

Quick Start Guide

MSR 85

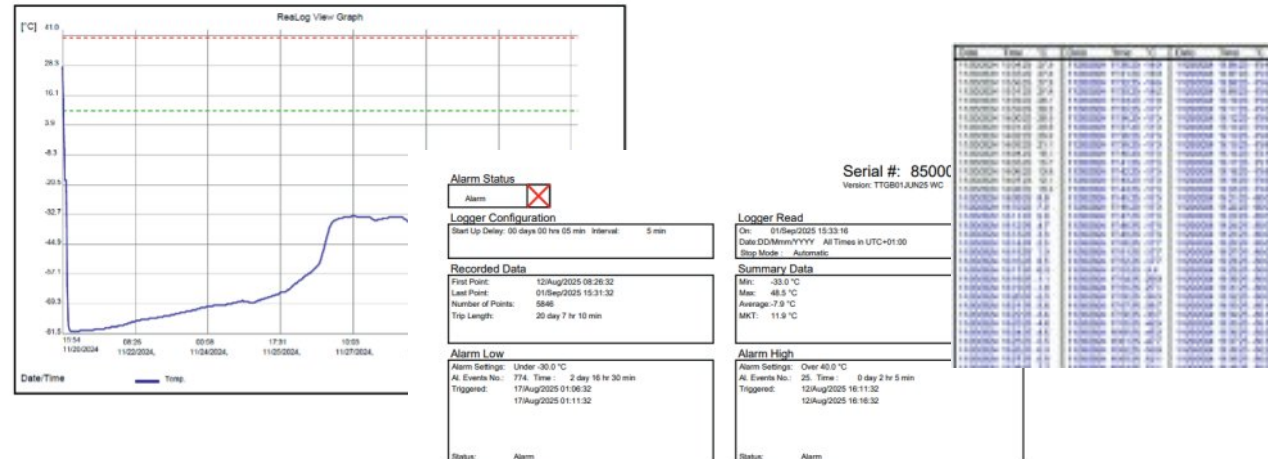
Reusable PDF Data Logger for Ultra-Low Temperatures down to -85 °C



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Introduction



MSR 85: Reusable PDF ultra-low dry ice temperature data logger down to -85 °C for temperature monitoring of cold chains and shipments.

MSR 85 BudgetLine data loggers reliably document the ultra-low temperature of sensitive products such as pharmaceuticals, enzymes, tissue, organs, vaccines, biologicals, specimens, clinical trials, etc... handled in dry ice during storage and in-transit.

Features:

- PT1000 temperature sensor -85 °C...+70 °C
- high accuracy & reading resolution
- two secured START & STOP buttons
- robust & tamper proof case
- easy plug & play operation
- auto generated PDF | CSV report
- integrated USB Type C
- 5-point-calibration certificate

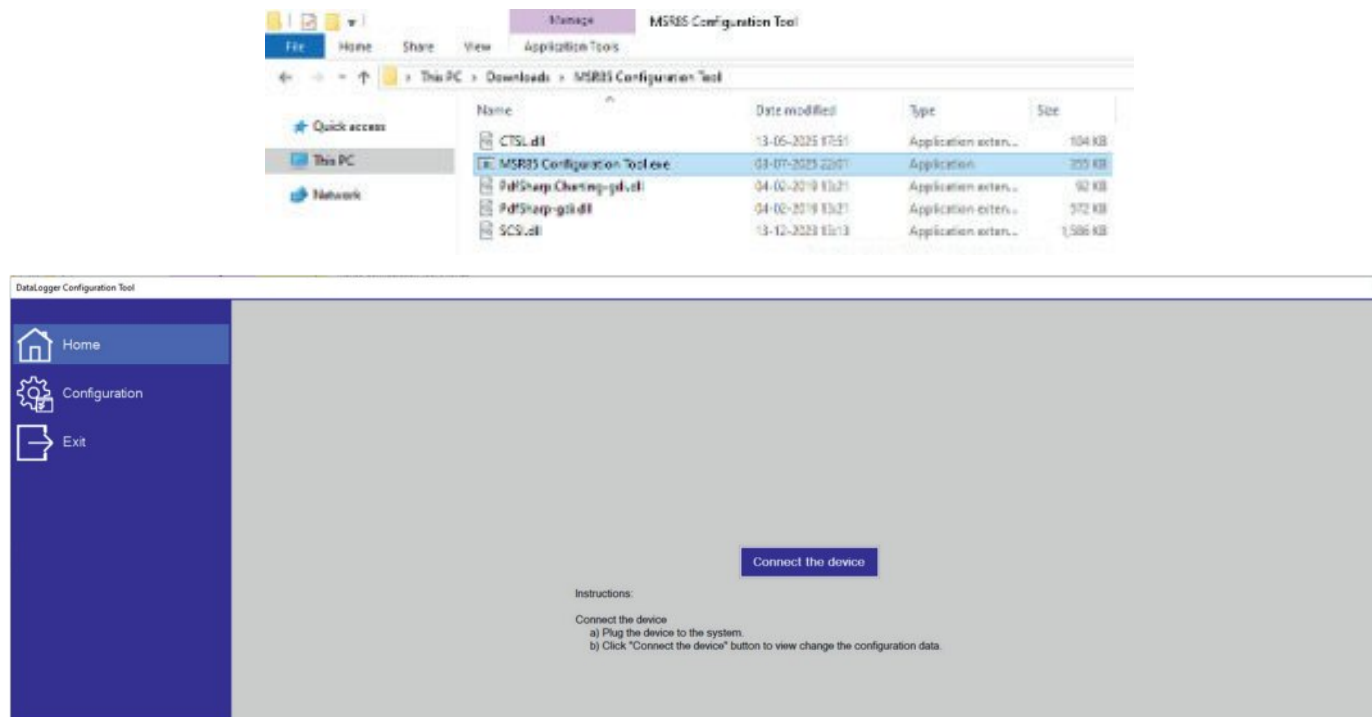
Requirements

To use MSR85 data loggers, you will require following items:

- MSR Configuration Tool
- 'USB Type A Plug' to 'USB Type C Plug' data cable
- one or more MSR85 data loggers

Download & Save Configuration Tool

- The MSR85 Configuration Tool can be downloaded at www.msr.ch
- After the download is complete, open the folder and double-click the MSR85 Configuration Tool to start the application.

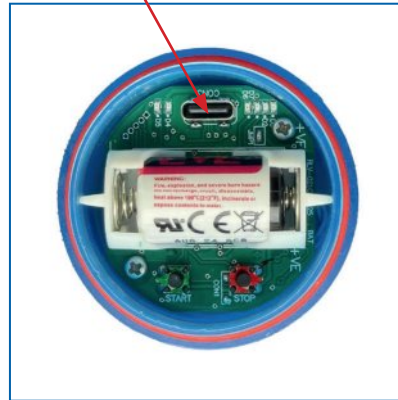


Connect the Data Logger to the PC

1) Turn the cap anti-clockwise.



2) Connect the USB cable to the USB-C port.



Any USB Type-A to USB Type-C data cable can be used to connect the logger to its USB Type-C port.

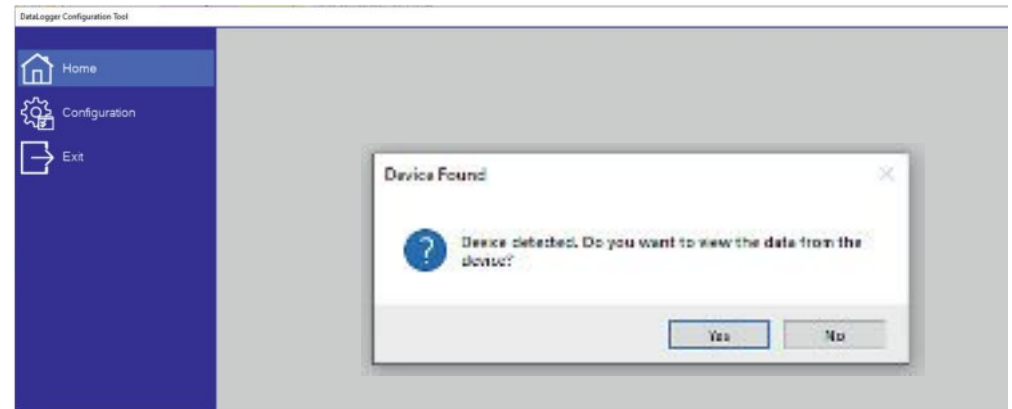


Please note: USB-C to USB-C cables are not supported.

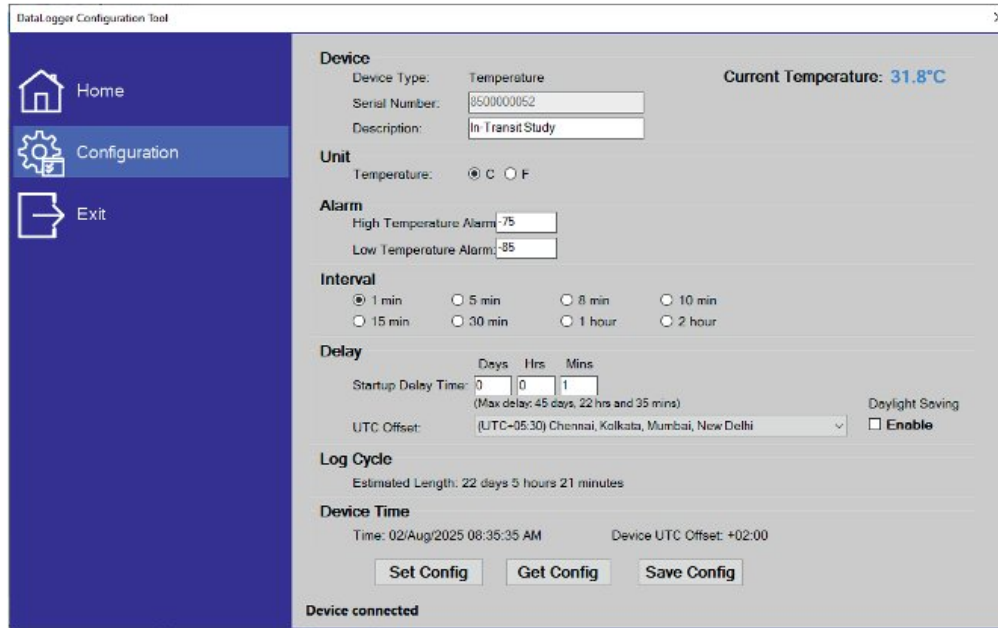
You will see a «Found New Hardware» message appear next to the clock on your PC. This will then change to indicate that the device is ready for use. After connecting the data logger to the PC, the communication LED inside the device will turn on.

Note: The logger will stop automatically 10 seconds after being connected to the PC. You can also stop the logger manually by pressing and holding the Stop button for 5 seconds.

Open the MSR85 Configuration Tool after connecting the MSR85 data logger. A message will appear: «Device detected. Do you want to view the data from the device?» Click **Yes** to continue.



Configure the Data Logger



Enter your required configuration: Description, Alarm Limits, Interval, Delay Start Time, Time Zone and click on 'Set Config'

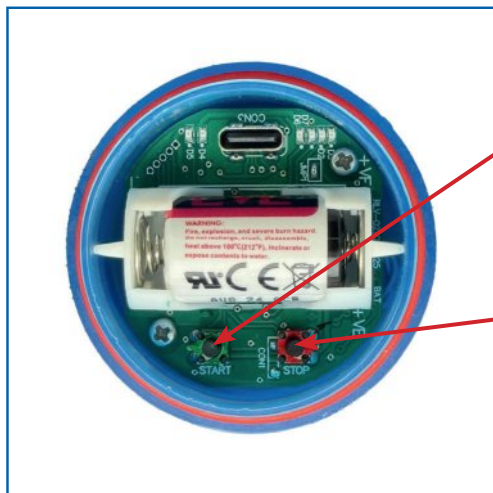


Click «Save Config» to save the configuration settings.

Important Note: If the data logger is already in recording mode, download and save the recorded data before configuring. Otherwise, the readings stored in the logger's memory will be erased. Please ensure that the correct date and time are set on your computer.

When the logger is disconnected, the green and red LEDs will flicker briefly to indicate that the configuration has been completed successfully.

Start the Data Logger & Check Status



Start the logger:

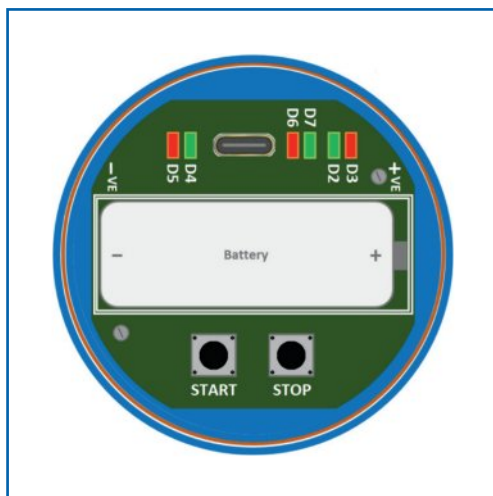
Press and hold the START button for 5 seconds until the green «D2» LED turns on.

To stop the logger:

Press and hold the STOP button for 5 seconds until the red «D3» LED turns on.

Check Status:

Press the START or STOP button once to check the status. The green «D2» LED will blink once to acknowledge your button press. The LEDs will then blink three times at 3-second intervals to indicate logger status, battery status, and alarm status.



Logging Status is indicated as follows:

- D2** Green LED – indicates Recording mode.
- D3** Red LED – indicates Stop mode.
- D2** Green LED & 'D3' Red LED – indicates Start Delay mode.

Alarm Status is indicated as follows:

- D4** Green LED – indicates No Alarm condition.
- D5** Red LED – indicates a High / Low alarm Condition.

Battery status is indicated as follows:

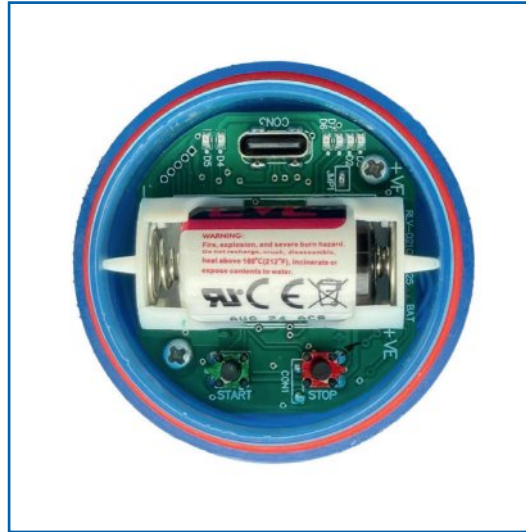
- D7** Green LED – indicates that the battery voltage is okay.
- D7** Green LED & **D6** Red LED – indicates that the battery voltage is 3/4th.
- D6** Red LED – indicates low battery voltage (replace battery).

Stop and Read out Data

1) Turn the cap anti-clockwise.



2) Connect the USB cable to the USB-C port



Press and hold the STOP button for 5 seconds until the red «D3» LED turns on.

Important Note: The data logger will automatically stop 10 seconds after being connected to a PC via the USB port. Open the lid and connect the device only at room temperature.

Report Generation

After stopping, when the logger is connected to the computer's USB port for the first time, both the green and red LEDs will start flashing to indicate that PDF generation is in progress. **Do not disconnect the logger until both LEDs remain steadily on, which indicates that the report is ready.**

A Microsoft Explorer window with the PDF and CSV reports will open automatically. Double-click a file to open it. Use **Copy** or **Save As** to store the report in your desired location. In the same folder, you will also find the calibration certificate.

	C85SAMPLE03.pdf	03.02.2025 14:15	PDF X	48 KB
	REPORT_85SAMPLE03.pdf	05.02.2025 09:27	PDF X	11 KB
	REPORT_85SAMPLE03_T.csv	05.02.2025 09:27	Microsoft Excel-C...	4 KB

MSR 85 RECORD

Serial #: 85SAMPLE03
Version: T08E1J025

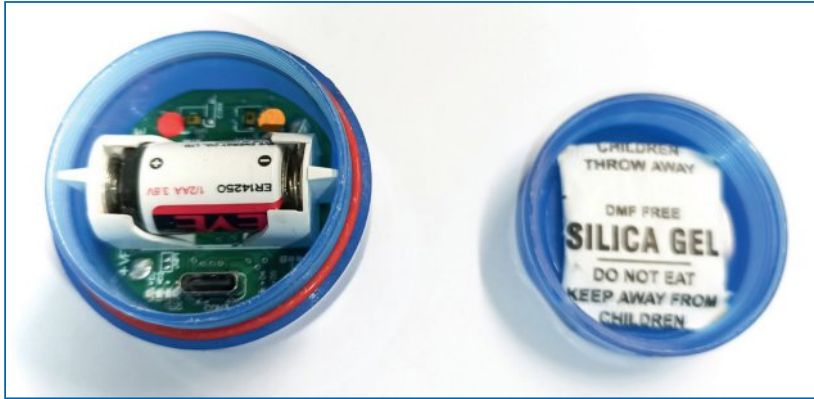
Alarm Status		Logger Config		Logger Read	
Alarm: <input type="checkbox"/>		Start Delay: 10 min @ 10:00:00		Date: 02/05/2025 09:27:12	
Event Range: Under -85.0 °C		Event Range: Over 70.0 °C		Date as YYYY/MM/DD: 02/05/2025	
All Events No.: 0 Time: 0 day 0 hr 0 min		All Events No.: 0 Time: 0 day 0 hr 0 min		Date as YYYY/MM/DD: 02/05/2025	
Triggered:		Triggered:		Date as YYYY/MM/DD: 02/05/2025	
Recorded Data		Summary Data		Logger Read	
File Path: 02/05/2025 17:00:00		Min: -78.2 °C		FILE READ TIME: 02/05/2025, 09:27:12	
Label Path: 02/05/2025 09:20:00		Max: 31.8 °C		Date as YYYY/MM/DD: All Times in UTC, +05:30	
Number of Points: 50		Average: 68.2 °C		Stop Note: 1, Manual	
Trip Length: 0 day 16 hr 30 min		Max: 8.5 °C		RECORDED DATA	
				First Points: 02/04/2025, 17:05:59	
				Stop Time: 02/05/2025, 09:25:59	
				Number of points: 50	
				Trip Length: 0 day 16 hr 30 min	
				SUMMARY DATA	
				Min: -78.2 °C	
				Max: 31.8 °C	
				Average: 68.2 °C	
				Max: 8.5 °C	
				ALARM LOW	
				Alarm Settings: Under -85.0 °C	
				All Events No.: 0 Time: 0 day 0 hr 0 min	
				Triggered:	
				Status: OK	
				ALARM HIGH	
				Alarm Settings: Over 70.0 °C	
				All Events No.: 0 Time: 0 day 0 hr 0 min	
				Triggered:	
				Status: OK	
				DATA TABLE	
				02/04/2025, 17:05:59, 30.8 °C	
				02/04/2025, 17:15:59, 30.4 °C	
				02/04/2025, 17:25:59, 30.4 °C	
				02/04/2025, 17:35:59, 30.4 °C	
				02/04/2025, 17:45:59, 31.0 °C	
				02/04/2025, 17:55:59, 30.7 °C	
				02/04/2025, 18:05:59, -15.2 °C	
				02/04/2025, 18:15:59, -39.6 °C	
				02/04/2025, 18:25:59, -53.3 °C	
				02/04/2025, 18:35:59, -61.5 °C	
				02/04/2025, 18:45:59, -66.8 °C	
				02/04/2025, 18:55:59, -70.2 °C	
				02/04/2025, 19:05:59, -72.8 °C	
				02/04/2025, 19:15:59, -74.4 °C	
				02/04/2025, 19:25:59, -75.6 °C	
				02/04/2025, 19:35:59, -76.1 °C	
				02/04/2025, 19:45:59, -76.8 °C	
				02/04/2025, 19:55:59, -77.2 °C	
				02/04/2025, 20:05:59, -77.5 °C	
				02/04/2025, 20:15:59, -77.7 °C	
				02/04/2025, 20:25:59, -78.0 °C	
				02/04/2025, 20:35:59, -78.0 °C	
				02/04/2025, 20:45:59, -78.0 °C	
				02/04/2025, 20:55:59, -78.1 °C	
				02/04/2025, 21:05:59, -78.2 °C	

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Precautions against Moisture in the Event of Temperature Changes

Each data logger contains a silica gel to prevent the formation of moisture in the event of extreme temperature changes. This must not be removed. Before closing the lid, check that this pad is still in the lid!



Close the logger by screwing the cap on:

Turn the cap anti-clockwise.

... until they are screwed tight, and two position marks are superimposed.



Contact Us

We are pleased that you are using our data loggers. If you have any questions, please contact the sales office where you purchased your MSR 85 data logger. More than 90 MSR sales partners in over 50 countries worldwide are available to provide you with competent advice.

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