P-RADIO & S-RADIO

High temperature data loggers (100˚C and 140˚), with real time wireless transmission

S-Radio (140°C) and *P-Radio* (100°C) temperature data loggers have been developed for real time temperature monitoring during sterilisation and pasteurisation processes. They can be adopted in the food, pharmaceutical/medical and laboratory fields easily.

System

The loggers can be used with different software:
- **SPD**, for quick and simple monitoring: start the devices, do your mission, receive data in real time via radio
- **TS Manager**, for deep analysis and control: a **FDA 21 CFR Part 11 compatible software** with multi-level access and reports according to regulations. Designed for autoclave validation, from pharmaceutical / medical to laboratories, dentists and food
- **Process Monitor**: for wireless loggers in the food field, with possibility of multi retorts / autoclaves monitoring, also with Ethernet receiver* and alarms on set temperature and F0 value. Complete reports with lot number, notes etc.

All loggers are connected to the PC by means of the DiskInterface HS (SPD software included). Devices can also record data in their memory to be download at the end of the process.

Radio

Different probe lengths (20, 60, 100, 125 mm X 3 mm diameter or 100 mm X 5 mm diameter) give you the possibility to always **reach the core of your product** and get a **fast response time**, important for short processes.

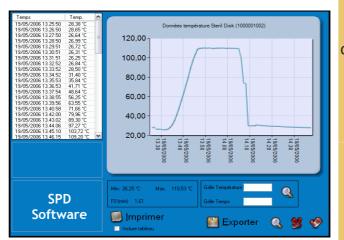Available also with flexible and metal semi-rigid bendable probe.

Possibility to be fixed on several surfaces with the *Fastening System* and the *Locking Bolt*.

Advantages

- High accuracy and resolution.
- Long battery life and with Jumbo version is even extended.
- Completely food grade and submersible.
- Printed reports compliant with health regulations and ISO (data are not editable in the software).
- F0 and PU calculation.
- Provided with **calibration certificate** Accredia (NIST equivalent) traceable.
- **Can be calibrated for low temperatures (-20°C).**

Applications

- Temperature monitoring of sterilisation and pasteurisation processes.
- Autoclave validation according to 21 CFR Part 11 regulations.
- Temperature monitoring during meat and ham cooking.

SPD Software

Technical Data

Model	Radio
Dimensions	76 h X 30 Ø (mm)
Probe size	20, 60, 100 125 h or on demand (175 mm max) X 3 Ø (mm) or 100 h X 5 Ø (mm); flexible and bendable probes available
Material Standard/Probe	Stainless steel AISI316L + Peek (completely Food Grade)
Temperature range	P-Radio: 0°C ÷ +100°C – S-Radio: 0°C ÷ +140°C (up to 5 bar)
Temperature resolution	0,01°C
Temperature accuracy	± 0,2°C (within standard calibration range: +25°C ÷ +125°C)
Number of acquisitions	120.000
Acquisition rate	From 1 every second up
Battery life	+3.800.000 acquisitions @ 25°C - Battery life might be less if exposed to high (+90°C) and low (-20°C) temperatures for extended periods
Protection degree	IP68
Communications	USB DiskInterface HS (SPD software included) + USB Radio Receiver

Software

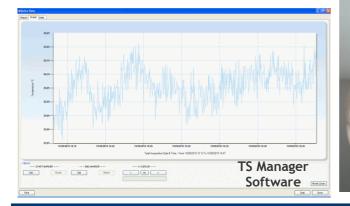| Type	SPD	TS Manager	Process Monitor
Operating Systems	Windows XP, Vista, 7, 8 (32, 64 bit)		
Data management	Missions sorted by start date and logger serial number; real time monitoring with radio transmission	Missions filtered by start date, logger type, serial number, customer/instrument validated and much more	Missions sorted by start date and logger serial number; real time monitoring with radio transmission
Data display	Graph (with zoom) and table (exportable into Excel) and printed report of all the data		
Multi graph display	Two or more missions can displayed on a single graph		
F0 and parameters	Automatically calculates the F0 and the Z and N parameters of the formula can be set		
Languages	Italian, English, French, Spanish, German	Italian, English, German	Italian, English

Devices can come also with a special **flexible cable** or **with semi-rigid metal probe**, with rigid probe at the end. With the flexible and bendable probes it is possible to use these devices also in places where there is not enough space to put the logger on or inside the the product's package.

Probe bendable

Process Monitor

TS Manager Software

Probe flessibile

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