a xylem brand

Single Use USB Data Logger

EBI 330-T30 / EBI 330-T85

User Manual

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Overview

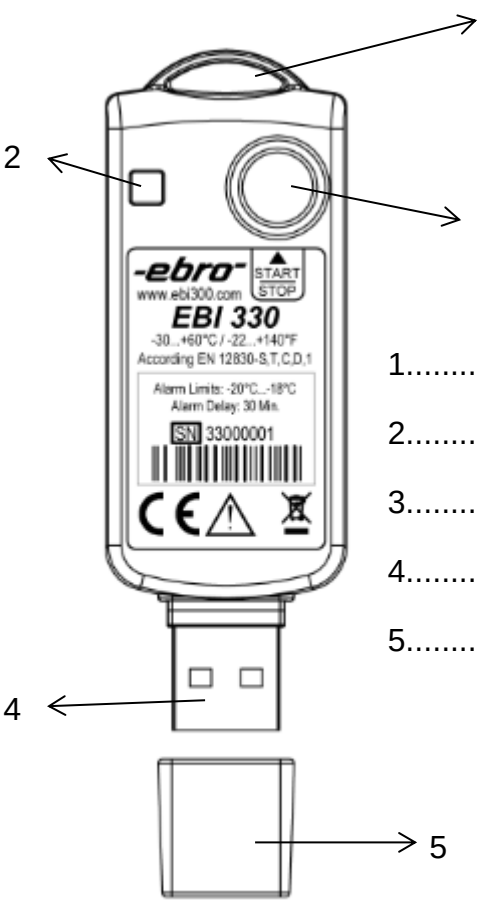
EBI 300 series data logger is a battery powered temperature measurement and recording instrument for monitoring temperature sensitive products during transportation. They can be programmed indefinitely, but as soon as the measurement is running, they can´t be restarted.

The logger has a USB-interface for connecting directly to a computer or USB-printer.

When connecting the logger to a USB-port a PDF file with a chart of all recorded measurement values and the alarm status (limit violations) will be automatically generated. The PDF file can be opened, printed or archived without any other additional software.

The USB connection can also be used to read out and program the logger with the softwares Winlog.pro/.light/.basic. You can program the devices via the free website http://www.ebi300.com/ as well, or order them pre-configured.

There are two versions: for regular deep temperature applications down to -30°C / -22°F the EBI 330-T30 with black protective cap, and for dry ice applications the EBI 330-T85 with blue protective cap. The following is referring to both versions, except for the technical data.



1..... Eye

2..... LED

3..... Start/Stop button

4..... USB-connector

5..... Protective cap

Safety instructions

Do not use the device in explosive areas.
Danger of death!

Do not use the device in an environment hotter than 60°C! The lithium battery may explode!

Do not expose the unit to microwave radiation. The lithium battery may explode!

To ensure the logger is water tight, the protective cap must be fit or an external probe must be connected.

Unpacking / Package Contents

After receipt of delivery, please check the equipment for any damage. Furthermore, please verify that the delivery corresponds to your order.

Scope of Delivery

The delivery includes:

- 10 EBI 330 temperature data loggers, each with battery, protective cap and a label, on which the device type, serial number, bar code and temperature limits are printed.

Should you have a complaint for any reason, please do not hesitate to contact us. You can find the contact data on the last page.

Configuration

The loggers can be ordered preconfigured. As long as the measurement hasn´t started yet, it is possible to reconfigure it any time. The configuration options are, among others:

- Measurement interval
- Upper and lower temperature limit
- Alarm delay
- Start delay
- Temperature unit
- Report title and measurement remark
- Time zone, time and date format
- Language of the PDF-file

You can apply these settings by downloading the free of charge software Winlog.basic from http://www.ebi300.com and using the software to program the device. Please refer to its user manual.

Naturally, the loggers are supported by the proprietary softwares Winlog.light and Winlog.pro as well, enabling the user to benefit from the advanced options of these programs.

Lastly, the website itself has an online configurator, with which you can program the devices, too. Therefore a software installation is not required.

Start / Stop

The logger is started by pushing the start/stop-button for at least three seconds.

CAUTION! The device can only be started once! The logger can be started just before reaching the expired date.

Depending on the set start delay, the device starts to measure immediately or after a few minutes. It will continue to measure and store temperature data according to the set interval, until the data memory is full (up to 20,000 values), the battery empty (lasts for at least 100 days), or the device is being stopped.

To stop the logger, again push the button for at least three seconds. Alternatively, remove the protective cap and plug the device into a USB-slot of your PC, laptop or USB-printer. The logger will be stopped and the PDF-file generated automatically.

CAUTION! After the logger is being stopped, it can´t be restarted!

LEDs

The logger has a green and a red LED.

When pushing the start/stop button, the LED will flash as long as you keep the button pushed - red for start, green for stop. Start and stop, respectively, are confirmed by triple blinking of the LED.

As soon as the logger is started, the green LED will blink in LED flashing interval. This will continue until the logger is being stopped, the battery is empty, or a temperature limit has been violated.

Should any of temperature limits be violated for longer than the configured alarm delay, the logger will blink red instead of green every LED flashing time. This will continue until the logger is being stopped or the battery is empty.

When the logger is being stopped, the LED will double blink every LED flashing time – green, if no limit has been violated, otherwise red.

PDF

As soon as the logger is plugged into a USB-slot, it automatically creates a PDF-file, which is saved on a USB-drive, similar to the ones of USB-sticks. The file can easily be copied from there.

The file has a lot of information to the measurement – the logger configuration, statistic data to and a chart of the measurement, and possible alarms. Thus, all relevant data can be viewed in one glance.

To display the PDF-file, a PDF-reader software is required. It is not included in the delivery.

Battery

The battery of the EBI 330-T30 loggers lasts for at least 100 days, independently from application temperature and the measurement interval.

The battery of the EBI 330-T85 loggers lasts for at least 100 days at temperatures down to -30°C. At temperatures below -30°C the battery lasts for 100 hours.

In neither logger version you can replace the battery.

Cleaning and maintenance

Please use a damp cloth to clean the logger.

Do not use a solvent, such as acetone, in order to avoid corrosion of the plastic.

Disposal

If the device will no longer be used, please dispose of the device in a suitable and environmental-friendly manner.

Technical Data

General

Accuracy class:	1
Resolution:	0.1° C
IP rating:	IP 65
Norms:	DIN EN 12830 (S, T, C, D, 1), ATP
Calibration:	batch calibration
Size:	80 x 28 x 12 mm
Weight:	16 g (incl. battery)

EBI 330-T30

Temperature:	-30 °C…+60 °C / -22 °F…+140 °F
Accuracy:	± 0.5 °C (-20 °C … +40 °C)
	± 0.8° C for the remaining range
Operating temp.:	-30 °C … +60 °C / -22 °F … +140 °F
Storage temperature:	-30 °C … +60 °C / -22 °F … +140 °F
LED flashing interval:	5s
Max. storage time:	9 Month
Power supply:	Lithium-cell (CR2032), 3V

EBI 330-T85

Temperature:	-85 °C … +50 °C / -121 °F … +122 °F
Accuracy:	± 2.0 °C (-85 °C … -30 °C)
	± 0.8° C (-30 °C … -20 °C)
	± 0.5° C (-20 °C … +50 °C)
Operating temp.:	-85 °C … +50 °C / -121 °F … +122 °F
Storage temperature:	-30 °C … +60 °C / -22 °F … +140 °F
LED flashing interval:	10s
Max. storage time:	6 Month
Power supply:	Lithium-cell (TLH-2450), 3,6V

Approvals

The conformity certificate confirms that this product complies to CE guidelines 2014/30/EU.

The product **EBI 330** complies to the guidelines in accordance with EN 12830.

Suitability:

S (Storage), T (Transport)

Location:

C (Food storage and distribution systems), D (Food Transport Vehicles)

Accuracy classification:

1, for measurement of the air temperature

Service-Adresse / Service Address / Adress du Service

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