

Splash Proof Wireless Temperature Data Logger for the Food Processing Industry

OM-CP-RFOT



- ✓ Ideal for Meat Processing Applications
- ✓ Wireless 2-Way Communication
- ✓ Splashproof (IP67)
- ✓ Real-Time Operation
- ✓ 2 Year Battery Life
- ✓ Battery Life Indicator
- ✓ Memory Wrap Around
- ✓ Field Upgradeable
- ✓ Minimal Long-Term Maintenance
- ✓ Long-Term Field Deployment
- ✓ HACCP Compliance
- ✓ Complying with USDA Regulations

The OM-CP-RFOT is the most advanced wireless temperature data logger in the meat industry today. Its rugged design, equipped with a flexible piercing probe allows it to be used in the harshest environments.

The OM-CP-RFOT is perfectly suited for smoke houses, ovens and other cooking processes up to 212°F (100°C) as well as refrigerators and freezers down to -20°C (-4°F). It is completely splash proof and can withstand wash down cycles. This state-of-the-art device records and transmits internal product temperature readings back to a central computer for instant real-time monitoring.

The OM-CP-RFOT never needs to be connected to a computer as it has been designed for two way wireless communication. Full communication can be performed directly from a central PC. In addition to wirelessly transmitting data, the OM-CP-RFOT also stores each reading to internal memory for backup. This back up data may be retrieved wirelessly at a later time.

This easy to use software features user programmable critical control points, called "cooling flags" to assist in compliance with USDA Appendix B. The "cooling flags" are automatically annotated on the graph and tabular data views.

The summary tab provides the cool down duration between each critical control point. The data can also be automatically exported to Excel® for further calculations.



Data retrieval is simple. Plug the device into an available USB port and our easy-to-use software does the rest. The software converts a PC into a real-time strip chart recorder. Data can be printed in graphical and tabular format or exported to a text or Microsoft Excel file.

The OM-CP-RFOT was designed with our customers in mind. We offer free firmware upgrades for the life of the product so that data loggers already deployed in the field can grow with new technological developments. Units do not need to be returned to the factory for upgrades. The user can do this automatically from any PC.

Specifications

TEMPERATURE

(Based on Pt100 RTD):

Probe Temperature Range:

-50 to 200°C (-58 to 392°F)

Resolution: 0.01°C

Probe Calibrated Accuracy: ±0.1°C

-10 to 150°C (14 to 302°F), ±0.5°C outside of that range

RESISTANCE

Nominal Range: 0 to 500 Ω

Resolution: 0.001Ω

Calibrated Accuracy: ±0.015 Ω

Specified Accuracy Range:

0 to 500 Ω at 25°C



OM-CP-RFC1000-EXT, Windows® software displays data in graphical or tabular format.

WIRELESS

RF Frequency: 2.45GHz IEEE

802.15.4 ultra-low power wireless transceiver with fully bi-directional communication

Band: ISM band 2.405-2.48 GHz

Maximum Output Power: +0dBm typical

Receiver Sensitivity

(OM-CP-RFC1000-EXT): -95dBm typical

Range: 610 m (2000') maximum outdoors line of sight unobstructed; 152 m (500') maximum indoors (typical urban)

GENERAL

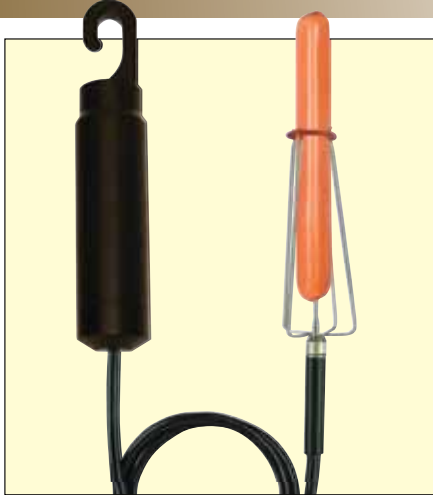
Reading Rate: One reading every two seconds to one every 24 hours

Memory: 20,000 readings; software configurable memory wrap

Wrap Around: Yes

Start Modes: Immediate start

WIRELESS DATA ACQUISITION



OM-CP-RFOT-HDA, probe attachment for use with small linked meat products such as hot dogs and sausages.

Calibration: Digital calibration through software

Calibration Date: Automatically recorded within device

Battery Type: 3.6V lithium battery (included); user replaceable

Battery Life: 2 years typical

Data Format: Date and time stamped °C, °F, K, °R

Time Accuracy: ±1 minute/month (at 25°C)

Computer Interface: USB (interface cable required); 115,200 baud

Software: XP SP3/Vista/7 and 8 (32 and 64-bit)

Operating Environment:

-20 to 100°C (-4 to 212°F),

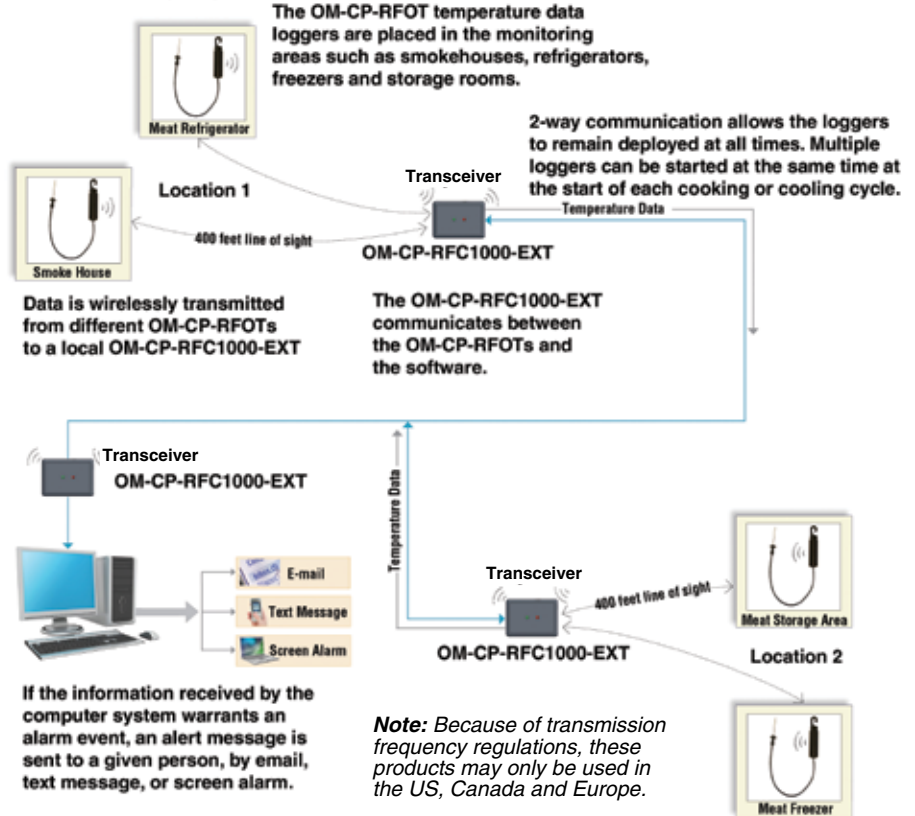
0 to 100% RH non-condensing

Dimensions:

Body: 203 x 44 mm dia (8 x 1.75")

Hook ID: 13 mm (0.5")

Wireless Alarming Diagram



Probe:

OM-CP-RFOT: 101 L x 4.8 mm dia (4 x 0.1875")

OM-CP-RFOT-SMP: 63 L x 4.8 mm dia (2.48 x 0.18")

Weight: 250 g (8.8 oz)

Enclosure Material: Tecaform®, food grade

OM-CP-RFC1000-EXT Transceiver (Acts as Receiver or Repeater)

Sensitivity: -95 dBm typical

Maximum Number of Transmitters:

Up to 20 transmitters sending data directly to the transceiver or up to 300 transmitters using additional transceivers (20 transmitters per transceiver)

Maximum Distance to Transceiver or from one Transceiver to the Next:

Outdoor Line-of-Sight:

122 m (400')

Indoor: 46 m (150')

To Order

Model No.	Description
OM-CP-RFOT	Wireless temperature data logger with 101 mm (4") probe
OM-CP-RFOT-CERT	Wireless temperature data logger with 101 mm (4") probe and NIST calibration certificate
OM-CP-RFOT-SMP	Wireless temperature data logger with 63 mm (2.5") probe
OM-CP-RFOT-SMP-CERT	Wireless temperature data logger with 63 mm (2.5") probe and NIST calibration certificate
OM-CP-RFC1000-EXT	Wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (not CE approved)
OM-CP-RFC1000-EXT-EUR	Wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (CE approved)
OM-CP-RFC1000-IP69K	Splash proof (IP69K) wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (not CE approved)
OM-CP-RFOT-HDA	Probe attachment for the OM-CP-RFOT data logger with 101 mm (4") probe for use with small linked meat products such as hot dogs and sausages
OM-CP-RFOT-O-RING	One set of replacement O-rings for OM-CP-RFOT or OM-CP-RFOT-SMP data logger
OM-CP-BAT109	Replacement 3.6 V lithium battery

Comes complete with 3.6V lithium battery. Operator's manual, Windows software and USB interface cable are included with the OM-CP-RFC1000-EXT wireless transceiver package (required to operate the data logger, sold separately).

Ordering Example: OM-CP-RFOT, wireless temperature data logger and OM-CP-RFC1000-EXT wireless transceiver package.