



RAILCAR TELEMATICS

TEMPERATURE SENSOR

Keep critical cargo at safe temperatures.

REAL TIME MONITORING FOR CRITICAL CARGO

In today's digital information age, the need for real time data about the status and condition of cargo is more important than ever.

Wabtec's Temperature Sensor, part of the Railcar Telematics portfolio, is a digital temperature sensor for tank containers and tank cars. It is a non-intrusive sensor that provides wireless real time monitoring of the temperature of a tank's content.

Temperature values are transmitted to the Wabtec Communication & Location Terminal or Bridge device, which then transmits the data to the Web Platform for easy centralized access. Alert notifications can be configured for exceeding low and/or high temperature thresholds, temperature gradients, and for combinations of events and temperature values.

BENEFITS

Preserve Product Quality:

Monitor and maintain the required temperature levels to ensure that cargo reaches its destination in optimal condition.

Prevent Spoilage:

Help to prevent spoilage by ensuring that the cargo arrives in the intended thermal state.

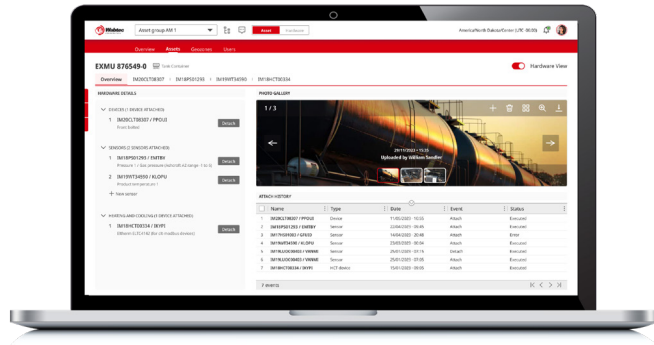
Mitigate Risks:

Enable intervention in case of deviation from the desired temperature range, minimizing the likelihood of damage or loss of cargo.

Customer Satisfaction:

Ensure that customers receive goods that meet their quality expectations. Enhance customer communications through informative insights.

TURN INSIGHTS INTO IMPROVED OUTCOMES



INPUT & DISPLAY

- **Temperature range:** -58°F to 500°F (-50 °C to +260°C. Other ranges by request.
- **Temperature sensor:** RTD PT1000 Class A probe, optionally a PT100; Thermocouple or other type of temperature measurement is supported.
- **Connector:** M8 connector for replaceable temperature probe.
- **Celsius button:** shows temperature in Celsius for 5 seconds.
- **Accuracy:** +/- 0.5°F (+/- 0.3°C)
- **Calibration:** Factory calibrated
- **Sample interval:** 1 minute
- **Cable length:** 4.9 ft (1.5 m), other lengths up to 164 ft (50 m) available on request.
- **Display:** 4 digit 7 segment LCD
- **Display resolution:** 0.2°F (0.1°C)
- **Battery life:** 10 years
- **RF transmitter:** 2.4 GHz RF transmitter for wireless connection to CLT or Bridge.

LOGGING DATA

- **Memory:** 4 MB memory chip
- **Log capacity:** 2 years temperature logging
- **Logging interval:** 10 minutes
- **Uploading data:** logged data can be uploaded remotely via the gateway.

CONTACT US

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MECHANICAL

- **Dimensions:** 5.1x1.4 in (130x35 mm), excluding probe connector
- **Weight:** 0.51 lb (230 g)
- **Enclosure:** durable glass filled nylon housing, polycarbonate front panel
- **Fitting:** 4 mounting holes for pop rivet attachment
- **Operating temperature:** -40°F to 185°F (-40°C to 85°C)
- **Protection class:** IP69K rated front panel, IP67 rated casing, impact resistant LCD window, IP67 rated PT1000 probe

APPROVALS

- ATEX Z1 T4 certification
- Intrinsic safety explosion protection:
 - II 2 G Ex ib IIC T4 Gb
 - II 2 D Ex ib IIIC T275°F (135°C) Db
- Certified operating temperature in ATEX: -40°F to 185°F (-40°C to 85°C)
- Compliant with EN 60079-0: 2018
- Compliant with EN 60079-0:2018 Annex F, impact and IP tested front panel
- Compliant with EN 60079-11: 2012
- DEKRA 21ATEX0019 X
- Directive 2014/34/EU