

PROCESS INSTRUMENTATION

SITRANS TF320/420 Reliable, accurate, robust

usa.siemens.com/temperature

The SITRANS TF320/420 field transmitters can be used for all common resistance thermometers and thermocouples. Resistance-type sensors and millivolt signals can be analyzed, too. The configuration can be done quick and easy via SIMATIC PDM, handheld communicator or the optional display with push buttons. Both temperature transmitters SITRANS TF320 as well as TF420 stand for reliability, accuracy and robustness.



Temperature measurement with easy push button programing

The two independent sensor inputs of the SITRANS TF420 include a 4-wire sensor connection with a hot backup function, which guarantees true reliability.

In case of a sensor failure, the transmitter switches seamlessly to the second sensor, the values will continuously be recorded without any data losses.

The sensor calibration according to the Callendar-van-Dusen method plus the additional sensor drift detection (only TF420) ensures high accuracy, accelerated calibration time and optimal calibration planning.

The SIL2 / 3 certification in conjunction with a variety of Ex approvals is the perfect solution for your safety-critical applications, even under the most extreme conditions down to -50 $^{\circ}$ C.

The service-friendly details make the SITRANS TF320/420 unique: with help of a millimeter the value of the 4..20mA loop can be read directly, without interrupting the output signal.

Thanks to the HART 7 ability, further diagnostic data can be transferred directly to the maintenance staff or, can be read, alternatively, directly at the display with push buttons, due to the NE107 conform diagnostics alarm.



Benefits

- High availability during measuring
- High reliability and long-term stability
- Prevention of production downtime due to measuring failures
- Best cost-benefit-ratio for the plant management
- Cost reduction due to predictive maintenance
- High sensor accuracy
- NE107 conform diagnostic alarms
- SIL 2/3 certification
- Extended temperature range up to -50°C

| Input | Resistance thermometers, thermocouples, resistors, potentiometers, DC voltage sources |
|---------------------------|---|
| Display with push buttons | Rotatable in 90° steps |
| Output | 420mA (SITRANS TF320), HART 7 (SITRANS TF320/420) |
| Material | Aluminum Stainless steel CF3M/1.4409 similar to 316L (dual chamber enclosure) |

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