

THE DATALOGGERS





TEMPSTICK® Radio System

Wireless Temperature Data Logger

The **TempStick®** Radio wireless sensor is a temperature radio recorder that can be used in combination with different systems and software. It acquires the temperature values through its sensor, available also with cable, and send the data to a radio receiver that can communicate with the PC directly with the USB port or through a network with an Ethernet connection. It works also with the Radio Printer, the portable device with printer that work without software and PC.

Pro:

- radio transmission, no more cables and real time stock houses and warehouses control of the data;
- compact and accurate;
- can be used in multiple system for many transports applications;
- with sensor and external cable, all food grade.

Applications:

- laboratories
- fridges/freezers
- other temperature sensitive environments compliant with ISO 9001 standards.

Sensors are waterproof, as the cables.

All units can be calibrated and delivered with their calibration certificate, necessary for ISO 9001 compliance.

Standard calibration validity is of one year.



Transmission

- reliable, with data control;
- no possibility of wrong data;
- range up to 200 meters in open space, meters in closed environment (transmission range depends also on walls and material of the walls themselves. Iron and steel obstacles might reduce the transmission range).

Sensors and transmitter.

- each transmitter has its unique identification number, as the radio;
- sensors are easy to install and place where you need to control temperature;
- software can manage a big number of sensors and transmitters;
- possibility to have the configuration interface (to set rate of transmission).

Technical Features



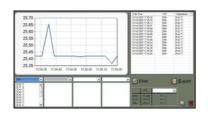
| TempStick® Radio | |
|----------------------------------|--|
| Size | 6,5 X 5 X 4,5 cm |
| Electronics Temperature Range | -20 °C ÷ +60 °C |
| Sensor Temperature Range | -40 °C ÷ +90 °C * |
| Resolution | 0,03 °C |
| Accuracy | ±0,25 °C with calibration certificate Standard calibration certificate: -10°C, 0°C, 10°C, 25°C, 50°C (other temperatures available on demand) ±1 °C without calibration certificate ** |
| N° acquisitions | Acquisitions storage on PC Hard Drive |
| Acquisition interval | From 1 reading every 3 seconds to 1 reading every 255 minutes |
| Battery | Factory replaceable |
| Autonomy | More than 500.000 acquisitions/transmissions - more than 10 years with standard use (24 acquisitions per day) |
| Mission length | Depending on the Hard Drive free memory |
| Protection degree | IP68 probe; IP67 case; IP40 connectors |
| | |

^{*} Depends on cable and sensor. Effective range is within calibration points interval and is 100°C for maximum resolution
** post production data without calibration

The Systems

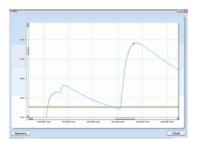
The *TempStick Radio* works with the following systems and software:

TSR



| TSR with USB Radio Receiver (basics system) | |
|---|---|
| Operating systems | Windows 2000, XP, Vista |
| Data management | Database organized on sensor's serial number and start date of the mission |
| Data display | Graph (with zoom) and table (exportable in Excel) and data printing in reports |
| Multi-graph | Up to 4 graph can be displayed simultaneously |
| Alarms | Visual and sound alarms on set thresholds (different for each sensor) |
| Communication | USB for the Radio Receiver and for the TempStick Radio Interface; Radio 433 MHz |
| Radio Range | 250 meters in open space; in closed environment depends on many variables and obstacles |
| Languages | English, Italian |

FridgeLog with WTMC



Radio Printer





Tecnosoft s.r.l.

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UNI EN ISO 9001:2008 certified for Firmware and Software development