Complete Measurement Solution

ITS
Industrial Temperature Sensors

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Company Profile

Since 1986, Industrial Temperature Sensors has been a leading manufacturer of temperature sensing devices. We manufacture a full line of standard and custom thermocouples, resistance temperature detectors (RTD's), NTC Thermistors and thermowell assemblies. Our Kildare manufacturing facility also features an in-house Temperature calibration laboratory. Our calibration services are traceably to national standards.

Over the past 25 years as a premier temperature sensing manufacturer Industrial Temperature Sensors has served a vast array of industries, including but not limited to pharmaceutical, petrol-chemical, plastics, heat treating, industrial, food service, defence/military, aerospace, medical, automotive, alternative energy, foundry, and heating/air. We offer a broad spectrum of experience and product knowledge. We also value our commitment to our customers and offer the stability to stand behind any product we manufacture and provide.

Industrial Temperature Sensors is committed to provide quality products on time that meet or exceed customer expectations and comply with all requirements. Industrial Temperature Sensors ensures success through the adherence to an effective quality management system based on continual improvement and customer satisfaction. We continually strive to reach our quality objectives of 100% on-time delivery to our customers and 100% customer satisfaction.

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General Purpose Process Sensor

This sensor assembly is a very common sensor used in many process applications. It consists of a temperature sensing element housed in a stainless steel protective sheath and terminated within a termination head which can be Aluminium, Plastic or Stainless Steel. Although various probe lengths may be specified some common lengths are readily available from stock. There are some options available as regards to termination & output such as ceramic termination block or a 4-20mA output head mounted temperature transmitter. Available with PT100,PT1000,Thermocouple or NTC Thermistor.

Threaded Process Sensor with lag

This sensor assembly is a very common one used in many process applications. It consists of a temperature sensing element housed in a stainless steel protective sheath with a process thread fixed to the stem & a standoff lag below the termination head which can be Aluminium, Plastic or Stainless Steel. 6mm would be a standard diameter for this probe and some stock lengths are 100mm up to 300mm in increments of 50mm. Other diameters & lengths are also available. Available with PT100,PT1000,Thermocouple or NTC Thermistor.

Threaded Process Sensor

This sensor assembly is a very common one used in many process applications. It consists of a temperature sensing element housed in a stainless steel protective sheath with a process thread fixed below the termination head which can be Aluminium, Plastic or Stainless Steel. 6mm would be a standard diameter for this probe and some stock lengths are 100mm up to 300mm in increments of 50mm. Other diameters & lengths are also available. Available with PT100,PT1000,Thermocouple or NTC Thermistor.

Spring Loaded Insert Sensor

These sensor assemblies are generally supplied to suit thermo pockets or thermowells but are also supplied as replacements or to suit existing thermo pockets & thermowells. It consists of a temperature sensing element housed in a stainless steel protective sheath and are spring loaded to ensure bottoming. They can be terminated with termination block, 4/20mA temperature transmitter or with flying leads to connect to existing unit. Available with PT100,PT1000,Thermocouple or NTC Thermistor.

Hygienic Tri-Clover Process Sensor

This sensor assembly is generally used within the dairy, brewery & pharmaceutical industry where a sanitary process connection is required. It consists of a Pt100 sensing element housed in a stainless steel protective sheath with a Tri-Clover ferrule process connection & a lag/standoff. These assemblies are generally of a high surface finish as required for such processes. The termination head which can be Aluminium, Plastic or Stainless Steel.

Hygienic ¾"BSP Process Sensor

This sensor assembly is generally used within the dairy, brewery & pharmaceutical industry where a sanitary process connection is required. It consists of a Pt100 sensing element housed in a stainless steel protective sheath with a floating nut which locks upon a measured collar & a lag/standoff. These assemblies are generally of a high surface finish as required for such processes. The termination head which can be Aluminium, Plastic or Stainless Steel.

Hygienic SMS Process Sensor

This sensor assembly is generally used within the dairy, brewery & pharmaceutical industry where a sanitary process connection is required. It consists of a Pt100 sensing element housed in a stainless steel protective sheath with a floating SMS style fitting & a lag/standoff. These assemblies are generally of a high surface finish as required for such processes. The termination head which can be Aluminium, Plastic or Stainless Steel.

Hygienic 3/8" BSP Process Sensor

This sensor assembly is generally used within the dairy, brewery & pharmaceutical industry where a sanitary process connection is required. It consists of a Pt100 sensing element housed in a stainless steel protective sheath with a floating 3/8"BSP nut which the 3/8"BSP weld socket mates with on a tolerance controlled shaft with a rubber O-ring to complete the seal. These assemblies are generally of a high surface finish as required for such processes. The termination head which can be Aluminium, Plastic or Stainless Steel.

Wall Mount Cold Room Sensor

This sensor assembly is generally used within a cold room environment. It consists of a Pt100 sensing element housed in a stainless steel protective sheath with an additional perforated protection sheath. The termination head is Aluminium with a screw cap & it also has two mounting lugs to enable direct wall mounting. IP 67 rated. Supplied with internal termination block or 4/20mA transmitter.

Wall Mount Cold Room Sensor

This sensor assembly is generally used within a cold room environment or for indoor/outdoor temperature measurement where an IP rated sensor is required. It consists of a Pt100 sensing element housed in a stainless steel protective sheath. The termination head is strong ABS plastic with a screw cap & it also has two mounting lugs to enable direct wall mounting. IP 67 rated. Supplied with internal termination block or 4/20mA transmitter.

Indoor Wall Mount Temperature Sensor

This sensor assembly is generally used within a room environment for air temperature measurement. It consists of a Pt100 sensing element housed in a strong ABS plastic which has perforations to allow air flow through the housing for exact measurement. These are available with terminals for cable connection or with a 4/20mA output.

Wall Mount Cold Room Sensor

This sensor assembly is generally used within a cold room environment or for indoor/outdoor temperature measurement where an IP rated sensor is required. It consists of a Pt100 sensing element housed in a stainless steel protective sheath. The termination head is strong ABS plastic housing, available in various sizes to accept various transmitters or converters etc. IP 67 rated.

Solid Drilled Flanged Thermowell

These Thermowells are turned & drilled from solid bar stock. This enables them to be placed within processes which experience or operate under high pressure or flow. They consist of a stainless steel shaft which can be straight or tapered. This is welded onto the process flange which is drilled to suit the shaft. There is a lag at the back of flange which houses an internal instrument connection thread. The bore is drilled out to 0.3mm larger than the intended sensor to be assembled giving a tolerance clearance fit to encourage good thermal conductivity.

Solid Drilled Threaded Thermowell

These Thermowells are turned & drilled from solid bar stock. This enables them to be placed within processes which experience or operate under high pressure/flow. They consist of a stainless steel shaft which can be straight or tapered. There is both an external process connection thread & an internal instrument connection thread. The bore is drilled out to 0.3mm larger than the intended sensor to be assembled giving a tolerance clearance fit to encourage good thermal conductivity.

Solid Drilled Weld-In Thermowell

These Thermowells are turned & drilled from solid bar stock. This enables them to be placed within processes which experience or operate under high pressure. They consist of a stainless steel shaft which can be straight or tapered. There is a weld collar to facilitate the thermowell to be welded in to the process & an internal instrument connection thread. The bore is drilled out to 0.3mm larger than the intended sensor to be assembled giving a tolerance clearance fit to encourage good thermal conductivity.

Solid Drilled Hygienic Thermowell

These Thermowells are turned & drilled from solid bar stock. This enables them to be placed within processes which experience or operate under high pressure or flow. They consist of a stainless steel shaft which can be straight or tapered. This is welded onto the Tri-Clover which is drilled to suit the shaft. There is a lag at the back of Tri-Clover which houses an internal instrument connection thread. This unit is generally Polished to achieve a high surface finish. The bore is drilled out to 0.3mm larger than the intended sensor to be assembled giving a tolerance clearance fit to encourage good thermal conductivity.
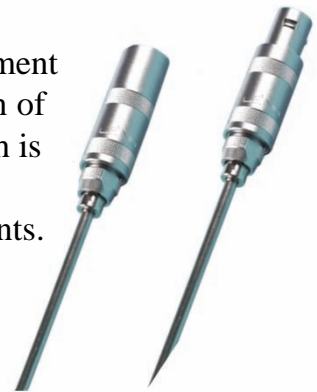
Bayonet Temperature Sensor

Suitable for plastic machinery and general purpose applications, these assemblies are supplied with a 200mm spring with an industry standard slotted adjustable bayonet cap fitting which is screw adjustable on the spring. The fitting can be fine tuned for positioning on site and is suitable where several applications in your plant require individual positioning of the sensor. The sensing tip is available in various diameters and the sensor comes with required length of extension cable from the probe.
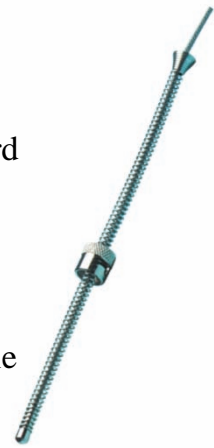
Lemo Connector Temperature Sensor

Temperature Sensor PT100 which consists of a Pt100 sensing element housed in a stainless steel 316L protective sheath. The Termination of the PT100 sensor is via a high specification Lemo connector which is used to connect the sensor to process or instrumentation. We offer various models of the Lemo connector to suit an array of instruments.

Temperature Sensor with Cable Extension

This sensor assembly has is used within various applications & environments. It consists of a Pt100 sensing element housed in a stainless steel 316L protective sheath . The extension cable can be silicon rubber, PVC or PTFE, dependant upon operating conditions. Both the sheath & the cable length can be specified to the required length.
Thermocouple versions also available.

High Temperature Sensor with Cable Extension

This sensor assembly has is used within various applications & environments. It consists of a Pt100 sensing element housed in a stainless steel 316L protective mineral insulated sheath rated to 650C. The extension cable can be silicon rubber, PVC or PTFE, dependant upon operating conditions. Both the sheath & the cable length can be specified to the required length.
Thermocouple versions also available.

Hermetically Sealed PFA Temperature Sensor

These flexible PFA insulated sensors are ideally suited to applications which require resistance to attack from virtually all known chemicals, oils and fluids. A 3mm in diameter Stainless Steel protective sheath houses the PT100 sensor which is encapsulated within a 5mm diameter PFA tube along the entire length of the sensor welded at the tip. A variety of lengths are available. The complete sensor is rated to 250°C.

Hermetically Sealed Temperature Sensor Heavy Duty

The harsh conditions found in the autoclave chambers and of sterilisers require a reliable sensor as all too often sensors can fail through ingress of moisture. Our Hermetically Sealed probes offers a reliable solution to the problem. Supplied as a PT100 sensor, it incorporates a complete seal via PFA tubing along the entire length of the sensor with a heavy duty stainless steel flexible conduit over protection.
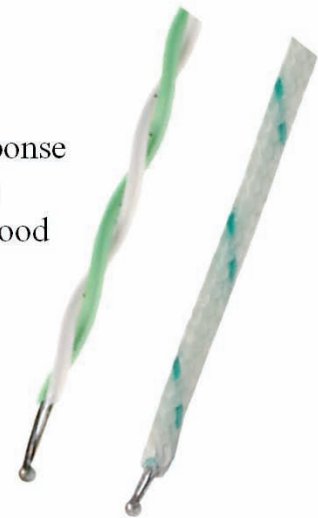
Welded Tip PFA Thermocouple

Simple PFA & Fibreglass insulated thermocouple for very fast response using 0.3mm dia conductors. Available with or without a miniature thermocouple plug attached Available in required metre lengths. Good for low temperature applications.
PFA -75C+250C
Fibreglass general up to 350C
Fibreglass High Temperature up to 750C

Washer Thermocouple

These thermocouples are suitable for surface monitoring of many applications including platens, pipes and vessels up to a maximum operating temperature of 400°C or 750C.

Surface Temperature Sensor Patch

Surface temperature measurement for pipes, tanks & motor casings etc. It consists of a Pt100 sensing element housed in a rugged silicon rubber self adhesive patch. Operating temperature of up to 200C. The extension cable extension is silicon rubber,. The extension cable length can be specified to the required length in meters.

Surface Temperature Sensor Magnet

Surface temperature measurement of ferrous materials for pipes, tanks & motor casings etc.
It consists of a Pt100 sensing spring loaded surface disc housed within a button magnet for magnetic connection to the measurement surface. Operating temperature of up to 250C. The extension cable extension is PFA & the cable length can be specified to the required length in meters.
Thermocouple versions also available.

Temperature Sensor with Pipe Clamp

This sensor assembly is used within various applications & environments for pipe surface Measurement. It consists of a Pt100 sensing element housed in a stainless steel 316L protective sheath. An extension union nipple union connects the clamp to the termination head which houses the spring loaded sensor insert. The tip of the sensor is flat and temperature sensitive for measuring pipe surface. The clamp is available in for various pipe diameters.
Thermocouple versions also available.

Temperature Sensor with Jubilee Pipe Clio

This sensor assembly is used within various applications & environments for pipe surface measurement. It consists of a Pt100 sensing element housed in a stainless steel 316L protective sheath with disc temperature sensitive tip which contacts the pipe upon mounting. The Jubilee is available in various pipe diameters and is adjustable.

Thermocouple versions also available.

Handheld Temperature Sensor

Immersion & penetration probe handheld sensor temperature measurement. It consists of a Pt100 sensing element in a stainless steel protective sheath with options on tip style such as pointed or rounded. The sensing element is available in thermocouple, thermistor NTC or RTD. The handle can be plastic or stainless steel. The extension can be cable or stainless steel flexible conduit. The extension length can also be specified. We provide digital handheld thermometers for connecting probes to offer visual digital readout of measurement with various resolution and accuracy

Heavy Duty Handheld Temperature Sensor

This series temperature sensor has been engineered and designed to withstand harsh environments and allow for product core temperature measurement whilst the product is undergoing the cooking process. It consists of a Pt100 temperature sensor housed in a 316 L Stainless Steel probe, both the handle & the heavy duty flexible conduit are also stainless steel. It has a 6mm diameter stem with choice of probe length 100mm or 150mm with pointed end. The probe is completely sealed from tip to tails preventing moisture or steam ingress into the sensor eliminating errors and breakdown.

Handheld Surface Temperature Sensor

Surface measurement handheld probe for surface temperature measurement. It consists of a sensing element in a stainless steel protective sheath with a flat contact stem tip. The sensing element is available in thermocouple or RTD. The handle can be plastic or stainless steel. The extension can be cable or stainless steel flexible conduit. The extension length can also be specified. We provide digital handheld thermometers for connecting probes to offer visual digital readout of measurement with various resolution and accuracy.

Handheld Temperature & Humidity Sensor

This sensor assembly has is used within various applications & environments. It consists of a Pt100 sensing element and a humidity sensor housed in a stainless steel 316L protective sheath 12mm diameter x 230mm with replaceable sintered tip. The handle is a moulded plastic and the cable length is 1 meter with DIN 8-pole connector. We provide digital handheld thermometers for connecting probes to offer visual digital readout of measurement with various resolution and accuracy.
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Handheld Sensors

High Temperature Ceramic Thermocouple Sensor

These thermocouples are used for temperature measurement to 1600ºC plus in kilns, furnaces and flues etc. Available in thermocouple types K with an impervious aluminous porcelain sheath or type R and S with an impervious recrystallized alumina sheath, they have a stainless steel support tube attached to a weatherproof connection head.
• Thermocouple types K , R or S
• Ceramic sheath material:
 Types K Aluminous Porcelain rated to 1350ºC (K)
 Types R and S, Recrystallized Alumina rated to 1600ºC
• Terminated in an IP67 weatherproof die cast alloy head rated to 135ºC

Heavy Duty Industrial Thermocouple

These sensors are available with thick wall protective sheaths in 316 or 310 Stainless Steel, Inconel 600®. Typical temperature measurement applications include: furnaces (blast, carburising etc.), kilns, ovens, boilers, flues, cyanide/galvanising baths and general heat treatment applications. They are available in a variety of diameters and lengths.
• Thermocouple types K, R or S
• Sheath material: 316 Stainless Steel, 310 Stainless Steel, Inconel 600® depending on thermocouple type selected
• Terminated in an IP67 weatherproof die cast alloy head rated to 135ºC

Twin Bore Ceramic Thermocouple Elements

These sensors are suitable for general use at high temperatures. Offered in Aluminous Porcelain for Type K, J, R & S thermocouples.
• Thermocouple types K J R or S
• Ceramic sheath material: Aluminous Porcelain rated to 1350ºC Recrystallized Alumina rated to 1700ºC Twin bore round insulators
• Variety of lengths and conductor diameters available

Humidity Transmitters

Smart humidity transmitters with 1 or 2 x (4 to 20) mA two wire outputs. The product will measure humidity, temperature, dew point and delta T (the difference between dew point and ambient temperature) values. Using free software, PC configuration allows you to output any 2 of these 4 parameters.

The optional 4 digit LED display option provides you with a visual indication of the process parameters, the display may be set to indicate either humidity, temperature, dew point or toggle between all three parameters.

Measures humidity, temperature, dew point or delta t
Dual channel 4/20mA output for any two of the above
Programmable using USB powered configurator
Display option
Plug in digital sensor
Wall Mount, Duct Mount or Remote Mount unit available

Pressure Transmitters

Pressure transmitter which are of high accuracy, robust, 2 wire current output pressure sensing devices. Sensing is by a piezoresistive element, oil filled, and enclosed in an all welded stainless steel (316 L) housing. Silicon filling and Viton seals are available as standard, with other options to order.

Span and Zero potentiometers are provided for fine adjustment or periodic re-calibration.

Gauge, absolute or sealed gauge types are available and all models are reverse polarity protected.

Ranges are to DIN standard (in ratios of 1, 1.6, 2.5, 4, 6,) e.g. 100, 160, 250, 400, 600 mbar and 1, 1.6 bars etc. with custom calibrations available in all pressure measurement units. High medium temperatures, up to 150 °C (illustrated). Lightning (surge) protection to EN 61000-4-5 and Intrinsic Safety options are all provided.

Gauge or Absolute
High Accuracy
IS Version
Up To 150 °C Medium Temperature
Choice of process connections including flanges
Lighting Protection Option

Temperature Transmitters

The task of transmitters is the transformation of the sensor signal into a stable and standardized signal. Digital technology offers better measurement accuracy & simultaneously higher flexibility, improve safety and safe costs. Measurement accuracy whereby the complete measurement point can be calibrated in a loop (Sensor and transmitter together).

The transfer of the real measured value digitally with accuracy and therefore offer cost savings by simplifying the wiring. Various models available with sensor & universal input. Head mounted & Din Rail mounted. Isolated, Ex rated & Hart models available.

°C mA

SEM710 Temperature Transmitter With Integrated Loop Powered Display

It has a universal input that has been designed to accept most common RTD and thermocouple sensor inputs and provide the user with a standard two wire (4 to 20) mA output signal. Isolation is provided between input and output and all temperature ranges are linear to temperature. The addition of a display provides the user with instant information of the loop condition at the point of measurement. It is available in either our SCH4 ABS plastic connection head or our SCH15 Stainless steel connector head. Both of which are available in sensor or wall mount versions.

DM640 SERIES - BATTERY POWERED THERMOMETER

The DM600 series of battery powered indicators accepts either an RTD (DM640P) or a Thermocouple (DM640TC) input. Each device shows the temperature on a 4 digit LCD display.

The unit is microprocessor based. The sensor type is selected from a simple to use menu system which is navigated by the use of three push buttons located on the rear of the display. This feature enables the user to easily configure the device in the field without the use of any other equipment.

Thermocouple & RTD Cables

We supply both thermocouple & RTD extension cables. They are supplied in with insulation in either Heat Resistant PVC or PFA or Stainless Steel Braided Fibreglass or Silicone Rubber. The cores are then twisted, screened, and overall sheathed in the same material. RTD & Thermocouple cables are in accordance to IEC colour code.
- Temperature rated as follows Heat Resistant PVC 105°C, PFA 250°C and Fibreglass 400°C for RTD, Fibreglass for Thermocouple up to 750C
 - Cores colour coded:- IEC colour code
 - Outer sheath PVC - Black, PFA – Black and Fibreglass is stainless steel
 - Available in a variety of lengths

Sensor Fittings

We supply an array of stainless steel fittings & unions complete with nut & olive which are used to connect sensors to thermo pockets, thermowells or direct into the process. Some sizes generally in stock are 1/8"bsp 1.5mm & 3mm. 1/4"bsp 3mm & 6mm. 1/2"bsp 6mm.

Enclosures

Enclosures with a wide range of entry sizes and positions. The heads will accept standard connecting blocks and most standard head mounting transmitters. Moulded in general purpose ABS, the external fixing points provide a simple and rapid means of mounting sensors directly onto ducts or walls, dispensing with the need for separate mounting plates.

Sensor Connectors

We Supply and stock various sensor connectors for both thermocouples and RTD to suit connection to many instruments and processes.

N320 Series Electronic Thermostats

Digital temperature Electronic Thermostats for heating, refrigeration, air conditioning, solar water heating & process. Alarm outputs with independent set points. The instrument allows for connection of PT100, Thermistor NTC, PTC or Thermocouple inputs. Available in various models with single or dual sensor inputs along with various output relay options. Also available in models such as Defrost, Timer & Temperature/Humidity.

Temperature Controller N1040

The microprocessor based N1040 was conceived for low cost applications and yet achieving high degree of accuracy. It features a short depth enclosure of only 70 mm thus reducing panel space considerably. Another important innovation is the exclusive removable wiring connection block which translates into ease of use during installation process. It accepts Pt100 RTDs and thermocouples types J, K and T and features two outputs for control and alarm, universal power supply and automatic tuning of the PID parameters.

Universal Controller N1100

Universal Controller N1100 holds in one single instrument all the major features that are needed for the vast majority of industrial processes. Both input and output are selected through the front keyboard without hardware change.
Universal input: Thermocouples J, K, T, S, Pt100, 4-20 mA, 50 mV, 0-5 Vdc.
2 alarms (Relays SPST) more Out linear 4-20 mA or logic pulse (standard)
PV or SP retransmission in 4 to 20 mA

N1200 is an advanced self-adaptive PID controller with an algorithm that constantly monitors the process performance and adjusts PID settings in order to always obtain the best possible control response. A single model is able to accept most industrial sensors and signals and provides all output types required to control different processes. All controller configuration can be achieved from the front panel without performing any hardware change.
The multi-purpose inputs and outputs can be combined to provide tremendous versatility with extremely high accuracy in the most demanding applications.

Universal Indicator 480i

This low cost and easy-to-use universal indicator can be programmed by non-experienced users. Full rangeability and a 24 Vdc output for remote transmitters are standard.
• Input: thermocouples J, K, T, N, R, S; Pt100, 50 mV, 10 V and 4-20 mA
• Alarm functions: LO, HI, differential, diff. HI, differential LO and broken sensor
• Detects any sensor failure
• Easy to use programming menu makes operator interface a snap

N2000 Universal Process Controller

The N2000 Universal Process Controller is a real breakthrough in versatility for holding in one single instrument all the major features required in the vast majority of industrial processes. With a sophisticated and consistent software and its advanced truly universal circuitry, the N2000 accepts configuration of both input signal and control output through the front keyboard without any internal hardware change. Power supply for remote loop powered transmitters is standard and is a must for high-end applications. From the very simple applications as a temperature controller to the most complex systems of distributed control with PLC's or SCADA networks, the N2000 is the right answer to your needs for industrial or laboratory automation.

N1500 Universal Indicator

The N1500 series of Universal Process Indicators are high performance instruments used for monitoring analog signals in the vast majority of industrial and laboratory processes.
Configuration from the front panel is fast and easy, accepting thermocouples, Pt100 and 4-20 mA or voltage signals without any hardware change.
The basic version comes with 24 Vdc output for field transmitters excitation, ultra bright five digit LED display and 2 relay alarms with 6 function options. 4 to 20 mA output for retransmission of measured variable to a recorder or PLC, two extra alarm relays, 1 digital input, RS485 digital communication interface are available as options.

Indicator N1500G

This high performance universal digital panel meter features a bright 56 mm high display for high visibility at long distances. Setup can be done via its keyboard or via a remote PC since it features RS485 comm and a digital input with special functions. Accepts termocouples J, K, T, E, N, R, S, B; Pt100, 4-20 mA, 0-50 mV and 0-5 Vdc. Alarms: two 3 A SPST relays. 24 Vdc output for remote transmitters

Universally applicable hand-held instruments P700 series

Application profile:

The universally applicable, micro-processor-controlled hand-held instruments, Series P700, are ideal for measuring operations in which high accuracy counts or the possibility of online documentation is demanded.

Areas of application

• Measurements for quality assurance according to ISO 9000

• As a reference instrument for checking production

• For taking comparison measurements in service and repair

• For registration of humidity and temperature in air conditioning and environmental engineering

• Long-term monitoring of temperature

Measures equilibrium moisture in masonry, cement, plastic granulate

Quality control of climatic cabinets
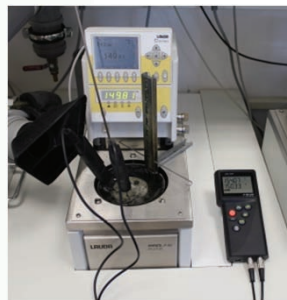
P750 as a standard in a laboratory

Windows Software DE-Graph(online measurements and calibration)

High precise measurements calibration systems

Pressure-tight moisture probe for measuring in compressed air

High precise measurements in laboratories

Climate control in greenhouses during production and storage of food and sensitive goods

Universally applicable hand-held instruments P700 series

Product features

- USB interface
- Optional DE-Graph Windows Software for graphic and tabular documentation
- High measuring accuracy (P750/P755 ±0,03°C)
- Integrated calibration function for simple compensation of sensor tolerances
- Physical 1-point, 2-point or 3-point calibration function
- Measuring channels are freely assignable
- Recording maximum, minimum, hold and average values
- Integrated sensor holder for one hand operation
- Mains operation possible
- Simultaneous display of two measured values
- Differential temperature display (2 channel instruments only)
- All Pt100-inputs in 4-wire-layout•°C/°F-switchable

Technical data P700 series For all instruments

Output:	USB-interface
Connector:	DIN 45326 8-pole
Working temp.:	0°C ... +40°C
Display:	2-line LCD
Housing:	plastic (ABS)
Dimensions:	200 x 93 x 44 mm(L x W x H)Weight:600g
Power supply:	9 V battery
Battery life:	approx. 20 h

Measurement Parameters

Airflow & Pressure
m/s
mbar

Temperature
°C

Humidity
%orH

P600-EX series - The explosion-proof instruments

Area of Application

Instruments for measuring in explosion hazard areas
(temperature range 200°C…+850°C), EX-mark: Ex ib IIB T4.

Technical data

Input: Pt100, 4-wire

Measuring range: -200°C...+850°C (EN 60751)

Resolution: P600-EX / P605-EX:0.1°CP650-EX / P655-EX /P655-LOG-EX:0.01°C
from -200°C...+200°Cotherwise 0,1°C

Accuracy: P600-EX / P605-EX:±0.1°C from -100°C...+200°C 0,1% remaining
rangeP650-EX / P655-EX /P655-LOG-EX:±0,03°C from -50°C...+199,99°C
±0,05°C from -200°C...-50.01°C otherwise 0,05%

EX-mark: EX ib IIB T4

Memory: 6,000 measurements (P655-LOG-EX only)

P795 Precision 2-channel hand-held measuring instrument

Application profile

An instrument which meets the highest demands. The 2-channel resistance thermometer automatically detects our Pt100-smartprobes with integrated EEprom. Thereby the calibration characteristic of each probe is transferred automatically to the instrument. The thermometer will achieve a system accuracy of ±0,015K (instrument + probe). Both measuring channels can be easily seen on the large LCD display. The instrument contains numerous functions for the measurement visualization. Various integrated calibration functions, including the intelligent EEprom probes, takes this compact instrument to a high performance class, making it ideally suitable as a primary reference standard.

Product features

- 2-channel-instruments, for Pt100 according EN 60751
- Simultaneous display of two measured values or differential measurement
- Recording maximum, minimum, hold and average values (average over user selectable time)
- Integrated calibration function (acc. EN60751 up to 14 points)
- High measuring accuracy (+ 0,010 °C)
- Password protection for calibration function
- USB interface, incl. USB-cable
- Manufacturers test certificate included
- Data Logger function for up to 6,000 measurements
- Optional Accredited or Traceable system calibration certification

Areas of application

The key issue for all instruments is the traceability of measurement to a recognised national standards laboratory. DKD(German UKAS equivalent) certified test equipment is recognized, without any further specifications, as an instrument of traceability in Europe and in many other non-European countries. As a service, certification for existing test equipment can be provided at any time.

- Reference system for your laboratory
- Service-Area
- Quality insurance
- Accurate long term monitoring measurements for quality assurance according to ISO 9000

Log 100/110

Ideal for Transportation, Storage, Environmental & many applications where temperature/humidity requires monitoring. Available with temperature, temperature/humidity, & with external sensor

LogBox-RHT and LogBox-RHT-LCD

Logbox-RHT and LogBox-RHT-LCD are dual channel data loggers with built-in temperature and relative humidity sensors. They use a high quality industrial grade humidity sensor for accurate and reliable operation in applications such as transportation, food and goods storage, process auditing, pharmaceutical, HVAC and others. LogChart II software allows for logger configuration, recorded data retrieval, plotting, historical analysis and it exports data to spread sheets.

Yoyo Data Loggers

Use indoors or outdoors! Wind, solar radiation, rain, storm, heat, light - these are just some of the environmental conditions data loggers have to brave in operation. Commonly used in environmental or climate studies, meteorology, workplace studies, studies about lighting i.e. street lighting.

Through Process Data Loggers

High Temperature Through Process Data Loggers
 - Temperature monitoring of sterilisation and pasteurisation processes.
 - Autoclave validation according to 21 CFR Part 11 regulations.
-   Temperature monitoring during meat and ham cooking.
The SterilCyl is the data logger for high temperatures (up to 140°C)
high accuracy and precision; compact and available with external Probes of different diameter and length;
Completely food grade and waterproof;

FieldLogger Universal Input Data Logger

It has 8 configurable universal analog inputs. It also has 2 relay outputs and 8 digital ports individually configurable as inputs or outputs.

Up to 128 mathematical channels can be used to perform operations on the measured values. Up to 32 alarm events can be detected, allowing output activations, e-mails and SNMP traps sending.

Its RS485 interface can operate as a Modbus RTU master or slave. It has a 10/100 Mbps Ethernet interface that allows for access through a browser (HTTP), FTP (client and server), e-mails sending (SMTP), SNMP and Modbus TCP.
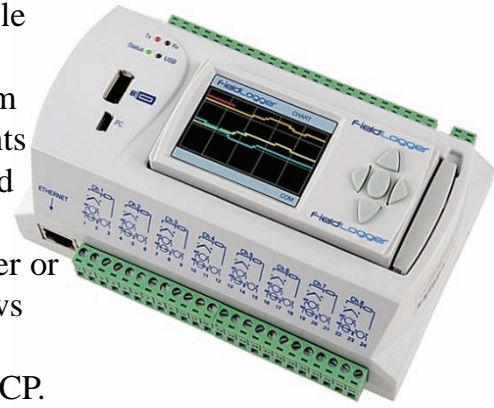
Squirrel Universal Data Loggers

Squirrel data loggers from Grant Instruments are easy to use, hand held, battery operated data loggers. They are characterised by their high accuracy of measurement, universal data inputs and build quality. This gives yo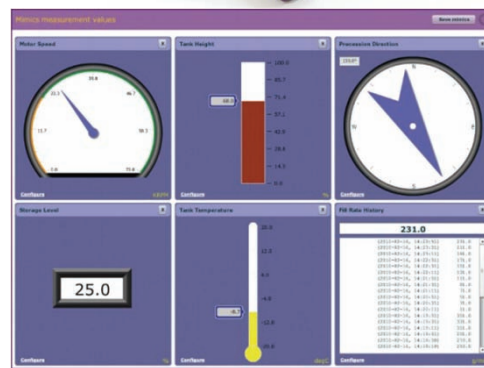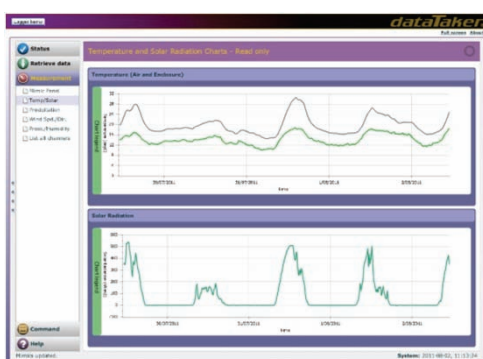u highly reliable data logging and system longevity. Universal input, multi-channel, high resolution data loggers are Ideal for remote sites where the integral display and keypad programming allow easy, onsite configuration. Loggers can also be programmed using Windows software. Units available with 4 to 32 analogue inputs and up to 100Hz logging rates.
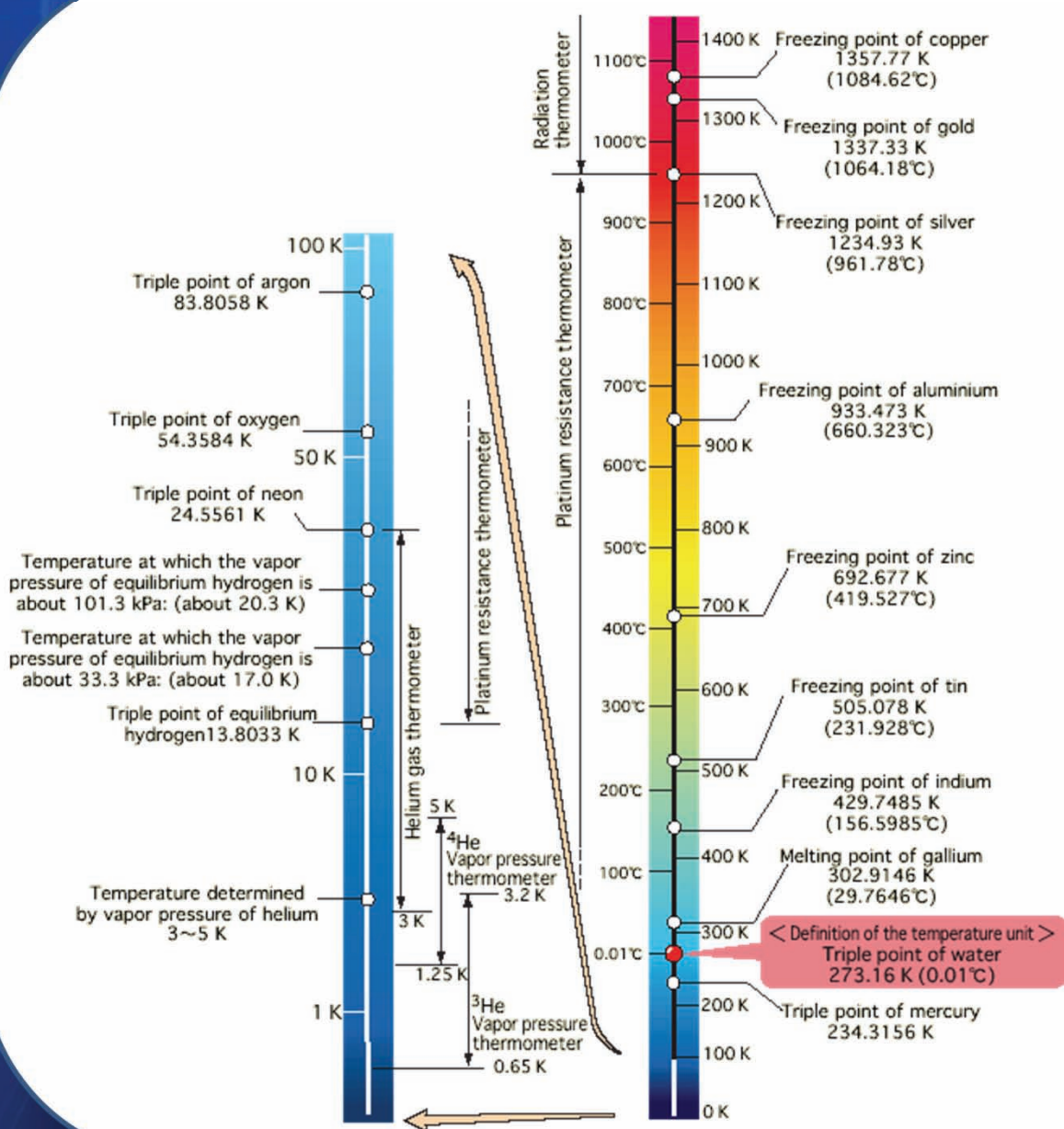
Datataker Data Logger Range

Multi-channel, universal input, 16Bit data loggers. A comprehensive range of loggers with 5 to 90 universal analogue channels, up to 60 digital channels and various serial inputs including SDI-12, RS232 & RS485. Low power consumption and built in LCD display are ideal for remote or portable applications. Various GSM, GPRS & Ethernet communication options.

Made to Measure