

xylem



## Professional thermometers and food oil monitor

ACCORDING TO EN 12830, EN 13485, HACCP

2019

**-ebro-**  
a xylem brand

# Continuous Monitoring of Temperature and Humidity

EBI 20 data logger continuously control temperature of sensitive food in storage and during transportation.



EBI 20-T1



EBI 20-TH1

*Applications: temperature control in storage and during transportation*

**The EBI 20-T1 standard temperature data logger offers:**

- Program with interface EBI 20-IF
- Measurement range -30 °C to +70 °C
- DIN EN 12830 conform
- Shockproof and waterproof housing (IP 67)
- Calibration certificate included

**The EBI 20-TH1 standard temperature-/humidity data logger offers:**

- Program with interface EBI 20-IF
- Measurement range -30 °C to +70 °C
- Measurement range of humidity of 0% rF to 100% rF
- Shockproof housing
- Calibration certificate included

# A guide to temperature limits

These temperature values insure optimum freshness:

## Food

	Transport and Storage Temperature
Fresh milk products	≤ +6 °C
Milk at a Dairy	≤ +6 °C
Pasteurized milk, repackaged milk	≤ +8 °C
Butter	≤ +10 °C (≤ +6 °C for transport)
Dessert	≤ +7 °C
Cheese (except hard cheese)	≤ +10 °C
Ice cream, prepackaged	≤ -18 °C (≤ -20 °C for transport)
Ice cream, scooped and served	≤ -10 °C
Eggs (if eggs to be stored over 18 days)	from +5°C to +8 °C
Egg products (deep frozen)	≤ -18 °C
Egg products (frozen)	≤ -12 °C
Egg products (fresh)	≤ +4 °C
Raw egg-containing food products (e.g. fresh mayonnaise)	≤ +7 °C
Bakery products with partially baked filling	≤ +7 °C
Fresh meat products, fresh meat (including big game)	≤ +7 °C
Fresh poultry (rabbit and small game)	≤ +4 °C
Exception: flightless birds (as approved)	≤ +7 °C
Meat preparation	≤ +4 °C
Meat preparation (production and sales on site)	≤ +7 °C
Cold cut plates	≤ +7 °C
Ground meat	≤ +2 °C
Ground meat (production and sales on site): 24 hours delivery	≤ +7 °C (≤ +2 °C for transport)
Offal / Organ meats	≤ +3 °C
Meat, poultry, fish (frozen)	≤ -12 °C
Meat, poultry, fish (deep frozen)	≤ -18 °C
Fish, fish products	in melting ice or ≤ +2 °C
Smoked fish	≤ +7 °C
Fishery products (marinated, soured, smoked)	≤ +7 °C (≤ +6 °C for transport)
Fishery products (fresh) plus crawfish and mollusk products	in melting ice or ≤ +2 °C
Delicacies	≤ +7 °C
Raw fruit and vegetables	≤ +7 °C
Salads, fresh and / or crushed, delicacies salads	≤ +7 °C

## Retained samples for testing

Save for a minimum of 10 days ≤ -18 °C

### Hot Meals

Heated (core temperature) ≥ +70 °C  
Food counter ≥ +65 °C

### Cold Meals

Storage temperature until serving ≤ +7 °C

### Disinfection facilities

Water ≥ +82 °C

German Food Inspectors recommend ebro® instruments

- Thermometers
- Temperature Data Loggers
- Food Oil Quality Meter



# Flexible Core Temperature Measurement

## TTX 200 Core Thermometer

Flexible core temperature measurements through temperature probe with cable.



*Applications: temperature control , e. g. during the manufacturing of food*

### The TTX 200 offers:

- Fast and easy core temperature measurement with the external sensor with 60 cm silicone cable and handle
- Very large display with big numbers for easy reading
- Measurement range of -30 °C to +199,9 °C
- DIN EN 13485 and HACCP conform
- Waterproof housing (IP 65)

# Dual Surface and Core Temperature Measurement

TLC 750i Dual Infrared / Fold-Back Thermometer  
Convenience of accuracy and speed in one device.



*Applications: e. g. to control incoming goods using infrared (contactless) or plug-in probes (measurement of core temperature)*



## The TLC 750i offers:

- Contamination free surface measurement and core temperature measurement in one device
- Temperature range of -50 °C to +250 °C
- Display with backlight for reading in dark environments
- Display can be upside down for reading from both sides
- User replaceable battery
- DIN EN 13485 and HACCP conform
- Waterproof housing (IP 65)

# Core Temperature Measurement

TLC 700 Basic Fold-Back Thermometer

Temperature measurements according to HACCP standards.



*Applications: e. g. core temperature measurement of food*

## The TLC 700 offers:

- Compact design with foldable penetration probe
- Exchangeable color ring, to relate the TLC to a certain department of your company
- Measurement range of -30 °C to +220 °C
- $\pm 0.5$  °C (-30 °C to +100 °C ) accuracy exceeds standard requirements
- DIN EN 13485 conform
- User replaceable battery
- Waterproof housing (IP 65)
- Calibration certificate included

# Food oil quality measurement

FOM 330-1 Food Oil Monitor Set\*

Objective evaluation of the quality of frying oil.



*Applications: restaurants, catering, snack stands a.s.o., for control of quality of frying oil*

## The FOM 330 offers:

- Determination of the frying oil quality in the range of 0 % to 40 % TPM
- Maintaining a constantly high food quality
- Get clear measurement results
- All around visible signal lamp for displaying the food oil quality
- Reduction of costs due to exact knowledge of the right time to change the oil
- Robust, waterproof (IP 67), easy to clean housing

*\*Set consists of food oil monitor, protection cover and carrying case.*

Type	Description	Item Number
EBI 20-T1	Temperature logger	1601-0042
EBI 20-T1-Set	Temperature logger set (temperature logger, evaluation software, interface)	1601-0046
EBI 20-TH1	Temperature humidity logger	1601-0044
EBI 20-TH1-Set	Temperature humidity logger set (logger, evaluation software, interface)	1601-0048
FOM 330-1	Food Oil Monitor-Set	1340-2702
CO 330	Reference oil for the Food Oil Monitor FOM 330	1341-2700
TLC 700	Basic Fold-Back Thermometer	1340-5735
TLC 750i	Dual Infrared-/Fold-Back Thermometer	1340-5736
TTX 200	Type T Core Thermometer	1340-5150
AG 121	Nylon Case for TLC 750i	1341-0624
AG 190	Drill for frozen food	1341-3834

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