



Optimize Your Plant
with Stable and Reliable
Temperature Measurements

HONEYWELL INNOVATION AND EXPERTISE

Honeywell has a long history of delivering products that provide accurate and reliable process measurement and control. Our temperature transmitter portfolio leads the industry in flexibility and stability, while reducing overall installed costs. And, no matter where your operations are located, timely and knowledgeable Honeywell support is always close and convenient. Combining our innovation and support allows our customers to:

- Achieve faster and smoother startups
- Reduce engineering, procurement, installation and commissioning costs by at least 10%
- Maintain continuity despite any turnover in your organization's personnel
- Maximize payback from your Honeywell investments
- Avoid unplanned downtime



Accurate and Stable Temperature Transmitter Solutions

Honeywell's industry-proven field instruments set the standard for reliability and performance, providing the safety and efficiency required in the most demanding applications. Honeywell has a track record of helping industrial operations reduce risk, avoid downtime and improve productivity. We are also committed to providing customers with application support to help them select the right offering based on their needs.

STT 3000 Series Smart Temperature Transmitters

The Honeywell STT 3000® Smart Temperature Transmitters meet a broad range of temperature measurement needs and provide reliability, stability and accuracy for monitoring, control and safety applications. The transmitters are available in OEM packages and ready-to-install assemblies with globally accepted approvals, communications and diagnostics.

The STT 3000 Series includes three-tiers and a family of integrated assemblies, ensuring the right combination of price and performance for individual users:

- **STT170:** Cost-effective solutions for temperature monitoring applications.
- **STT250:** Advanced, mid-tier solution for control and safety applications.
- **STT350:** High-performance solution for critical control applications.
- **STT800:** Installation-ready temperature measurement with integrated assemblies.



STT 3000 Series Smart Temperature Transmitters:

- Safe and Reliable Operation
- TÜV Certified Modules
- Faster Startup, Installation and Commissioning
- Ease of Maintenance and Operation
- Lower Cost of Ownership



STT170

Smart Temperature Transmitter: Ideal for Basic Temperature Monitoring

The STT170 is a cost-effective 4-20 mA transmitter that is ideal for basic temperature monitoring and OEM applications. It is offered with flexible mounting options that help lower installation costs. The smaller size makes it compatible with any temperature sensor head and housing. The STT171, STT173 and STT17H are all configurable using STT17C configuration tool and PC.



Features:

- Universally programmable for both RTDs and thermocouples
- Ultra-compact size fits into the smallest DIN B head mount housing
- Field-mount housing options with local engineering unit meter
- High- or low-limit alarms to activate in the event of sensor failure

STT170 Industrial Application:

- Compact size and modular design makes it suitable for cement, sugar, food & beverage and inorganic chemical industries
- Original equipment manufacturers serving discrete and continuous process industries appreciate the excellent price performance ratio and usage in the curing presses, compressors, metering skids, furnaces and ovens



The STT170 is offered in four models:

- **STT171**
 - Analog 4-20 mA output and RTD or Ohm input
 - NAMUR NE43 sensor error response
- **STT17F**
 - FOUNDATION fieldbus protocol
 - RTD, T/C, Ohm or mV input
 - Single or dual (difference, average or redundant) sensor input
 - Function blocks (2 analog, 1 PID)
 - FISCO certification
 - Basic or LAS capability
 - Galvanic isolation
 - Support for open standards—FDT certified DTMs
- **STT173**
 - Analog 4-20 mA output
 - RTD, T/C, Ohm or mV input
 - NAMUR NE43 sensor error response
 - Galvanic isolation
- **STT17H**
 - HART™ / 4-20 mA output
 - RTD, T/C, Ohm or mV input
 - Single or dual (difference or average) sensor input
 - HART™ multidrop capable
 - NAMUR NE43 sensor error response
 - Galvanic isolation

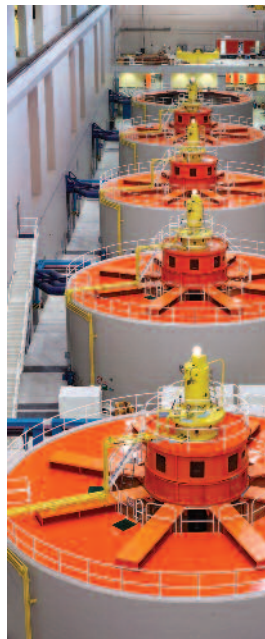


STT250

Smart Temperature Transmitter: Ideal for Control and Safety Applications

The STT250 is a mid-tier transmitter that is ideal for control and safety applications. It is an advanced solution with increased functionality in a compact module.

The STT250 surge protection device protects smart temperature transmitters against surges such as those generated by lightning strikes. It mounts to the top of the STT250 terminal block, providing easy field wiring with a compact mounting to allow the use of a variety of housings, including the popular Honeywell explosion-proof field-mount housing. The STT250 surge protection device is suited for both intrinsic safety and flame/explosion-proof applications.



Features:

- HART 6 communication output option
- TÜV SIL2 certification
- Universal sensor inputs—RTDs and thermocouples
- Available with integral engineering units meter
- Support for open standards (Viz. EDD, DTMs, etc.)
- Sensor matching function*
- Advanced diagnostics
- Dual-input version for redundant, differential, averaging and split range measurements*

STT250 Industrial Application:

- Ideal for hazardous environments requiring intrinsically safe and rugged construction designs such as those in the oil and gas upstream and downstream, chemical and refining industries
- Available with a head mountable module or a field-mounted unit in aluminum or a stainless steel housing for corrosive environments
- Meets the functional safety requirements according to IEC 61508 and is TÜV certified for SIL2/SIL3 applications
- Modular design is suitable for pulp and paper applications requiring sensor head mounting in pulp mill digestors, recovery boilers and paper machine areas where the ambient temperature is not very high

* Consult factory for availability.

The STT250 is offered in five models:

- **STT25D**
 - Single input
 - DE protocol
- **STT25H**
 - Single input
 - HART protocol
- **STT25S**
 - Single input
 - HART6 protocol
 - SIL2 TÜV certification
- **STT25M**
 - Single input
 - 4-20 mA output
- **STT25T**
 - Dual input
 - HART™ protocol



STT350

Smart Temperature Transmitter: Superior Stability and Performance

The STT350 is a high-performance transmitter accurate enough to reduce variations in custody transfer measurements and increase process yield in critical control applications. It offers superior stability and noise performance to reduce measurement variation and lower maintenance costs. It is available with Honeywell DE or FOUNDATION fieldbus communications, diagnostics, Delta T and redundant sensors capabilities. The transmitter also supports local or remote interfacing to provide significant efficiency improvements in commissioning, start-up and ongoing maintenance functions.



The STT350 is FISCO approved and automatically provides true differential temperature measurement of thermocouple or RTD inputs by individual linearization of each sensor reading, and then computing the difference.

Features:

- Robust galvanic isolation for noise immunity in tough industrial applications Universal sensor inputs—RTDs and thermocouples
- External cold junction compensation temperature at an isothermal block
- Engineering units displayed in degrees C, F, K, or R plus millivolt and Ohms
- One model for most thermocouples or RTDs (2, 3 or 4-wire)
- Auto calibration against internal reference every second
- DIN rail mounting or remote field mounting in a flameproof housing

STT350 Industrial Application:

- Ideal for applications requiring a high accuracy and stability, specifically in the hydrocarbon and specialty chemical industries for custody transfer and reactor temperature measurements.
- High noise immunity and robust galvanic isolation make it ideal for smelting applications in non-ferrous industries like alumina and zinc manufacturing plants.



STT800

Temperature Probe Assemblies: Ready to Install Assemblies for a Variety of Industrial Applications

The STT800 is an installation-ready temperature measurement assembly for any of the STT 3000 transmitters, sensor heads, sensors, thermo wells and process connections. It is available in short delivery cycles and comes with custom calibration and agency approvals. These are high quality probes with an exceptional level of support that provide ease of engineering, procurement and installation.



STT800 Temperature Probe Assemblies:

- All STT 3000 transmitters are offered as a ready-to-install assembly for all industrial applications
- Honeywell offers the right combination of sensor, thermo well and housing along with needed documentation such as NACE certification, material certification and wake frequency calculation for high velocity applications

The STT800 is offered in three models:

- **STT820**
 - Rigid probe assembly
- **STT830**
 - Threaded and socket weld thermo well assembly
- **STT840**
 - Drilled and flanged thermo well assembly

Honeywell STT 3000 Range of Temperature Transmitters

STT 3000 Temperature Transmitters	Mounting Options				Functional Options			Communication Options		
	Pipe (2 inches)	Wall	Head	DIN Rail	Local Meter	Dual Input	Integrated Assembly	DE	HART	FF
STT170	●	●	●	●	●	●	●		●	●
STT250	●	●	●	●	●	●	●	●	●	
STT350	●	●		●	●	●	●	●		●

Global Agency Certifications

Honeywell STT 3000 Temperature Transmitters are globally certified:



Honeywell STT 3000 Detailed Specifications

Detailed specifications are available on our website www.honeywellprocess.com. Use the specifications reference number below to locate them:

Product	Specification Reference Numbers
STT170	34-TT-03-07
STT250	EN0I-6031
STT350	EN0I-5222
STT35F	EN0I-6083
STT800	34-TT-03-08

For More Information

For more information on Honeywell's STT 3000 Smart Temperature Transmitters, contact your Honeywell account manager or visit our website at www.honeywellprocess.com/en-US/explore/products/instrumentation/temperature-transmitters-and-sensors/stt-3000-temperature-transmitters/Pages/default.aspx

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