

Industrial Temperature Reader

Reader system for switchgear monitoring



RFM5117

APPLICATIONS

Low-voltage switchgear
Medium-voltage switchgear
UPS battery stacks
Power distribution busbars
Critical electrical breakers

KEY FEATURES

Reader temperature range
-20 °C to +70 °C

RS485/MODBUS RTU

Setup application over USB

Smart Passive Sensing™

For battery-free sensors

Programmable
Sensor IDs and Locations

Wireless battery-free temperature monitoring for switchgear

The RFM5117 is a wireless reader system for battery-free Smart Passive Sensing™ devices. Antennas, cables, and a digital display are provided to complete the system. Primary reader communication is over RS-485 using the MODBUS protocol. The reader is compatible with common SCADA safety and security monitoring software. Installation software is provided to simplify reader set-up, and sensor registration. The installation software runs on a PC and communicates with the reader over a USB connection.

Antennas may be placed in harsh environments

The RFM5117 reader system includes four antennas that can be mounted magnetically or using screws. Antennas are usually placed in harsh environments along with the temperature sensors. The reader and the antennas are connected by RF cables, so the reader can be placed in the benign low-voltage cabinet.

Digital display provides local alarms and updates

The RFM5117 system communicates with a panel-mount digital display. The digital display manages local alarms and informs local maintenance teams of temperature operating conditions.

Compliance

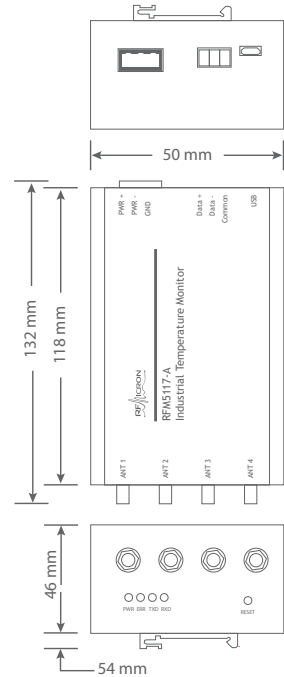
The RFM5117 is available in FCC and ETSI/EU frequency ranges. The RFM5117 is a complete switchgear solution including the reader, four antennas and a digital display. Sensor sold separately.



RFM5117 System Performance Data

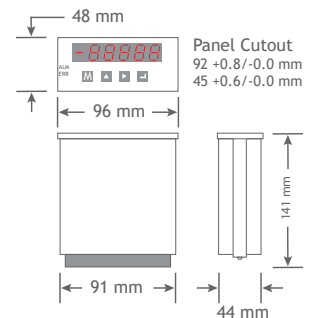
Wireless reader for Smart Passive Sensing devices used in industrial applications

PARAMETER	VALUE
Normal temperature range	-20 °C to +70 °C
Compatible standards	EPC class 1 gen 2 v2.0.1 ISO 18000-6C
Number of antenna ports	4
Output power	+27 dBm
Read distance	2 Meters inside metal-enclosed environments
Interface options	RS485/MODBUS RTU
Power supply	80V to 265V, AC or DC
Size	132 x 50 x 54 mm
Mounting	Included DIN rail mount with spring loaded clip
Shipment method	Individually boxed
Minimum order quantity	1 pc MOQ
Ordering information	RFM5117-AF (FCC 902 to 928 MHz) RFM5117-AE (ETSI/EU 865.6 MHz to 867.6MHz)



Panel-mount digital display for use with RFM5117 reader

PARAMETER	VALUE
Normal temperature range	-50 °C to +150 °C
Interface options	RS485/MODBUS RTU, USB
Alarm Output	Form C, Mac AC120V/5A, 250V/3A or DC 24V/3A
Power supply	80V to 265V, AC or DC, 7 W max
Size	96 x 48 x 141 mm
Mounting	Included panel-mount clamp
Shipment method	Individually boxed



Magnetic mount or screw-attached antenna for use with RFM5117 reader

PARAMETER	VALUE
Normal temperature range	-50 °C to +150 °C
Connector style	SMA connector
Size	119 x 108 x 30 mm with 75mm cable
Mounting	Magnetic mount or user-supplied screws
Quantity per system	4 pc
Ordering information	FCC or ETSI/EU included in appropriate set

