



Temperatur- och fuktlogger LOG 110

OBS! Ej vattentät

Användningsområde

Övervakning av temperatur och fukt.

TEKNISKA DATA

Mätområde

-30 till +70°C och 0 – 99 % Rf.

Upplösning

0.1°C och 0.1 % Rf.

Noggrannhet

± 0.5°C vid -20/+50°C övrigt ± 0.7°C.
± 3% Rf.

Mätintervall

Fritt inställbar 1 sekund till 24 timmar.

Funktioner

MAX (maxvärdet lagras).

MIN (minvärdet lagras).

AVG (medelvärde).

°C/°F (temperaturenhet).

Extern anslutning för mätsond.

Alarmsfunktion vid över-/ och underskridandet av temperatur.

Lagring av 60.000 mätvärden vid tre mätstorlekar.

USB anslutning.

Batteri

1 x CR2032.

Vikt (instrumentet)

Ca. 98g.

Dimension (instrumentet)

88 x 55 x 20 mm.

Option

Logger med mjukvara och USB kabel.

DE GRAPH.

Typ: SET LOG 110.

Windows mjukvara med USB kabel för
programering och läsning av datalogger.

Typ: 31.1041.



Temperaturgivare.

Typ: SL303504

Mätområde: -50/+125°C.

Upplösning: 0.1°C.

Noggrannhet: ± 0.5°C vid 0/+40°C övrigt ± 1°C.

Mätelement: NTC kabelgivare.

Kabel: 3 m av silikon.

Givardel: 40 x Ø 3 mm.

Vikt: 59g.

Temperaturgivare.

Typ: SL303505

Mätområde: -50/+125°C.

Upplösning: 0.1°C.

Noggrannhet: ± 0.5°C vid 0/+40°C övrigt ± 1°C.

Mätelement: NTC kabelgivare.

Kabel: 8 m av silikon.

Givardel: 40 x Ø 3 mm.

Vikt: 147g.



Bruksanvisning på engelska

Mätinstrument
för temperatur,
tryck, fukt och flöde

SL

INGENJÖRSFIRMA

SIXTEN LARSSON AB

www.sixtenlarssonab.se

Data logger Log100/110



English

Manual

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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 is already inserted.

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:

1. Description: blank(max. 16 characters)
2. LCD-Snooze mode:
3. LCD-Snooze after Sec.: 10
4. Mode-button active:
5. Alarm settings for temperature
 - 30,0°C
 - 70,0°C
 - 40,0°C
 - 150,0°CAlarm settings humidity
 - 0,0%
 - 100,0%
6. Alarm delay: 0 cycle
7. Alarm cumulation: off
8. Alarm indication: LED- and Buzzer (1 second)
9. Alarm reset:
10. Time setting
11. Temperature unit: °C
12. Start-button active:
13. Start by Reed-contact: (by request only)
14. Waiting for manual start:
15. Single use only:
16. Measuring interval: 15 Minutes
17. Stop-button active:
18. Stop by Reed-contact (by request only)
19. Cycle memory: (if the memory is full the oldest measurement will be overwritten)

1.4. Marking

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.

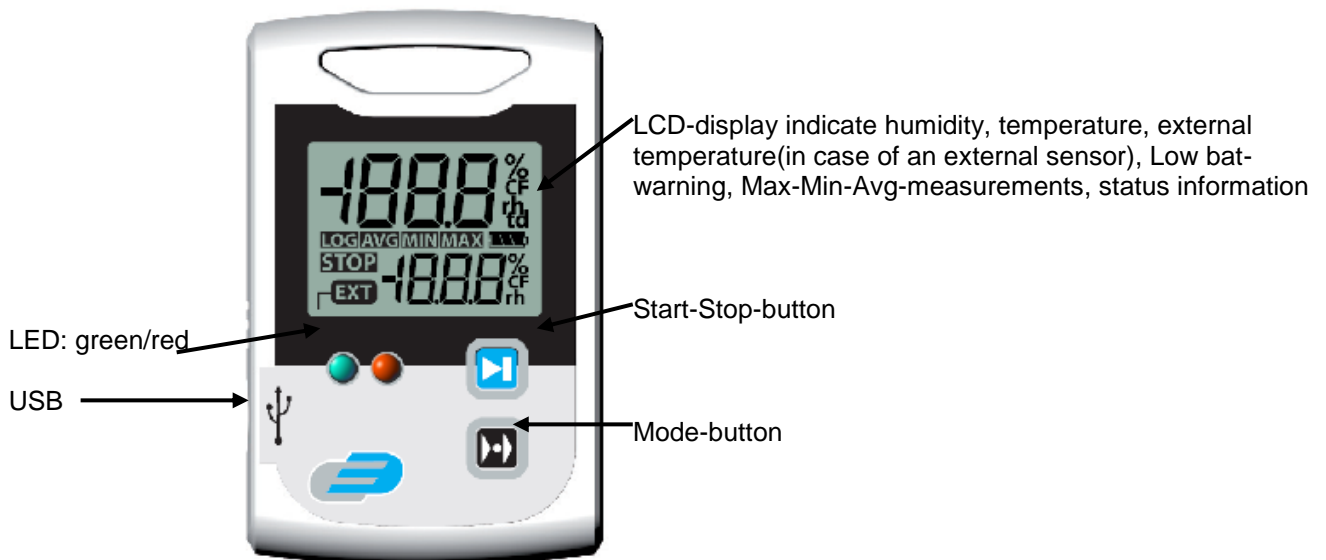
2.1 USB-Port

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

Log100/110 has a large display, two LEDs and two buttons.



2.3 Buttons-handling

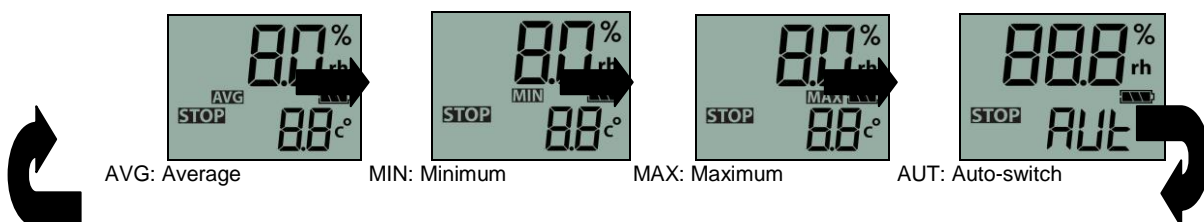
On the front panel there are two buttons. Both buttons can be de activated by using the Software DE-LOG-Graph, to prevent unauthorized use.

Start-Stop-button:

Depending on the setup configuration, you can start or Stop the data logger via the mentioned Start-Stop-buttons. You have to press and hold the buttons 3 seconds. When it starts a short acoustic signal and the green LED- will flash and the display indication will switch from STOP to LOG.

Mode-button:

By pressing the Mode-button you will see on the bottom line 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.



By using the AUTO-Mode(AUT) the display will switch automatically every two seconds.

2.4 Display segments of LCD

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.



Measurement 1 displays the current relative humidity(Log110) or the current temperature(Log100).

Unit Measurement 1 display the current measuring unit of measurement 1.

Measurement 2 displays the measurement in the lower display line. Depending on the logger model, the settings of the internal or the external temperature measurement, average, minimum or maximum measurements will be displayed.

Unit Measurement 2 display the current measuring unit of measurement 2.

MAXMINAVG display the average, minimum or maximum measurements.

Status info display the operation mode LOG or STOP. LOG indicates the recording mode and STOP indicates standby mode.

External probe EXT is displayed when an external sensor is connected. In the lower display line the measurement 2 is corresponding with the external sensor.

Low bat indicates the capacity.

Note:

°C = Celsius, °F = Fahrenheit, %rh = relative humidity, td = dew point temperature

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:



Display switched off



connected to the PC



Logger configured



Logger is recording



Battery total empty



Factory settings

2.5 LED-Indication and Buzzer

The two LED's and the internal buzzer help you to understand all logger information, several status modes and alarm indications

LED green:

The green LED flashes during the logger start and according to the measuring interval if the standard settings hasn't been changed.

LED red:

The red LED flashes when Hi- or Lo-Alarm has been achieved.

Buzzer:

The Buzzer rings when Hi- or Lo-Alarm has been achieved(if the buzzer is not deactivated).

The Buzzer also rings when the configuration has been transferred successful from the PC to the Logger.

You can activate or deactivate both, LEDs and Buzzer by using the Software DE-LOG-Graph.

2.6 USB-Port

For readout or programming, the data logger must be connected via USB-cable with a PC.

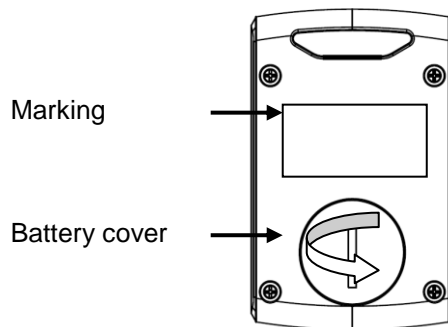
View from the front: On the left side there is the USB-port. The port is protected by a small white rubber cap.

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. 24 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 „PF“, the battery is completely exhausted. Please replace the battery immediately.



Note: For protection of our environment please don't put the battery into general household waste, but use a local authority approved recycling method.