# S-Micro L

S-Micro L is a temperature data logger from -40°C to 220°C (standard calibration from 25°C to 140°C, calibrable from 0°C to 220°C, only the probe will resist above 140°C) with 20 or 50 or 100 or 150 mm or on demand length external probe (probes cannot be switched) on a 5 mm base (base height is not counted for probe length), managed with Windows software and USB connecting bay: DiskInterface HS, Multibay. **Battery is user replaceable** and the data logger is **provided with an Accredia** (NIST equivalent) **traceable cetificate** on 6 points.

It is supported by the TS Manager software for validation compatible with the FDA 21 CFR Part 11 and GAMP 5 regulations.

Note: if used below -30°C, battery life will be highly reduced. When device is calibrated above 140°C accuracy and resolution might be less than what declared.

#### **Main features**

- Reduced size: 17 mm diameter only
- With different lengths rigid probe for penetration
- Completely food grade and waterproof
- All software calculate lethality value (F0, PU, A0 ecc.)
- Low battery consumption for an extended battery life
- User replaceable battery (software shows battery status)
- Very easy to deploy in any type of package
- Accredia (NIST equivalent) traceable calibration certificate included
- Available **extended calibration from -40°C to 220°C** (order extra calibration points; in case of wide calibration range the accuracy might be worse)
- For calibration over 140°C the minimum probe length is 140 mm

### **Plus**

- Extremely high accuracy and precision: with an accuracy of ± 0,1°C these devices can be employed in any application involving food, pharmaceuticals, validation, laboratory and medical field
- Fast response time thanks to the 3 mm diameter probe
- Printed reports compliant with health regulations and ISO (data are not editable in the software)
- Thanks to its reduced diameter it can be easily used in the narrow pasteurisation tunnels, especially for fresh filled pasta

## The system

The system is made up by:

- S-Micro L temperature data logger
- DiskInterface HS or Universal Multibay
- SPD software or TS Manager software (compatible with the FDA 21 CFR Part 11 regulation)



# **Applications**



Sterilisation



Food & Beverages



Pharmaceutical



Medical



Healthcare



**Pasteurisation** 



Laboratories



Validatio

## **Accessories**

- SPD
- TS Manager
- DiskInterface HS
- Universal multibay
- Locking bolt
- Fastening system
- Teflon protective tube
- S-Micro L battery kit
- Universal tool for opening logger

## **Technical specifications**

| Probe dimensions                          | Probe base dimensions 3 h X 14 Ø (mm) - Probe 20/50/100/150/on demand I X 3 Ø (mm) (I   |
|---|---|
|   | on demand: min. 12 mm / max. 175 mm. For longer probes ask for quotation)   |
| Weight                                    | 36 g  |
| Materials                                 | Stainless steel AISI316L, PEEK  |
| Temperature range                         | -40°C ÷ +140°C  |
| Sensor temperature range                  | -40 °C ÷ +220 °C  |
| Standard calibration points (temperature) | 25/50/75/100/121/140°C  |
| Extra calibration points (temperature)    | Within the range -40 °C ÷ +220 °C   |
| Temperature resolution                    | 0,01 °C   |
| Temperature accuracy                      | $\pm$ 0,1 °C (within the calibration range)   |
| Memory (n. of acquisitions)               | 20.224  |
| Acquisition step                          | From 1 every second up, with 1 second steps   |
| Protection degree                         | IP68  |
| Battery type                              | 3.0V lithium user replaceable   |
| Battery life                              | +10.000.000 acquisitions at 1 second step continuously (calculated time @25°C. Battery life may be shorter if used in low temperatures) |
| Software&Mobile App                       | SPD, TS Manager   |
| Accessories                               | DiskInterface HS, Multibay universale   |