

XS110A XS550 Wireless Temperature Sensor



#### Temperature neasurements with thermocouples

The XS550 Temperature Measurement Module operates as a batterypowered wireless temperature sensor when combined with the XS110A Wireless Communication Module and one or two thermocouples. The sensor supports IEC standard (IEC60584) thermocouples (9 types) and wirelessly transmits the measurement data to the host systems. The battery can be replaced by removing only the wireless communication module without dismounting the measurement module.



Measurement data	Temperature, 2 points (non-insulated)
Measurement range	Thermocouples of types B, E, J, K, N, R, S, T, C -200 to 2315°C (-328 to 4199°F)*1
Reference contact compensation accuracy	±1.0°C
Accuracy	Refer to the General Specifications for the XS550 Temperature Measurement Module.
Update time	1 minute to 3 days
Battery life	10 years (update time: 1 hour*2), battery replaceable
Dimensions and weight*3	141 × ø68 mm, 800 g or less
Explosionproof	ATEX, IECEx, FM, CSA

<sup>\*1</sup> Depends on the type of thermocouple used. \*2 Ambient temperature:  $23 \pm 2^{\circ}$ C (73.4  $\pm$  3.6°F) \*3 Dimensions and weight depend on the specifications selected.

## **EXPECTED APPLICATIONS**

# MONITORING TEMPERATURE FOR MULTI-STAGE HEAT EXCHANGERS

### Challenge

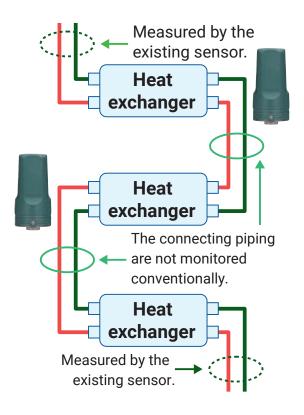
Multi-stage heat exchangers have channels for measuring the input/output temperatures of the whole heat exchanger from a process operation point of view. Customers want to know the health condition of respective heat exchanger comprising each stage of the piping connecting each other.

#### Solution

The health condition of the piping can be monitored by adding wireless temperature sensors on the heat exchangers of each stage.

#### Benefit

This solution makes it easy to identify the heat exchanger that requires maintenance. Thus, maintenance can be conducted efficiently according to the conditions of the target heat exchangers.



# DETECTING LEAKAGE AND CLOGGING OF DUST COLLECTORS AND THEIR PIPING

### Challenge

Safety valves are mounted for relieving the pressure in case of a pressure rise in equipment or piping. Due to the effect of the internal environment, a slight amount of seat leakage may occur that requires operation shut-down and maintenance. Since safety valves cannot be visually

inspected during operation, customers want to monitor them remotely without equipment shut-down.

#### Solution

The temperatures at the inlet and outlet of a safety valve are measured by wireless temperature sensors to monitor the temperature difference.

#### Benefit

Monitoring the temperature difference enables early detection of seat leakage to avoid unscheduled operation shut-down.

