Temperature Logger for F-Value Measurement
EBI 10-T230
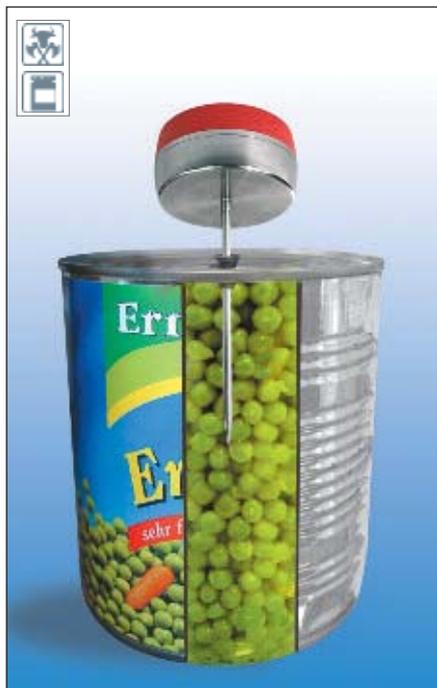
Technical Data	
Type	**EBI 10-T230**
Measuring range	-85°C ... +400°C (-160°F ... 752°F)
Accuracy	±0.5°C at -85°C ... -40° (±1.0°F at -160°F ... 752°F)
	±0.2°C at -40°C ... +0°C (±0.4°F at -40°F ... 32°F)
	±0.1°C at 0°C ... +140°C (±0.2°F at 32°F ... 284°F)
	±0.2°C at +140°C ... +150°C (±0.4°F at 284°F ... 302°F)
	±0.5°C at +250°C ... 400°C (±1.0°F at 470°F ... 752°F)
Sensor	1 temperature, Pt 1000, external, axial
Operating pressure	up to 20 bar
Resolution	0.025°C (0.045ºF)
Sampling rate	adjustable: 250 ms, 500 ms, 1s ... 24h
Memory	100.000 values
Measurement mode	· endless mode
	· measure upon start time
	· measure upon start temperature
	· start immediately until end of memory
	· start / stop time
Communication	wireless 2.4 GHz/ IEEE 802.15.4
Eyelet	optional, included for all EBI 10 types
Battery	3.6 V, exchangeable by user
Dimensions	B = 46 mm x L = 24 mm*
Weight	70 g *
Housing	stainless steel (V4A) / PEEK
Protection class	IP 68 / NEMA 6

* Size and weight are shown for EBI 10 body only

EBI 10-T230

Applications

- Determination of F-value for canned goods
- Monitoring of pasteurization systems
- Temperature process monitoring in production

Attributes

- Temperature resistant up to +150°C (302°F)
- Suitable for food products
- High accuracy
- Completely waterproof
- Programming and evaluation with PC
- Different models available
- Factory calibration certificate
- Battery exchangeable
- Data transfer in real-time through radio technology possible

Comments

Accessories see page 40.

Accessories for EBI 10 and EBI 11

Accessories

Thermo-Silicone protection box AL 100

· protects temperature logger against heat peaks
· protects temperature logger against mechanical damage
· extends life of logger

Silicone protection box AL 101

· protects temperature/pressure logger against heat peaks
· protects temperature/pressure against mechanical damage
· extends life of logger

EBI TIB

· usable from +150°C ... +400°C (302°F ... 752°F)
· thermal protection of data loggers
· for **EBI 10** R-loggers
· stainless steel, 160 x 160 x 82 mm

NEW

Interface EBI IF 100 for EBI 10 and EBI 11

· USB connection
· colored LEDs signal the status (program, read out, error)
· incl. antenna **AL 111**
· works with: **Winlog.pro**

4-port interface EBI IF 200 for EBI 10

· USB connection
· colored LEDs signal the status (program, read out, error)
· incl. antenna **AL 111**
· works with: **Winlog.pro**

4-port interface IF 300 for EBI 11

· USB connection
· colored LEDs signal the status (program, read out, error)
· incl. antenna **AL 111**
· works with : **Winlog.pro**

Battery exchange set AL 103

Included: lubricated O-Ring, batteries, exchanging instruments, screwdriver, screw, operating instructions

Battery exchange set AL 113 für EBI 11

Included: Batteries, exchanging instruments, lubricated oils

AL 103

AL 113

Description	Type	Part No.
Thermo-silicone protection box (for EBI 10 - temperature)	AL 100	1340-6020
Silicone protection box (for EBI 10 - temperature and pressure)	AL 101	1340-6021
Thermal insulation box	EBI TIB	1340-1894
1-port interface for EBI 10 and EBI 11	EBI IF 100	1340-6001
4-port interface for EBI 10	EBI IF 200	1340-6002
4-port interface for EBI 11	EBI IF 300	1340-6003
Antenna, suitable for all interfaces	AL 111	1340-6006
Battery exchange set for EBI 10	AL 103	1100-0117
Battery exchange set for EBI 10 batteries, gaskets, fat) without fig.	AL 104	1100-0118
Battery exchange set for EBI 11	AL 113	1100-0120

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ebro® Electronic – Food

Evaluation Software for all ebro® Data Loggers
Winlog.basic, Winlog.pro

Winlog.basic
Evaluation software for data loggers

Winlog.pro
Universal software for ebro® data loggers

Winlog.basic
The new free software for programming and evaluating of data loggers. Supports all types of ebro® data loggers.

Winlog.basic
Self-explanatory and easy to operate
· User-friendly
· Programming and readout of data loggers
· Graphic and numeric presentation of measured data
· Protocol print out (with printer and computer)
· Scans and enlarges measured data
· Data export into Microsoft® Excel
· 21 CFR Part 11 functions possible (optional)
· Free software

Winlog.pro
The new ebro® software supports all ebro® data logger types – even the wireless data logger series EBI 10. With these data loggers, Winlog.pro enables time-saving process monitoring in real-time.

Winlog.pro
The universal software for programming and evaluation of ebro® data loggers
· User-friendly
· Automatic evaluation of all measured data
· Graphic and numeric presentation of data progression
· Supports all **ebro**® data logger types
· Real-time monitoring for loggers with wireless communication
· Formula editor for calculating A_0-Vaue, F_0-Value and theoretic steam temperature
· User-defined functions possible
· Statistics for measured date, i.e. average, standard deviation, MKT, MIN/MAX)
· File and system audit trail
· 21 CFR part 11 conform
NEW · Modules for calibration and adjustment of data loggers

System requirements

To enable the software to operate smoothly, your computer must meet the following requirements:

Hardware requirments:
Processor speed minimum 1.5 GHz
Working memory 512 MB
200 MB free hard disc space
USB (Universal Serial Bus)

Software Requirements:
Operating System Microsoft® Windows® XP or Windows® 2000 or Windows® Vista

Description	Type	Part No.
Evaluation software	Winlog.basic	1340-2375
Universal software	Winlog.pro	1340-2355
Additional Licence for Universal Software Winlog.pro	Winlog.pro - Additional Licence	1340-2356

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