RFM3250 PRODUCT BRIEF



# Wireless Temperature Sensor

Rugged for on-metal applications





RFM3250

## Battery-free equipment monitoring

The RFM3250 is a wireless battery-free temperature sensor. This rugged sensor is designed to monitor mechanical plant and equipment temperatures in the harsh and extreme environments common in industrial settings. Typical applications include electric motor protection, bearing temperature monitoring, heating and cooling equipment (HVAC) efficiency monitoring, switchgear and other applications where metal surfaces are common.

#### Wireless temperature sensing

The RFM3250 has a normal operating temperature range of  $-40\,^{\circ}$ C to  $+85\,^{\circ}$ C. This covers the typical operating temperatures of most equipment over a range of environmental operating conditions. The RFM3250 reports temperatures beyond its normal operating range to as high as  $+145\,^{\circ}$ C, although prolonged operation at such an elevated temperature is not recommended.

### Rugged design for use on metal and equipment

The RFM3250 is built with a robust composite antenna and is ideal for harsh environments subject to temperature extremes and the elements. The integrated RF antenna harvests energy for the temperature sensing function, as well as communicates with a RAIN/UHF compliant reader. The integrated antenna is suitable for use on metal surfaces that might otherwise adversely affect wireless/RF communication range.

#### Compliance

The RFM3250 is available in FCC and EU/ETSI frequency ranges. The RFM3250 requires a RAIN/UHF compliant reader. These sensors can be purchased separately or as part of a kit.

### **APPLICATIONS**

Protect mechanical plants
Ensure efficient operation
Predictive maintenance
Monitor electric motors
Monitor HVAC efficiency
Monitor AC switchgear

#### **KEY FEATURES**

Normal temperature range  $-40~^{\circ}\text{C}$  to  $+85~^{\circ}\text{C}$ 

High-temperature alarm up to +145  $^{\circ}\text{C}$ 

Powered by Magnus® \$3

Sensor size 25.4 x 9.1 x 3.2 mm

Battery-free design

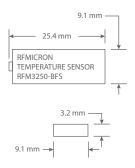
Adhesive backing

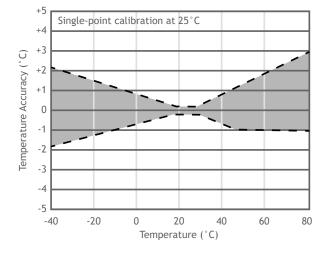


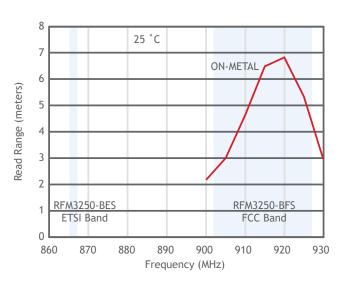
# RFM3250 Performance Data

Rugged temperature sensor for on-metal and industrial applications

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PARAMETER	VALUE
Normal temperature range	-40 °C to +85 °C
High-temperature alarm	Up to +145 °C
Compatable standards	EPC class 1 gen 2 v2.0.1
	ISO 18000-6C
Integrated circuit	Powered by Magnus® S3
TID memory	64-bits
EPC memory	160-bits supporting up to 128-bit EPC
User memory	128-bits
Sensor Size	25.4 x 9.1 x 3.2 mm
Adhesive	Self-stick with easy release tab
Shipment method	Vacuum packed tray
Minimum order quantity	100 pc MOQ
Ordering information	RFM3250-BFS (FCC 902 to 928 MHz)
	RFM3250-BES (ETSI 865.6 MHz to 867.6MHz)







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