



Dieses Gerät ist entsprechend der EU-Richtlinie über die Entsorgung von Elektro- und Elektronik-Altgeräten (WEEE) gekennzeichnet.
Dieses Produkt darf nicht mit dem Hausmüll entsorgt werden. Der Nutzer ist verpflichtet, das Altgerät zur umweltgerechten Entsorgung bei einer ausgewiesenen Annahmestelle für die Entsorgung von Elektro- und Elektronikgeräten abzugeben.

3.0 Technische Daten

	Temperaturlogger BG-LOG-Temp	Temperatur-Feuchte-logger BG-LOG-TempRH
Interne Temperatur	-30..+60°C	-30..+60°C
Genauigkeit	±0,5°C @ -20..+50°C, sonst ±0,7°C	±0,100%F
Relative Feuchte	---	± 3%/F
Genauigkeit	---	± 3%/F
Speicherkapazität	ca. 20.000 Datensätze	
Schnittstelle	USB	
Arbeitstemperatur (ohne Display)	-30..+60°C	
Lagertemperatur	-30..+70°C	
Abmessungen	92 x 55 x 21 mm	
Gewicht	95 g	
Spannungsversorgung	1 x CR2032 3 V	

1. Introduction

Dear customer,
thank you very much for purchasing one of our products. Before operating the data logger please read this manual carefully. You will get useful information for understanding all functions.

1.1 General advice

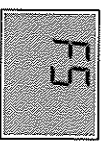
- For cleaning the instrument please do not use an abrasive cleaner only a dry or wet piece of soft cloth.
- Please store the measuring instrument in a dry and clean place.
- Avoid any force like shocks or pressure to the instrument.
- Do not use force to connect the probe or the interface plugs in. The interface plug is different from the probe plug.

1.2 Before operation

- Before operating the instrument take the instrument out of the packaging. Check whether a full battery CR2032 (3 Volt) is already inserted.



Display indication



Display indication after key depression
FS = Factory settings

- After inserting the battery the instrument displays for 10 seconds the actual measurements, afterwards the instrument displays for 30 seconds "FS", after this the instrument turn off. The same procedure appear after pressing any button.

1.3 Standard settings / Factory settings

- Note the following default settings of the data logger before first use. By using the DE-LOG-Graph software, the setting parameter can easily be changed:

- Description: blank (max: 16 characters)
- LCD-Snooze mode:
- LCD-Snooze after Sec.: 30
- Alarm settings for temperature: -30,0°C 60,0°C

Alarm settings humidity: 0,0% 100,0% (BG-LOG-TempRH only)

- Alarm delay:
- Alarm cumulation: off
- Alarm reset:
- Temperature unit: °C
- Waiting for manual start:
- Single use only:
- Measuring interval: 15 Minutes
- Cycle memory: (if the memory is full the oldest measurement will be overwritten)

= Default

1.4 Marking (BG-LOG-Temp only)

- CE-conformity, EN 12830, EN 13485, Suitability for storage (S) and transportation (T) for food storage and distribution (C), Accuracy classification 1 (-30,+70°C), according to EN 13486 we recommend a recalibration once per year.

2. Operation

- For configuring the data logger, please install the Software DE-LOG-Graph on a PC.

2.1 USB-Port

- When the Software Installation has been completed please connect the PC with data logger via USB-cable. For detailed information please read the manual of the DE-LOG-Graph-Software.

2.2 Panel and display (Fig. 1)

BG-LOG-Temp/TempRH has a large display, one LED and one button.

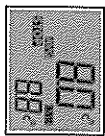
- A: LCD-display indicates temperature, humidity (BG-LOG-TempRH only), Low bat-warning, Max-Min-Avg-measurements, status information
- B: Start-Stop-button
- C: LED: red
- D: USB-port (with rubber cap)

2.3 Handling the Start-Stop-button

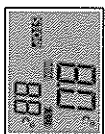
- Depending on the setup configuration, you can start or stop the data logger via the Start-Stop-button. You have to press and hold the button for 3 seconds. When it starts, the display indication will switch from STOP to LOG.

• MAX-, MIN-, Average values:

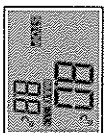
At the bottom line of the display, you will see the Average (AVG), Minimum (MIN)- and Maximum (MAX) temperature of the recorded measurements. If the data logger is not started it will display --- instead of AVG, MIN or MAX temperature.



AVG:
Average



MIN:
Minimum



MAX:
Maximum



AUTO:
Auto-switch

The display will switch automatically every 10 seconds.

2.4 Display segments of LCD (Fig. 2)

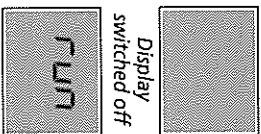
Besides the two measurements, the large LCD displays several status information. By using the Software DE-LOG-Graph you are able to switch on or off the display, or to setup an interval how long the display will stay on when no button is pressed (snooze function). By using this function it is possible to prevent it displaying information to unauthorized persons.

- E: Measurement 1 displays the current temperature.
- F: Unit Measurement 1 display the current measuring unit of measurement 1.
- G: Measurement 2 displays the temperature measurement, average, minimum or maximum measurements.
- H: Unit Measurement 2 display the current measuring unit of measurement 2.
- I: MAX-MIN-AVG display the average, minimum or maximum measurements.
- J: Status Info displays the operation mode LOG or STOP. LOG indicates the recording mode and STOP indicates standby mode.

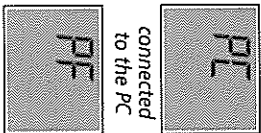
K: Lowbat indicates the capacity of the battery.
Note: °C = Celsius, °F = Fahrenheit

Other display information

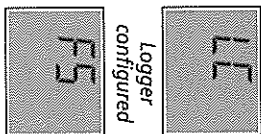
In addition to the above mentioned information, the display also indicates several other information. This information will be displayed depending on the display settings (snooze function) and operation mode:



Logger is recording



connected to the PC
Battery (total empty)



Logger configured
Factory settings

2.5 LED-Indication

- The LED will help you to understand all logger information, several status modes and alarm indications.
 - LED red: The red LED flashes when Hi- or Lo-Alarm has been achieved.
- 2.6 USB-Port
- For readout or programming, the data logger must be connected via USB-cable with a PC.



- View from the front: On the left side there is the USB-port. The port is protected by a small white rubber cap. To operate the USB-port please remove the rubber cap.
- After the completed communication with the PC do not forget to plug the rubber cap back into the port. It prevents dirt and water from entering the data logger.

2.7 Rear side of the data logger / battery case

- On the rear side of the data logger you will find the battery case and a printed sticker.

2.8 Replacing battery

- To replace the battery please open the battery cover on the rear side. Therefore you have to turn the battery cover 90° to the left. Remove the battery from the instrument and replace with a new battery.
- The "BAT" symbol indicates that the battery needs to be exchanged. The instrument allows app. 10 hours of further operation after displaying the "BAT" symbol. The battery symbol indicates according to the battery status between 1 to 3 segments.
- If the display indicates only "PP", the battery is completely exhausted. Please replace the battery immediately.

2.9 Waste disposal

This product has been manufactured using high-grade materials and components which can be recycled and reused.

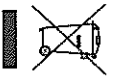
Never dispose of empty batteries and rechargeable batteries in household waste.

As a consumer, you are legally required to take them to your retail store or to appropriate collection sites depending on national or local regulations in order to protect the environment.



The symbols for the heavy metals contained are:
Cd=cadmium, Hg=mercury, Pb=lead

This instrument is labeled in accordance with the EU Waste Electrical and Electronic Equipment Directive (WEEE). Please do not dispose of this instrument in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment, in order to ensure environmentally-compatible disposal.



3.0 Specifications

	Temperature logger BG-LOG-Temp	Temperature-humidity logger BG-LOG-TempRH
Internal temperature	-30..+60°C	-30..+60°C
Accuracy	±0.5°C @ -20..+50°C, remaining range ±0.7°C	
Relative Humidity	---	0..100%/RH
Accuracy	---	±3%/RH
Memory	appr. 20,000 Data sets	
Interface	USB	
Working temperature (without display)	-30..+60°C	
Storage temperature	-30..+70°C	
Dimensions	92 x 55 x 21 mm	
Weight	95 g	
Power supply	1 x CR2032 3 V	