HVACR SENSORS

APPLICATIONS

- Alternative Energy and Solar
- Boiler Controls
- Building and Energy Management
- Commercial Chillers
- Commercial Cooking Equipment
- Compressors and Motors
- Container Storage
- Electronic Expansion Valves
- Forced Air Furnaces
- Heat Pumps
- Humidifiers and Dehumidifiers
- HVACR Diagnostic Equipment
- Ice Machines
- Packaged Terminal Air Conditioner and Small A/C
- Pool Heater and Equipment
- Refrigerators
- Refrigerated Beverage Dispensing
- Refrigeration Controls
- Underfloor Heating and Ice Melting
- VAV Systems and Air Handlers
- Water Heater
- Zone Controls

TE Connectivity (TE) sensors are an integral part of most heating, ventilation, air-conditioning and refrigeration (HVACR) systems — helping to not only maintain a comfortable indoor climate but also to increase the efficiency of the HVACR systems. They also enable integration of HVACR systems with building automation systems. As a global designer and manufacturer of sensors and sensor-based systems, TE provides support to HVACR engineers in both the development and instrumentation of HVACR systems. Our sensors are designed and manufactured to exacting specifications, often on a custom basis. Together with our customers, we are working to solve today's biggest application challenges in new and creative ways.

- PRESSURE
- TEMPERATURE
- HUMIDITY
- POSITION
- VIBRATION
- FLOW
- ULTRASONIC
- MASS AIR FLOW

LEARN MORE

PRESSURE SENSORS

M3200
The M3200 pressure transducer, with analog or digital output is suitable for measurement of liquid or gas pressure, even for difficult media such as contaminated water, steam and mildly corrosive fluids.

M5200/U5200/D5100
The latest series features high accuracy and a quick turnaround for demanding commercial and heavy industrial applications including surge protection and reverse polarity protection.

MS4515DO/MS4525DO
The transducer is built using the latest CMOS sensor conditioning circuitry to create a low cost, high performance digital output pressure (14bit) and temperature (11bit) transducer designed to meet the strictest requirements from OEM customers. Analog output options are also available.

M7100/U7100
The M7100 and U7100 pressure transducer is suitable for measurement of liquid or gas pressure, even for difficult liquids and gases, such as contaminated water, steam and corrosive fluids.

MS8607
The MS8607 is the novel digital combination sensor providing three environmental physical measurements all-in-one: pressure, humidity and temperature (PHT).

85BSD/86BSD
The 14-bit digital output pressure sensor supports I²C and SPI interface protocols in either a 3.3 or 5.0Vdc supply voltage and is designed to be weldable or threaded with process fittings.

89BSD
The 89BSD is a 9mm diameter small profile, media compatible, piezoresistive silicon pressure sensor packaged in a 316L stainless steel housing.

M5600/U5600
The 24-bit ADC wireless pressure transducers enclosed in a stainless steel and polycarbonate housing.

MSP100
The MSP100 pressure transducer provides stainless steel media compatibility in a low cost, small profile solution.

TEMPERATURE SENSORS

Push-in Sensors
The temperature sensor assembly available in brass, copper or stainless steel housing. Highly moisture resistant and available with mounting tabs or clips.

Screw-in Sensors
The temperature sensor assembly with an integrated connector. Custom lengths, diameters and threads available.

Refrigeration Molded Sensors
The overmolded Pt or NTC elements designed for high moisture environments. These are available in a range of values, curves and lead lengths.

Boiler Sensors
The Boiler Sensors designed for a range of boiler controls. These brass assemblies are corrosion resistant and can accommodate a range of threads and integrated connectors.

Air Temperature Sensors
The Air Temperature sensors are a range of configurations for sensing air temperature. Designs allow for easy installation and accurate measurements and can include various sensing elements.

Pipe Mount Sensors
The various mounting styles are available for a wide range of pipe sizes. Some come with integrated mounting clips and are designed for easy installation.

Handy Box Sensors
The Handy Box is a duct temperature sensor with a built-in handy box, supports a range of probe lengths and sensors.

Motor Temperature Sensors
The Motor Temperature sensor is designed for installing directly into the motor windings. These sensors protect HVAC motors from overheating conditions.

Radial Leaded Thermistors
The BetaCURVE series I NTC thermistors are small epoxy coated devices with solid tin-plated lead wires.

Axial Thermistors
The DO-35 is a glass encapsulated NTC thermistor for various applications and industries.

Platinum Thin Film Sensors
The platinum temperature sensors are designed to provide precise, stable measurement in extreme temperature applications. These sensors offer high value through proven design, ease-of-use, reliable performance and quick availability.

TSYS Series
The digital temperature sensor provides industry leading 0.1°C accuracy. The optimized microcircuit design allows fast conversion times along with very low power consumption.

TSD Series
The TSD series digital thermopile sensors include an infrared sensor and integrated signal conditioner. These thermopile sensors can directly interface with micro-controllers through an I²C interface.

HUMIDITY SENSORS

HTU21D
The miniature RH/Temperature sensor provides calibrated, linearized signals in analog pulse width modulated (PWM) format.

HTU31
The HTU31 humidity and temperature sensor is one of the smallest and most accurate humidity sensors on the market. Available in digital and analog versions, the HTU31 provides fast response time, precision measurement, low hysteresis and sustained performance, even in the harshest environments.

HTU3535PVBM/Wire
The HTU3500 series are dedicated humidity and temperature plug and play transducer designed for OEM applications where reliable and accurate measurements are needed.

HS1101LF
The HS1101LF sensor is based on a unique capacitive cell, these humidity sensors are designed for high volume, cost sensitive applications such as office automation, automotive cabin air control, home appliances and industrial process control systems.

HTG351xCH
The HTG3500 series are dedicated humidity and temperature plug and play transducers designed for OEM applications where reliable and accurate measurements are needed.

HTF3000LF
The TF3000LF PVH-3.3 is a dedicated humidity and temperature transducer designed for OEM applications where reliable and accurate measurement is needed.

POSITION SENSORS

KMA36
The KMA36 is a highly reliable universal magnetic position sensor IC for precise rotational or linear measurement with a resolution up to 0.04 degrees.

KMT32B
The KMT32B is a magnetic field sensor based on the anisotropic magneto resistance effect, i.e. it is sensing the magnetic field direction independently on the magnetic field strength for applied field strengths H>25 kA/m.

VIBRATION SENSORS

808/808M1
The Model 808 is a miniature adhesive mount IEPE accelerometer built on a 3-pin TO-8 header.

810M1
The Model 810M1 is a low cost, board mountable accelerometer designed for general purpose vibration measurements.

MiniSense 100 LDTC Family
The MiniSense 100NM is a low-cost cantilever-type vibration sensor offering moderate sensitivity over a useful frequency band up to 200 Hz.

8011
The internally shielded piezo velocity transducer designed for condition monitoring of low frequency rotating machinery. These transducers are available in ranges from 10.0 to 50.0 in/sec and interfaces with the standard IEPE constant current supply.

8032-01
The model 8032-01 is an internally shielded rugged IEPE accelerometer designed for harsh environments.

4020/4030
The model 4020 & 4030 are low noise, signal conditioned DC accelerometers packaged in a durable molded housing.

FLOW SENSORS

FS-01
The FS-01 flow switch is a flow switch for various applications for water flow.

ULTRASONIC SENSORS

LL-01
The LL-01 series ultrasonic sentio™ miniature liquid level switch uses proven ultrasonic technology combined with compact electronics yielding improved performance in aerated liquids.

MASS AIR FLOW SENSORS

LMM-H03
The LMM-H03 is a thermodynamic sensing element for the bi-directional measurement of mass air flow in a well-defined channel.

LMM-H04
The LMM-H04 is a thermodynamic sensing element for the unidirectional measurement of mass air flow in a well-defined channel.

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