Temperature & Humidity
Monitoring Solutions for Cold Chain
Tecnosoft, founded in 1989, is an Italian company of research and development of technical-scientific software, data acquisition systems and solutions for many and diverse sectors including pharmaceutical, medical, healthcare and food.

30 years of experience have helped us to develop a vast knowledge of the problems related to process control aspects during the design of data collection and analysis solutions in various fields and food is the first sector in which we began to propose the Tecnosoft brand systems.

In all these years, Tecnosoft has developed important skills to understand the needs of the customer and transfer them to the project specifications and to the development of the system, keeping up-to-date on the new technologies available and providing cutting-edge solutions.

Don’t think of Tecnosoft as a simple hardware manufacturer but as a data provider: users, operators, aiming to obtain reliable and accurate data, the data carrier itself is a means to achieve another goal. We aim to deliver your data, those you need to collect to make all the important decisions regarding your products, your decisions, your strategy, your business.

That’s why we develop solutions instead of producing loggers: a solution is dedicated to a specific application, includes different devices and holds the best technology that meets your requirements, particularly in the pharmaceutical, medical and healthcare sectors. The needs of each user are different and for this it is necessary to be able to quickly understand these needs and implement them in the systems.

Thanks to our flexibility and constant updating we can quickly understand these needs and translate them into new systems or continuous updates of existing solutions, together with the possibility of customizations for different users.

Our sales and technical team is able to guide the customer in choosing the right solution for each application, as well as providing a complete service such as short and long-term rentals and after-sales service.

Application Areas - Where Tecnosoft loggers are used

**Pharmaceutical Industry / Medical sector**

Temperature & Humidity monitoring, as well as the constant documentation during the production, transport and storage of temperature-sensitive products such as medicines, blood plasma, serums, drugs are not only subject to strict requirements but also a good working practice.

**Food Industry / HACCP**

Only consistently maintenance of the cold chain can guarantee that food products retain their high quality and optimum shelf life. In order to guarantee this, prescribed threshold values must be maintained during the manufacturing, storage and especially transport stages and parameters must be constantly monitored and documented. The Hazard Analysis and Critical Control Points concept (HACCP) plays an important role in the food sector. Preventative measures ensure that food products’ perfect quality is guaranteed.

**Research & Development, Laboratories & Hospitals**

Monitoring of temperature- and humidity-sensitive products are mandatory for a high standard of quality in research and development areas as well as in laboratories and hospitals.

**Buildings & Museums**

In order to protect sensitive and valuable objects like art pieces in museums or archives the ambient temperature and humidity too must be monitored constantly.

**Production, storage & transport in Industry**

Monitoring of production areas, storerooms, refrigerators and climate cabinets and at the same time uninterrupted recording of measurement parameters during the transport of industrial goods, like temperature-sensitive chemicals, electronic components etc, is a guaranty of quality of these products.

**Logistic & Warehouse**

Transport and warehousing according to the requested temperature and humidity regulations, play an important role to ensure the desired quality of products. After manufacturing and before the dispatch of products they need to be stored in a controlled environment. Logistics companies are obliged to transport these temperature-sensitive goods according to the regulations.
TempNFC - Contact less Temperature Data Logger for Shipping & Cold Chain

TempNFC is a contactless temperature data logger with NFC technology managed through Android devices with dedicated Apps from Google Play. It allows to manage temperature monitoring using a Smartphone or a Tablet and to share INSTANTLY with anyone the recording readings. Developed especially but not only for transports and cold chain monitoring the logger is ideal also for monitoring of ambients, fridges and cold rooms. TempNFC is available in several versions: with or without external probe, in blister or rigid case, with an anti-tamper function used in combination with the wall mount and it allows knowing if and when a logger has been removed from its support.

Available Versions

- Temp NFC Lite - Free basic version
- TempNFC Pro - Advanced version
- TemNFC Ent - Cloud version

Main features

- Operating system Requirements: Android
- Data management: data stored in internal memory, SD Card; share via email
- Data display: view readings in graphical or tabular format
- Customizable parameters: minimum and maximum limits, activation energy for MKT calculation, mission maximum duration, notes and info (sender, operator, recipient), recipient email address for automatic delivery, manual start via button.
- Calculated parameters: MKT

TempNFC data logger does not need any additional accessory. Just download the Android App and you are ready to start using it.

TempNFC Android Apps downloadable on Google Play
TempBLE - Bluetooth Temperature Data Logger for Shipping & Cold Chain

TempBLE is a Bluetooth temperature data logger, managed through Android devices with TempBLE Delivery App for transports, from Google Play. The data logger is paired with a smartphone and transmits data via Bluetooth (4.0 or above) at a programmed rate. Data are displayed in real time as they come and alarms are given when the temperature is out of limits (limits can be programmed too). Upon delivery, it is possible to send data via email. Connecting a Bluetooth thermal printer data can be printed to be left with delivery documents.

Range: -30 °C ÷ +60 °C / Accuracy: ± 0.5 °C without certificate / ± 0,2 °C with Accredia traceable certificate / Resolution: 0,01 °C / Memory: 3.840 / Battery: 2X1,5V, up to 2 years life with acquisition rate of 15 minutes / Buttons and functions: immediate reading, Bluetooth pairing / Protection degree: IP67

TempBLE data logger does not need any additional accessory. Just download the Android App and you are ready to start using it.

TempBLE Delivery Android App is downloadable on Google Play Store

Main features
- Operating system Requirements: Android, Bluetooth 4.0 device
- Real-time data transmission on Android devices
- Real-time check against alarm thresholds
- Geolocalization of delivery places: the program will recognize the customer through GPS from the delivery list
- Automatically send XML reports via email
- Acquisition step: from 1 minute up (in steps of 1 minute)

Bluetooth thermal printer
It is available a Bluetooth thermal printer for data logger TempBLE which allows immediate printing of all the recorded acquisitions on a “receipt” to be given upon delivery to the recipient of the goods.

Main features
- Bluetooth connection with the smartphone
- Printing method: on thermal paper, 1 roll of thermal paper included
- 12 V, power adapter included
TempStick - Miniaturized Temperature Data Logger

The TempStick is a miniaturized temperature recorder with a wide range of monitoring applications: from temperature controlled transports of food and chemical or clinical reagents to continuous monitoring in fridges and cells according to 12830 and HACCP regulations. The data logger can be supplied with different types of probes and cables and with a calibration certificate traceable to a national reference.

TempStick & HumiStick Accessories

TecnoStick Interface
USB reading base for downloading data and programming TempStick and HumiStick data loggers.

SRI (Starter & Reader) Interface
Portable USB reading base with the display for programming and reading dataloggers. Particularly indicated for monitoring of temperature and humidity controlled transports.

StickLog Pro
TempStick and HumiStick data logger management software. The software can be downloaded freely on Tecnosoft website.

Software features
- Graph with zoom and selection of the curves
- 4 limits: minimum, maximum, absolute minimum, absolute maximum
- Data management: missions sorted by starting date and logger serial number
- Heat index and dew point calculation (with HumiStick only), MKT calculation
- Data exportable to excel
- Printed reports with information on the acquired data, table, graph
- Create programming profile to start quickly the loggers
- Customizable data folders

Operating System Requirements: Windows XP, Vista, 7, 8, 10 (32, 64 bit)
Syrinx System – Wireless Continuous Monitoring of Temperature & Humidity

Syrinx is a real-time continuous monitoring system for temperature and humidity in environments such as warehouses, stock-houses, buildings, laboratories, hospitals, museums, refrigerators and freezers. The system is based upon the ZED radio modules that can accept up to two sensors. The sensors are intelligent sensors and therefore the recalibration is quick and easy: just replace the expiring sensor with a new calibrated one and the system will recognize it and will be automatically calibrated and updated. A selection of ZED radio modules with several sensors is available to meet the needs of a variety of applications.

ZED – Radio Module
- Bidirectional communication
- Data saved in data logger internal memory
- Accepts up to 2 intelligent sensors
- Possibility of LCD display
- Quick and economic recalibration thanks to the intelligent sensors

EAP – Radio Receiver
- Each EAP creates its own radio network and can manage several ZEDs
- EAP can work as simple receiver, if not connected to the network

Syrinx – Data Collector
- Collects and stores the data from different EAP
- Manages data and saves them in a shared folder or internal memory software
- Manages alarm notification

FridgeLog Z – Review the Results
- Management software for Syrinx system
- Continuous monitoring and easy access to the data
- MKT calculation
- Immediate evaluation of the curve
- Remote alarms
- Data display: graph and table (exportable into Excel)

Allarm Notification:
- Email
- SMS

WE DELIVER DATA