AZ Instrument 88170 High Temperature Data Logger Instruction Manual

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introduction

Congratulations on your purchase of this multi-functional high temperature data logger. This data logger is designed for temperature monitoring subject to quality control in the laboratory and industry. The temperature measurement is saved during the measurement period. This data logger is equipped with user-defined programming functions. The measurement report output is implemented using a PDF file and an Excel file, unique software and USB driver are not required. The generated PDF report contains graphs and statistics. Read the instruction manual before using this logger. The logger is calibrated before shipping.

Product description

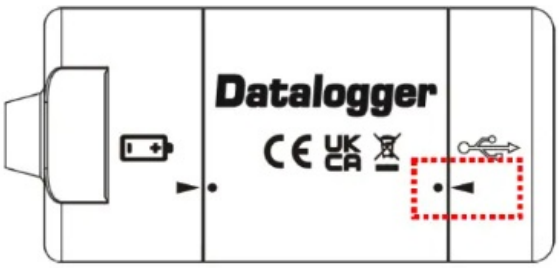
1. USB2.0 Type C plug and play socket. No USB driver required. No PC software is required either. Type C cable is included in the package.
2. LED indicator:

status	LED indicator
off	All LEDs are off.
substitute	When the logger is programmed to be in standby mode and has not yet st arted logging, the green LED will flash every 5 seconds. LED brightness is weaker thanRecording status
recording	Green LED blinks every 5 seconds during loginIt is in progress
The recording is finished but the data is not finishedstill read	The green LED will flash 3 times every 5 seconds after the registration fun ction is finished, but the registration is completeData is not read
low power	The red LED flashes every 5 times seconds when the power is low

High accuracy in PT1000 sensor for temperature measurement.
Battery protection. This logger is powered by a replaceable 1 volt lithium battery. The battery has been installed and tested by the datalogger manufacturer. Please always contact the store you purchased the logger from to repurchase this battery.
Waterproof USB Cover: To provide waterproof feature to the logger, you need to rotate the cover to the assigned alignment point. To open, use the coin to spin the open counter-clockwise.

It is recommended to clean the inside of the USB cover and periodically replace the O-ring to maintain the waterproof performance in the best condition.

To close, turn clockwise to match the alignment mark.



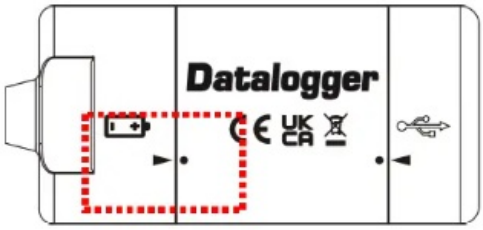
Battery installation

The battery is already installed. The battery is replaceable but not rechargeable. The power provided is enough for 1 million record times or 18 months of use, whichever comes first. While the red LED is flashing, please contact the store where you purchased the datalogger to purchase a new battery. Then, follow the procedure below to replace the battery.

1. Suggest using a wrench to hold the wood in position.
2. Turn the middle part of the bearing counterclockwise.

3. Remove the old battery and O-ring and install the new batteries. Pay attention to the polarity of the battery.

4. Turn clockwise until it matches the alignment mark.



action

Note:

1. Adobe Reader is required.
2. **Program the logger and generate PDF and Excel reports at room temperature.**
   For example: If the lager is removed from the autoclave, it should be allowed to return to ambient room temperature before generating a temperature PDF report.
3. The executable file for programming the logger is called: PDF Logger Configuration

tools

Step 1: Configure the data logger

It is possible to make configuration changes at any time before the reporting function starts. Once the logger has started, configuration changes cannot be made unless you first stop logging. If the Logger is locked with a password, the password is required to make configuration changes.

- First, use the coin to open the USB port. Then, connect the datalogger to the PC via a USB Type-C cable. The green LED stays on while communicating with the computer.
- Windows file display window appears.
- If it is true that the file folder is not open, click on Folder to view files.
- Open the PDF Logger configuration tool file. exe".
- The default language is English. The user may change it to one of six alternative languages. There is English, German, French, Italian, Spanish and Portuguese.
- User programmable parameters are as follows:

Select **the sampling rate and the ling interval you need from 1 second to 120 minutes.**

Start Delay
Select the start delay from 0 minutes to 24 hours. For example: if the delay is 5 minutes and the sampling rate is 5 seconds, the actual time to record the first temperature measurement is 5 minutes after pressing the "save" button in the software. All measurements will be 5 seconds (or selected) after the first measurement.

Unit of Measure (UoM)
Select the unit to display in the report. Choices are Celsius or Fahrenheit

Password
The default password function is off. The user may enable it to prevent unauthorized reprogramming before pressing the logger start key. A password may contain up to 16 alpha or numeric characters.

Company Name
A user-defined name, location, or descriptor can be entered below the Company Name. In the PDF report, it is displayed as a title, with a maximum of 20 characters.

Effective Range
Select the effective temperature threshold values. Whether the core temperature has remained within the specified range for a sufficient period of time can also be determined from the generated report. For example: if 130 to 140 degrees Celsius is selected, it means that the effective core temperature range for you is between 130 and 140 degrees. Then you can find the effective time information from the report after reading the data.

Time Zone
Before programming the logger, the user must ensure that the PC is set to the correct time zone. When the “Save” button is clicked, the logger will automatically synchronize with the time zone of the PC. The time zone changes during the transport interval are not adjusted in the recorded data.

The default value of the above parameters are:

- Sampling rate: 1 second
- Start delay: 0 minutes Effective range:
- Unit temperature: 120.0 °C …..140.0 °C
- Password: disable
- Company Name: Blank Language: English
- After all the programming is done, press “Save” to confirm the settings, and then you can close the settings window and remove the logger from the PC USB port.

Step 2: Start logging in

- Once the logger has been successfully programmed, if the start delay time is set to zero minutes, the logger will start recording immediately after you disconnect the logger from the computer. The green LED should blink once every 5 seconds.
- If the selected delay time is not zero, the green LED will flash every 5 seconds to indicate that the logger is in standby mode. LED brightness is weaker than recording mode. Then, switch to normal flashing every 5 seconds to indicate recording has started.
- During login, the green LED will flash, if the battery power is too low to maintain normal operation, the red LED will flash.

Step 3: Download the data

- Always wait for the lager to cool to room temperature.
- Connecting the logger to the computer’s USB port can stop logging.
- Open PDF Logger configuration tool file. exe
- Select the “Convert to PDF” or “Convert to Excel” function to generate the report in the preferred format. The default language is English. The user may change it to one of six alternative languages.
- Select the preferred location to save the generated report.
- The generated Excel report contains all the data shown in the PDF report except for the chart.
- The logger will automatically turn off after logging and no new logging trips have been scheduled.
- If you stop the logger but forget to download the data, the logger will flash 5 times every 3 seconds. As this

consumes power, it is strongly suggested that you download the data as soon as possible to stop the LED flashing.

- If a new recording trip is required, please be sure to go to the configuration page to double-check the settings and press SAVE, regardless of whether the settings are the same or different from the previous trip.
- The recorded data is stored in the logger and is only overwritten when a new recording trip is started. Any time before this, you may return to the file generation feature to re-generate the report at any wash you want.
- **Note:** The generated “Excel” file is a tab-separated text file that is easily readable by many programs. However, when opening the file in Microsoft Excel, a warning message may be displayed because the file “csv.” name but its contents are like “.txt”. file. It can be opened safely.

Technical information

- High temperature multiple use model. concentrator
- Temperature sensor by PT1000 sensor
- Temperature range -40.0~140.0oC (-40.0~284.0oF)
- Temperature resolution 0.1oC (0.1oF)
- Temperature accuracy +/-0.4oC
- T90 response <20 seconds (room temperature up to 90°C)
- Multiple use login type
- SampaLing score 48000 points
- Battery life Replaceable battery, ~1 year time
- Meter/probe size 64 (L) * 31.2 (diameter) mm, probe 25.8 (L) * 3.5 (diameter) mm
- Both material and probe are SUS304
- Working time more than 48 hours @121 oC more than 30 minutes @134 oC
- Operating temperature -40~140oC (login status); room temperature (computer status)
- RH% operating humidity < 80%
- Storage temperature -40 ~ 85 degrees Celsius
- Storage RH% humidity <90%
- Weight 175 grams
- Battery 1 PC 3.6V Lithiim battery. Installed before shipment. replaceable
- Sampling interval 1,5,10,30 seconds, 5, 10, 30, 60, 90, 120 minutes
- Start delay 0, 5, 30, 45, 60, 90, 120, 24 hours
- Keyless operation keys
- REC LED indicator, low battery
- Protection class IP68
- Directive EN 61326-1:2013
- Windows operating system only

	AZ Instrument 88170 High Temperature Data Logger [pdf] Instruction Manual 2409091325420000003, 88170, 88170 High Temperature Data Logger, 88170, High Temperature Data Logger, Temperature Data Logger, Data Logger, Logger

References

- User Manual