tecnosoft
WE DELIVER DATA

MONITORING SOLUTIONS FOR THE COLD CHAIN

SOLUTIONS FOR STERILIZATION, PASTEURIZATION, COOKING AND CHILLING MONITORING

VALIDATION AND PROCESS MONITORING

Tecnosoft is your best partner for processes and products monitoring. We are the data consultants and we provide it to you by adapting to your needs and processes.

Tecnosoft does not limit itself to developing the simple device but provides a complete solution that includes software dedicated to different applications and different areas, which respond to the regulatory needs in force and the need for simplicity and user friendliness.

We can turn users needs into new systems and services with the possibility to customize them, thanks to Tecnosoft flexibility and continuous updates.

tecnosoft.eu

1 PROCESS MONITORING

Temperature, humidity, pressure solutions.

2 COLD CHAIN

Cold chain monitoring solutions

3 DEEPWAVE

Real time monitoring solutions

4 TS MANAGER

Validation software

5 BLUEWAVE

Bluetooth data logger for process monitoring

6 TC LOG

Thermocouples Temperature data logger

PROCESS MONITORING

TEMPERATURE, HUMIDITY, PRESSURE SOLUTIONS

Data logger

[from English data=data ; logger=recorder]:

electronic device that records data over time from one or more sensors (channels) by sampling them at regular or dynamic intervals, with external or battery power.

MicroW S	MicroW L	MicroW XL	SterilDisk Probe	SterilDisk Probe 10	SterilDisk

Temperature: MicroW and SterilDisk Series for validation of thermal processes validation (cooking, pasteurization, sterilization) or daily routine in the life science and food fields.

INCLUDED

CERTIFICATE

	MicroW S	**MicroW L**	**MicroW XL**	**SterilDisk**
Lenght	14 mm	39 mm	64 mm	17.4 mm
Ø	20 mm	20 mm	20 mm	36 mm
Probe	Rigid Flexible Bendable	Rigid Flexible Bendable	Rigid Flexible Bendable	Flat Rigid Flexible
Battery life	🔋	🔋	🔋	🔋
Datasheet				

Maximum data logger range:
-80°C ÷ +140°C

Maximum probe range:
-80°C ÷ +500°C

Accuracy:
±0,1°C

1. Probe Bendable
Bendable metal probe, customizable length.

2. Rigid Probe
Customizable length.

3. Flexible Probe
Flexible teflon cable and rigid tip.

1.   2.   3.

Pressure: PressureDisk series for high pressures, up to 5 bar, and saturated steam processes. Pirani series for extreme vacuum for freeze-drying and plasma sterilization processes (H2O2).

PressureDisk Range:
-40°C ÷ +140°C
0 bar ÷ 5 bar absolutes

Maximum Pirani Range:
-80 °C ÷ +85 °C
0,001 mbar ÷ 1200 mbar absolutes

PressureDisk   PressureDisk 05   Pirani Vacuum Logger   Pirani Vacuum Logger

	PressureDisk	Pirani Vacuum Logger	RHTemp L	RHTemp XL
Lenght	43,22 mm	64 mm	46 mm	71 mm
Ø	35 mm	20 mm	18 mm	18 mm
Battery life				
Datasheet				

INCLUDED

CERTIFICATE

RHTemp L/XL 80 Range:
-40°C ÷ + 80°C
0% ÷ +100% RH (non condensing)

RHTemp L/XL 125 Range:
-40°C ÷ +125°C
0% ÷ +100% RH (non condensing)

Umidity: RHTemp series for instruments validation and environmental processes monitoring such as drying and incubation.

RHTemp L   RHTemp XL

COLD CHAIN
COLD CHAIN MONITORING SOLUTIONS

Temperature-controlled and continuous transport monitoring solutions for environments, warehouses, fridges, cold rooms etc.
Windows and Mobile apps for data management and report printing.
Can also be used for thermal mapping according to GDP or in the food sector for HACCP compliance.

ON REQUEST

CERTIFICATE

Stick Logger: TempStick with internal or external cable sensor of various types and HumiStick for temperature and humidity.

It is requested the USB connection base for the communication with PC.

Maximum data logger range:
-30°C ÷ +60°C

Accuracy with calibration certificate:
±0,25°C

Accuracy without calibration certificate:
±1°C

Maximum data logger range:
-30°C ÷ +60°C / 5% ÷ 95% RH

Temperature accuracy:
±0,4°C da + 5°C a +40°C /
±1°C da - 30°C a +60°C

Humidity accuracy:
±3% RH da 20% a 80% /
±4% RH da 5% a 95%

PROBE -40°C ÷ +80°C

PROBE -80°C ÷ +20°C
PROBE 0°C ÷ +200°C

BlueLOG: Real-time Bluetooth communication with Android and iOS Mobile. Internal or external cable temperature sensor, also for ultra freezers, humidity, inclination and shock/shock sensors. Manual start via button, real-time alarms with acoustic signal and LED. App with report printing, Excel export, tracking of stops on Maps.
Real-time Cloud NOD also available (internet connection required).

AVAILABLE ON
Google Play

Available on
iOs Store

	TempStick	Humistick	BlueLOG	BlueLOG RH	TempNFC
Dimensions	50 x 24 x 10 mm	50 x 24 x 10 mm	67 x 20 x 97 mm	67 x 20 x 97 mm	67 x 20 x 97 mm
Temperatur Range	-30°C ÷ +60°C	-30°C ÷ +60°C 5% ÷ 95% RH	-30°C ÷ +60°C	-30°C ÷ +60°C 0% ÷ 100% RH	-40°C ÷ +60°C
External sensor	-80°C ÷ +200°C	-	-80°C ÷ +200°C	-	-80°C ÷ +70°C
Accuracy	±0,25°C	±3% RH da 20% a 80% ±4% RH da 5% a 95%	±0,1°C / ±3%	±0,2°C / ±3%	±0,2 °C
Battery	Replaceable	Replaceable	Replaceable	Replaceable	Replaceable

Temp NFC: Contactless for Android Mobile with internal or external temperature cable sensor, ultra freezers are included.

Disposable Temp NFC is available.

AVAILABLE ON
Google Play

DEEPWAVE

REAL TIME MONITORING SOLUTION

DeepWave is the complete solution for real-time monitoring in closed environments, warehouses, refrigerators, cold rooms, ultra freezers. It consists of a series of radio data loggers with long-distance transmission based on the LoRa protocol, available in several versions and a receiver connected to the TSLog 21 software, that can be validated in the pharmaceutical, cosmetic, healthcare and medical fields. The measurements are carried out by Smart Sensors, digital sensors that are always calibrated and connected to radio data loggers. The system is widely versatile and scalable and allows you to extend the network at any time, being able to add sensors and radio modules where and when you want.

Helios is the heart of the DeepWave system: it receives data from data loggers and saves them in the TSLog 21 database, the management software that can be validated with HACCP, 21 CFR Part11, Annex 11, GAMP 5 regulations.
The LoRa data loggers send the data detected by the Smart Sensors via radio to Helios which saves them in its memory and manages the alarms. Helios, connected to your network via Ethernet, allows the connection of multiple clients to the TSLog 21 database.

INCLUDED

CERTIFICATE

The Smart Sensor is a digital sensor with built-in data conversion and calibration parameters: in this way the recalibration process is easy and quick, just by replacing sensors. It does not request the techician intervention on-site for the calibration and it is not necessary to remove the sensors in order to send them to the calibration laboratory. All Smart Sensors are supplied with an Accredia traceable calibration certificate included.

TEMPERATURE SMART SENSOR

PRESSURE DIFFERENTIAL SMART SENSOR

HUMIDITY SMART SENSOR

EXTENSION

TSLog 21 allows you to manage multiple users with different levels, each user accesses via Login and Password. The data can be viewed in graphic format with zoom and table, and can be printed in customizable reports by exporting them to Excel. Alarms are sent via email and/or SMS and can be customized according to availability shifts. It is possible to create a map of the environments to monitor the sensors as a whole, with reporting of the values read and those outside the threshold.
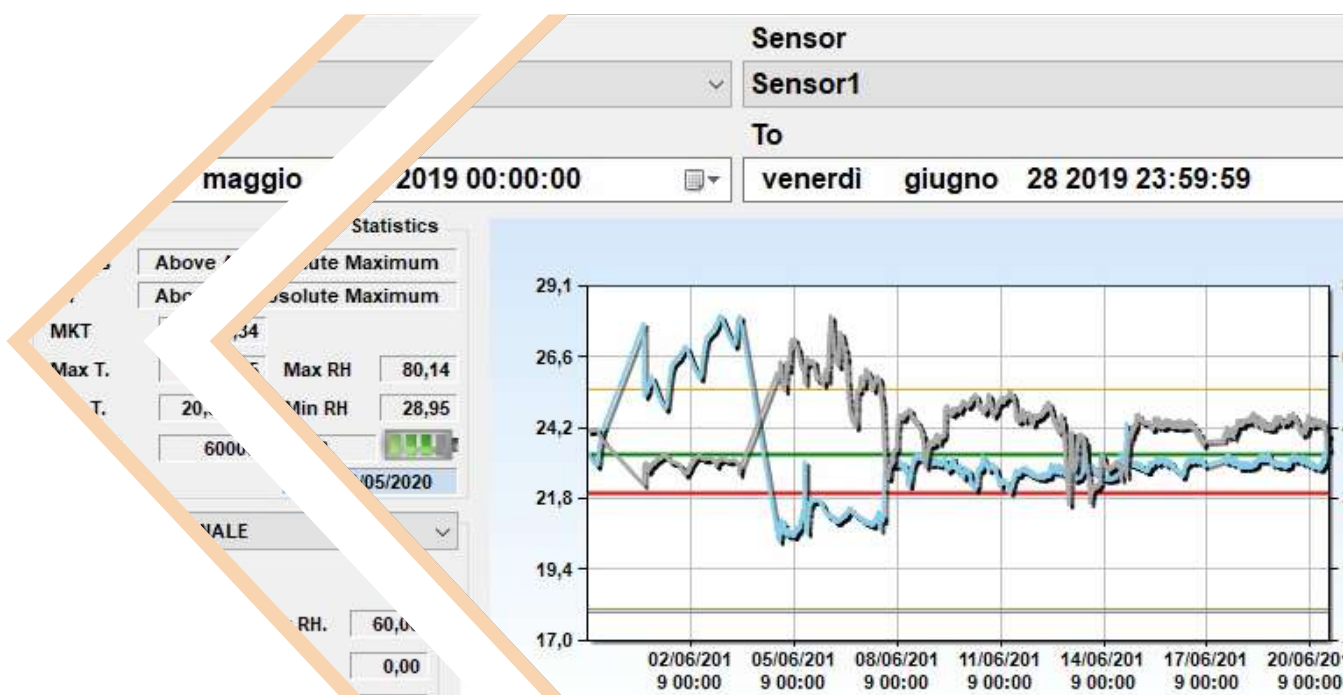
TS MANAGER

VALIDATION SOFTWARE

Validation, certification and qualification, mapping and everyday use software that supports all Tecnosoft data loggers. From thermal process validation to warehouse mapping, TS Manager is the most powerful tool that can accompany you in your work. It meets all the requirements of FDA 21 CFR Part 11, GAMP5, Annex 11 regulations and offers a wide choice of functions and options for the analysis and reporting of your data.

MAIN FEATURES

- > New UI for a modern User Experience

- > Multi-level access (guest, standard, advanced, administrator) via login and password

- > Audit Trail

- > Client/server installation with shared database

- > Data in the software cannot be changed and encrypted

- > Division of probe groups into Sections with partial analyzes on each Section

- > Multilingual

- > Graph, with zoom and synchronized data table

- > Multigraph analysis for groups of probes

- > Lethality chart in missions and mission groups

- > Print custom reports

- > Wide choice of analysis and statistics: lethality, F0, A0, PU, Vacuum Leak Test, Stability, Maximum and Minimum Thresholds, Averages, Theoretical Temperature of Pressure in Saturated Vapor

- > Table with synchronized data and statistics

Profili
2.6.0.2 Pro DEFAULT Amministratore ADMIN

Missioni
2.6.0.2 Pro DEFAULT Amministratore ADMIN
Rapporto
Data e ora avvio   Data e ora fermo   Cliente   Strumento
21/09/2023 10.05.03   21/09/2023 10.05.03
Stazione   Stazione
Default   Default
Utente   Utente
Admin   Admin
Modello Datalogger   Numero letture missione
MicroWH L   850
Numero di serie   Durata

Impostazioni
2.6.0.2 Pro DEFAULT Amministratore ADMIN
Proprietà   Avanzate   Stampa   Personalizzazioni   Gruppi   Versione
Database
Connessione
Data Source=.\SQLEXPRESS;Integrated Security=True;user Instance=true   Prova
Stazione
DEFAULT   Avanzate   Forza il controllo del database al prossimo avvio
Sicurezza
Richiedi l'autorizzazione per avviare la missione
Richiedi l'autorizzazione per fermare la missione
Solo gli amministratori possono creare nuovi utenti
Controllo integrità all'apertura delle missioni
30 Richiesta di inserire la password dopo periodo di inattività

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TS Manager
Software compatibile FDA 21 CFR Part 11

Tecnosoft Srl
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20068 (MI) Italy
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Versione
2.6.0.7
Rel. 0

Utente A.
Amministratore
Password

Accedi

Ispezione   Termina
24/08/2023 16.53.00

Numero di serie   Durata
3501252022   00 : 14 : 09
Nome
Albo
Scadenza calibrazione
2671072023

Programmato	Fermato	Prima acquisizione	Dispositivo	Numero di serie	Nome	Sigillato	Nome profilo	Stampato	Cliente	Strumento	Stazione	Nome utente	Cognome utente
21/09/2023	21/09/2023	10.05.03	MicroWH L	3501252022	Datalogger 1	X	Avvio rapido				GMAN	Greta	Manfredini
21/09/2023	21/09/2023	10.05.03	MicroWH L	3501252022	Datalogger 1	X	Avvio rapido				GMAN	Greta	Manfredini
21/09/2023	21/09/2023	10.05.03	MicroWH L	3501252022	Datalogger 1	X	Avvio rapido				GMAN	Greta	Manfredini
21/09/2023	21/09/2023	10.05.03	MicroWH L	3501252022	Datalogger 1	X	Avvio rapido				GMAN	Greta	Manfredini
21/09/2023	21/09/2023	10.05.03	MicroWH L	3501252022	Datalogger 1	X	Avvio rapido				GMAN	Greta	Manfredini
21/09/2023	21/09/2023	10.05.03	S-Micro W L	3501252022	Datalogger 1	X	Avvio rapido				GMAN	Greta	Manfredini

Dashboard   Missioni   Gruppi   Profili   Collegamento   Controllo integrità   Reimposta zoom   Opzioni di stampe   Stampa
Analisi   Utenti   Audit Trail   Clienti   Approva   Esporta   Salva e chiudi   Chiudi

Manuale   FAQ   Backup   Certificati & Supporto   Lock

Grigia Pressione
Indica l'intervallo in Bar asse Y
Scala Y Pressione   Griglia asse X in secondi
Manuale   Indica l'intervallo di tempo dell'asse X
Minimo   Testo asse X in secondi
Massimo   Adatta il testo dell'asse X

Dashboard   Missioni   Gruppi   Profili   Collegamento   Controllo integrità   Reimposta zoom   Opzioni di stampe   Stampa
Analisi   Utenti   Audit Trail   Clienti   Personalizza   Approva   Esporta   Salva e chiudi   Chiudi

Manuale   FAQ   Backup   Certificati & Supporto   Lock

Minimo   Testo asse X in secondi
Massimo   Adatta il testo dell'asse X

Dashboard   Missioni   Gruppi   Profili   Collegamento   Controllo integrità   Reimposta zoom   Opzioni di stampe   Stampa
Analisi   Utenti   Audit Trail   Clienti   Personalizza   Approva   Esporta   Salva e chiudi   Chiudi

Manuale   FAQ   Backup   Certificati & Supporto   Lock

BLUEWAVE

BLUETOOTH DATA LOGGER FOR PROCESS MONITORING

Forget connection bases, receivers, accessories and additional devices: today you can receive data in real time directly on your PC or on your Smartphone*. No connection bases, receivers, accessories are needed. With the BlueWave series for temperature and pressure processes monitoring the user can control processes in real time and without additional space. Receive data and share it instantly.
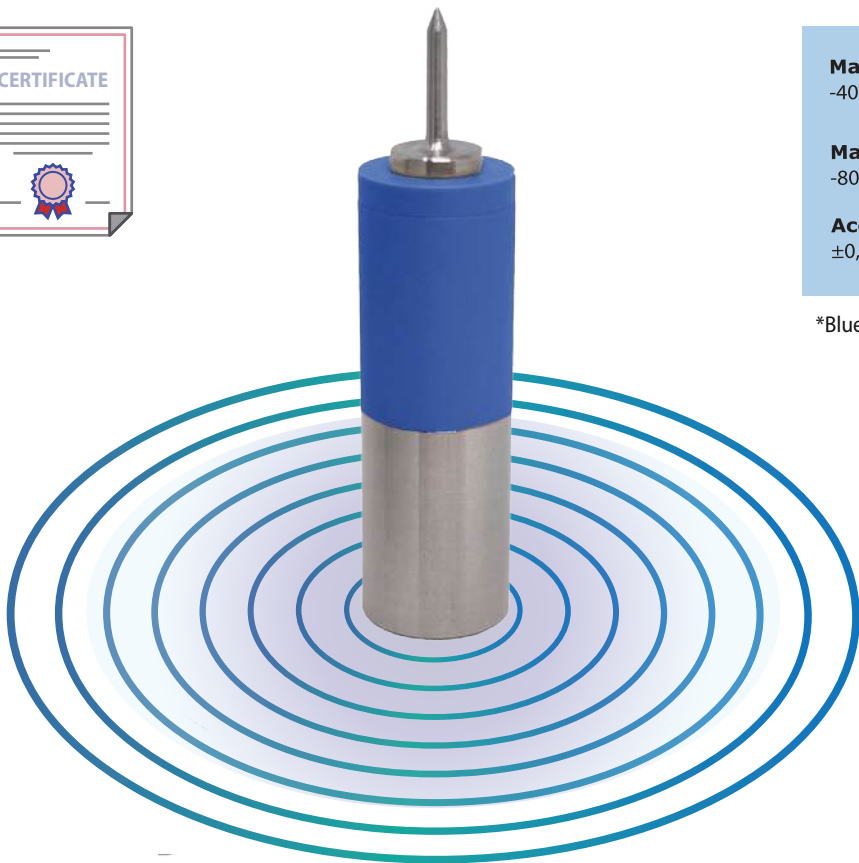
INCLUDED

CERTIFICATE

Maximum data logger range:
-40°C ÷ + 140°C

Maximum probe range:
-80°C ÷ + 500°C

Accuracy:
±0,1°C

*Bluetooth 5.0 or higher device required

	Bluewave Temperature	Bluewave Pressure
Height	70 mm	89 mm
Ø	23 mm	23 mm
Probe	Rigid Rigid + Bendable Flexible Bendable	Pressure Rigid + Pressure Bendable + Pressure
Battery life	🔋	🔋
Data sheet		

Maximum data logger range:
-40°C ÷ + 140°C
0 bar ÷ 5 bar absolutes

Maximum probe range:
-80°C ÷ + 500°C

Battery:
Replaceable

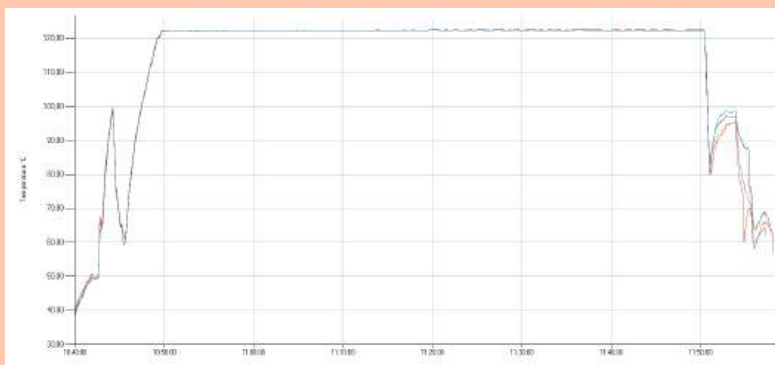*Bluetooth 5.0 or higher device required
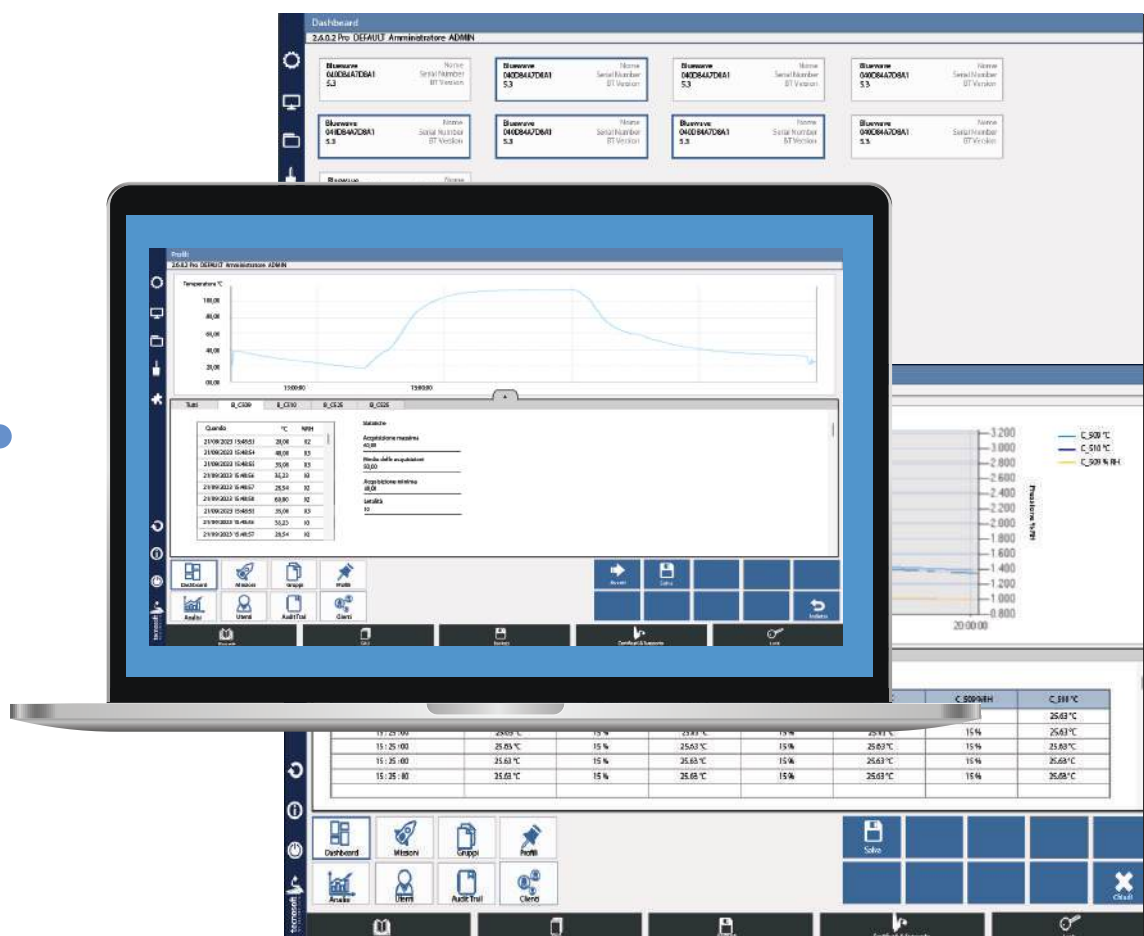
TC LOG

THERMOCOUPLES TEMPERATURE DATA LOGGER

Up to 8 channels profile, resistant up to 130°C, available for T, K or Universal thermocouples, both with and without connectors.
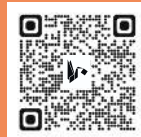Various thermal protections are available and can be used in extreme heated environments.

Dimensions:
132 x 80 x 25 mm

Temperature range of sensor:
-60°C ÷ + 130°C

Battery:
Replaceable

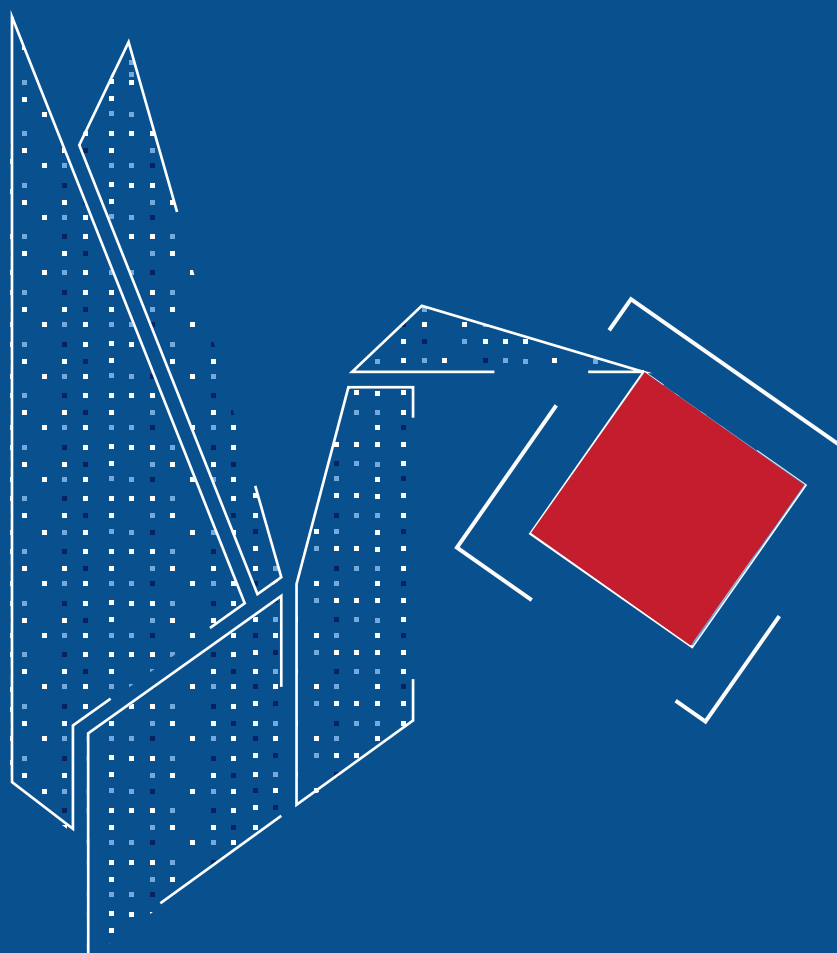# ACCESSORIES

FIXING AND PROTECTION SYSTEMS

1.

2.

3.

4.

5.

6.

7.

8.

9.

1. Universal tool for opening logger 2. Thermal protector for MicroW S 3. Thermal protector for TC-Log 8 S USB 4. Pressure Disk 5 filter 5. Example of data logger fixed with high temperature adhesive rubber 6. Locking nut used to fix and adjust the depth of the tip inside the packages. 7. Example of deep fixing 8. Fixing example equipped with spacer and used to monitor the core of the product. 9. Special antenna for autoclaves.