Fold-Back Thermometers

On the following pages you will find various fold-back thermometers with and without infrared measurement technology. The penetration probe is foldable for a secure and convenient storage of the measurement device. The new radio thermometers allow for efficient collection and management of measurement data.

Applications

- Incoming goods inspections
- Control of refrigeration units and cooling rooms
- Core temperature measurement
- Surface temperature measurement with infrared
- HACCP compliant control and documentation of temperature events

Find your perfect fold-back thermometer:

Fold-Back Thermometers	Measurement range	High accuracy	Probe type	Channels		Fast response time	Waterproof housing	Wireless communication	Detection of users and locations
TLC 1598 Precision Fold-Back Thermometer	-50 °C … +200 °C	✗	Pt 1000	1					
TLC 700 Basic Fold-Back Thermometer	-30 °C … +220 °C		NTC	1			✗		
TLC 750 Dual Infrared/Fold-Back Thermometer	-50 °C ... +250 °C		Infrared and thermocouple type T	2	✗ (Infrared)		✗		
TLC 750 BT Dual Radio-Thermometer	-50 °C … +250 °C		Infrared and thermocouple type T	2	✗ (Infrared)		✗	✗	
TLC 750 NFC Dual HACCP-Thermometer	-50 °C … +250 °C		Infrared and thermocouple type T	2	✗ (Infrared)		✗	✗	✗

TLC 750 NFC Dual HACCP-Thermometer

for HACCP compliant control and documentation

Technical Data

Measurement range	-50 °C ... +250 °C (-58 °F ... +482 °F)
Accuracy infrared	±4 °C at -50 °C ... -30.1 °C (±7.2 °F at -58 °F ... -22 °F) ±2.5 °C at -30 °C ... -18.1 °C (±4.5 °F at -22 °F ... -0.4 °F) ±1.5 °C at -18 °C ... -0.1 °C (±2.7 °F at -0.4 °F ... +32 °F) ±1.0 °C at 0 °C ... +65 °C (±1.8 °F at 32 °F ... +149 °F) ±2.0 °C or 2 % at +65 °C ... +250 °C (±3.6 °F at +149 °F ... +482 °F)
Accuracy penetration probe	±0.5 °C at -30 °C ... +99.9 °C (±0.9 °F at -22 °F ... +212 °F) ±1 °C (±2 °F) or 1 % for the remaining measurement range (whichever is larger)
Resolution	0.1 °C / 0.2 °F
Distance : Spot ratio	8:1
Sensor	Thermocouple type T
Operating temperature	-20 °C ... +50 °C (-13 °F ... +122 °F)
Storage temperature	-30 °C ... +70 °C (-40 °F ... +158 °F)
Battery	Rechargeable lithium polymer battery 3.7 V
Battery lifetime	Approximately 8 h of continuous use
Battery charging	Wireless or via USB C port, 500 mA
Dimensions (L x W x H)	169.5 x 44 x 23 mm (without probe), needle length = 100 mm
Housing material	ABS
Weight	Approximately 140 g
Protection class	IP65
Automatic deactivation	Automatically after 15 seconds, deactivatable
Certificate	Factory calibration certificate (-18 °C and 0°C)
Memory capacity	200 measurement values
Interfaces	NFC, BLE, USB-C

- Wireless data transmission via Bluetooth Low Energy
- Detection of locations and users via NFC reader
- Wireless rechargeable battery
- Display with backlight for reading in dark environments
- Display can be upside down for reading from both sides

The **TLC 750 NFC** has an infrared sensor for **surface temperature measurement** and a penetration probe for **core temperature measurement**. The **display with backlight** can be read from both sides. This combination of features is ideal for **incoming goods inspections** and **storage monitoring**.

But it can do much more than that. The TLC 750 NFC has a memory for up to 200 measurements. With one walkabout, all measurement locations can be handled. The measurements will be saved and can be transferred to the PC at once – **no manual notes required any more**!

On top of that, it can read NFC tags, which can identify measurement locations and the users of the TLC 750 NFC. Hence the device brings together all relevant data **automatically** and **without risk of failure: what has been measured by whom, where, and when** – because the device also knows date and time.

Thanks to the Bluetooth interface, the data can be transferred to the PC wirelessly via the IF 750 or an App on a mobile device.

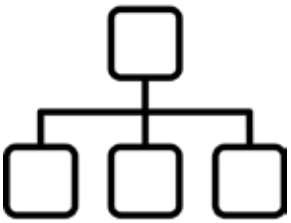
HACCP-Software

All components of our HACCP-system marked with this picture are supported by our new Bluetooth oil quality measurement device FOM 330 BT (please see page 92)

HACCP software are Digital Food Safety Management Systems that allow for defining, managing, scheduling and controlling Food Safety processes 24/7. With them it is possible to transform paper-based checklists into digital checklists to gain real-time insight and drive Food Safety process optimization.

Usually these software consist of a cloud-based application software and an app for mobile devices. ebro´s Bluetooth devices are supported by the HACCP-softwares of various providers. Contact us for a recommendation!

Flexible and scalable



Build your own organizational structure and add users to one or more organizational unit(s). An unlimited number of locations, users (co-workers) and checklists can be added.

Create, plan and fill in a checklist

Every paper-based checklist can be digitalized (HACCP tasks, temperature measurements, cleaning registration etc.). Plan and assign the checklists to one or more organizational units and their users. The digital checklists can easily be completed using the app.

Real-time reporting and dashboards

The responsible manager can follow the tasks that have been completed and with what result, or which tasks still needs to be completed.

Cloud based application

HACCP-softwares are a cloud-based solutions (all data is safely stored), meaning that it can be accessed from all over the world. The app can be downloaded for free on the AppStore (iOS) or the Google PlayStore (Android).

The evaluation software Easy Data Collector

FOM 330 BT

The evaluation software EDC (Easy Data Collector) is a self-contained, windows-based application software. It offers the collection, evaluation and storage of measurement data gathered with the TLC 750 NFC, especially to customers who don´t need the HACCP software. EDC focusses entirely on the measurement data, similar to the Winlog.basic.

The evaluation software EDC will be shipped together with the IF 750.

FOM 330 BT

IF 750

The **IF 750** has a BLE interface, so that you can communicate with the TLC 750 NFC even without mobile device. Additionaly, it has both a USB and an ethernet interface, allowing it to talk to a PC. Therefore it establishes the **connection between software and measurement device**.

It also serves as **charging station** for the TLC 750 NFC. Charging is done wirelessly, avoiding electric contacts and their common problems, like corrosion and wear.

The **NFC interface** of the IF 750 offers reading NFC tags into the software while setting up the measurement system. There the tag information can be assigned to locations and users.

The IF 750 is also there to **store** the TLC 750 NFC. It can be laid on a flat surface, or used as a wall mount.

The **CS 750** is a combination of charging station and wall mount, and the **WM 750** is a wall mount only. Those two items are supplements to the system, in case several TLC 750 NFC devices are used. They have the same shape as an IF 750 and can be connected to it physically, so that the entire measurement system is **situated in a compact manner**.

FOM 330 BT

UT 750

FOM 330 BT

LT 750

The user NFC tags **UT 750** can be assigned to users of the TLC 750 NFC. Similar to a time card, the user will be identified by the tag. This way the TLC 750 NFC will know who is using it. That information will then be linked to the measurement data. **Later on you can follow who measured**.

The location NFC tags **LT 750** work in a similar way. They identify the measurement locations, e. g. a rack in a cooling room, or a fridge. **This way you can follow where it has been measured**.

Type	Description	Part No.
TLC 750 NFC	Dual HACCP-Thermometer	1340-5741A
SI 750	Set: Interface IF 750 incl. charging station and evaluation software EDC	1340-5750
CS 750	Charging station for the TLC 750 BT and TLC 750 NFC	1341-5750
SH 750 NFC	Set: TLC 750 NFC, Interface IF 750 incl. charging station, evaluation software EDC, 5 User-Tags, 5 Location-Tags	1340-5752A
UT 750	Set: 5 User-Tags for TLC 750 NFC	1341-5751
LT 750	Set: 5 Location-Tags for TLC 750 NFC	1341-5752
WM 750	Wall mount for TLC 750 BT and TLC 750 NFC	1341-5753