966 to speak to one of our knowledgeable representatives who can help answer your application questions. Please visit www.appliedsensortech.com to use our product selector, find one of our 150 worldwide distributors, and for further information about United Electric Controls and its products.