

Ebro-20 Standard Data Logger



Pharma Lab



Pharma Warehouse



Blood Bank

Applications: • Transport monitoring • Storage monitoring • Process monitoring

General technical specifications: valid for all types*

Resolution: Temperature	0.1 °C (0.2 °F)
Resolution: Humidity (only humidity data loggers)	0.1 % rH
Measurement mode	<ul style="list-style-type: none"> • Endless measurement • Start immediately until end of memory • Start / stop measurement • Start with key press
Operating temperature	-30 °C ... +70 °C (-22 °F ... +158 °F)
Storage temperature	-40 °C ... +70 °C (-40 °F ... +158 °F)
Battery	3 V lithium (CR2450), user replaceable
Battery lifetime	Up to 24 months, at a sampling rate of 15 min. at +25 °C (77 °F)
Housing material	ABS
Dimensions (L x W x H)	69 x 48 x 22 mm**
Weight	Approximately 45 g**
Certificate	Factory calibration certificate

* Please find the exact technical data of each EBI 20 logger type on the next pages.

** Dimensions and weight just refer to the EBI 20 housing.

EBI 20-T1 Standard Temperature Data Logger *with internal temperature sensor*



Technical Data

Measurement range	-30 °C ... +70 °C (-22 °F ... +158 °F) (please see the note on the next page)
Accuracy	±0.5 °C (-20 °C ... +40 °C) / ±0.9 °F (-4 °F ... 104 °F) ±0.8 °C (±1.4 °F) for the remaining measurement range
Data memory	1 channel, 40,000 measurements
Sensor	NTC
Sampling rate	1 min to 24 hours
Protection class	IP 67

Type	Description	Part No.
EBI 20 T1	Temperature logger	1601-0042

EBI 20-TH1 Standard Temperature / Humidity Data Logger with internal humidity sensor



Technical Data

Measurement range: humidity	0% rH ... 100% rH
Accuracy: humidity	±3% rH (10% rH ... 90% rH)
Measurement range: temperature	-30 °C ... +70 °C (-22 °F ... +158 °F) (please see the note below)
Accuracy: temperature	±0.5 °C at -20 °C ... +40 °C (±0.9 °F at -4 °F ... 104 °F) ±0.8 °C (±1.4 °F) for the remaining measurement range
Data memory	40,000 measurements
Channels	channel 1: relative humidity, channel 2: temperature
Sensor	NTC, capacitive humidity sensor
Sampling rate	1min ... 24h
Protection class	IP 52

Type	Description	Part No.
EBI 20-TH1	Temperature/Humidity Data Logger	1601-0044

EBI 20-TF Standard Temperature Data Logger with external probe up to +100 °C (+212 °F)



Technical Data

Measurement range	0 °C ... +100 °C (+32 °F ... +212 °F)
Accuracy	±0.5 °C (+50 °C ... +100 °C) ±1 °C for the remaining measurement range
Data memory	1 channel, 8,000 measurements
Sensor	NTC, 55 mm, Ø 3 mm, pointed
Sampling rate	Adjustable from 1 sec to 24 hours
Cable	Silicone, L = 0.8 m
Protection class	IP 67

Type	Description	Part No.
EBI 20-TF	Temperature data logger with external probe	1601-0010

EBI 20-TE1 Standard Temperature Data Logger with external probe

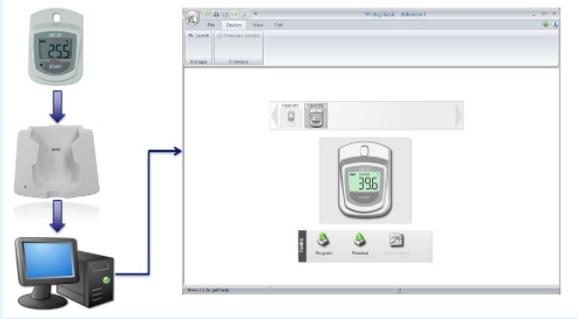


Technical Data

Measurement range	-30 °C ... +70 °C (-22 °F ... +158 °F) (please see the note on the next page)
Accuracy	±0.5 °C at -20 °C ... +40 °C (±0.9 °F at -4 °F ... 104 °F) ±0.8 °C (±1.4 °F) for the remaining measurement range
Data memory	1 channel, 40,000 measurements
Sensor	NTC, 55 mm, Ø 3 mm, pointed
Sampling rate	1 min to 24 h
Cable	Silicone, L = 0.8 m
Protection class	IP 67

Type	Description	Part No.
EBI 20-TE1	Temperature logger with external probe	1601-0043

Sets and Accessories for EBI 20



EBI-20IF



EBI 20-WM wall bracket



EBI 20-WM-1 truck wall bracket

Type	Description	Part No.
EBI 20-T1-Set	Temperature logger set (temperature logger, evaluation software, interface)	1601-0046
EBI 20-TE1-Set	Temperature logger set (logger with external probe, evaluation software, interface)	1601-0047
EBI 20-TF-Set	Temperature logger set (logger with external probe up to +100 °C (+212 °F), evaluation software, interface)	1601-0011
EBI 20-TH1-Set	Temperature Humidity Logger Set (logger, evaluation software, interface)	1601-0048
EBI 20-IF	Interface for EBI 20	1601-0020
EBI 20-WM	EBI 20 wall bracket with padlock	1601-0030
EBI 20-WM-1	EBI 20 truck wall bracket	1601-0033

Evaluation Software for Any Applications

Winlog.basic, Winlog.pro

For programming and readout of ebro data loggers and for evaluating the measurement values ebro offers three different software versions: the **free Winlog.basic**, the **standard software Winlog.light** and the **professional software Winlog.pro**

Benefits

- Easy installation
- Easy programming of the data loggers, no prior knowledge required
- Extensive and custom report generation
- Suitable for all applications
- Security by compliance with FDA 21 CFR Part 11

Extensive Report Generation

The software makes it easy to generate standard and custom reports:

- Compact, one-sided report (1)
- Multi-page, detailed report (2)
- Tabular report with the measurement values (3)
- Insertion of your own company logo possible (4)
- Export data to Microsoft Excel® and PDF (5)
- Integration of pictures and graphics possible (Winlog.pro only) (6)



Software Details



Winlog.pro *Professional software*

- Contains all the features of Winlog.basic and Winlog.light
- Enables real-time monitoring with wireless data loggers
- Formula editor for calculating the F0-value of the absolute humidity, the PE value etc.
- Display of the timeline either absolute or relative
- Customized definition of individual areas possible (with their own statistics and calculations)
- Including calibration tool for data loggers
- Integration of pictures and graphics into reports possible
- IQ/OQ documentation optional

Winlog.basic *Easy to use, free software*

- User friendly: intuitive and easy to use
- Graphical and numerical display of measurement data
- Protocol print (with printer and computers)
- Scan and enlarge of the measurement data
- Data export to Microsoft® Excel and PDF
- FDA 21 CFR Part 11 functionality as an option