OM-21

Cold Chain PDF Logger

INSTRUCTION SHEET

M5491/0715

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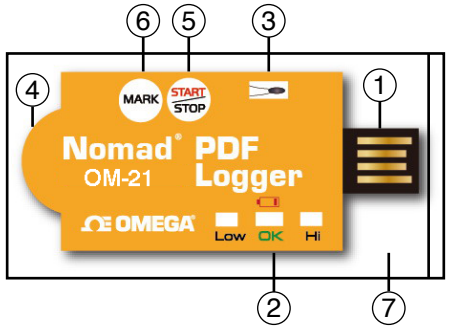
Introduction

Congratulations on your purchase of this single use cold chain PDF datalogger. This datalogger is specifically designed for monitoring the transportation of products subject to cold chain requirements(GDP). Temperature readings is saved throughout the entire duration of the measurement program.

This datalogger is equipped with flexible programming function. Measurement report output is implemented via PDF file, no software and no USB driver are required to be installed.

Read through the instruction manual before using this logger. The logger is calibrated before shipment.

Product Description



☐ USB2.0 plug & play connector. USB driver is not required.

☐ LED indicator:

Low/High: Red LED blinks when the measuring set limit value is exceeded.

OK: Green LED blinks triple every 5 seconds when logger is in standby mode but not yet be started to log readings. When logging function is started, green LED blinks every 2 seconds

Low bat. symbol :Red LED blinks every 2 seconds when battery power is too low to maintain an accurate logging.

☐ Accurate NTC thermistor for temperature measuring.

☐ Pre-installed CR2032 battery

☐ START/STOP key:

After the logger is programmed, press "START" key for 2 seconds to start the logging. To stop it, press "STOP" key for 2 seconds.

☐ MARK key:

To place a bookmark manually during the delivery transition, press MARK key. You will see time stamps on generated PDF report.

⑦ IP65 zipped plastic bag

Open to program the logger and well seal it before leaving the logger in shipping container.

Operation

NOTE:

1. Adobe Reader software is required.

2. Please program the logger and generate the PDF report under room temperature. For example: If the logger is taken out from -30℃ freezer, please leave it in air for few minutes before plugging into PC to generate PDF report.

*3. The programming execute is designed as *.exe format.*

Step1 Configuring the data logger

Anytime before the logging is started, the logger can be programmed several times. If the logger is locked by password after first configuration, password will also be required to program the logger again.

- Connect the data logger to a PC via the USB port.
- The logger status LEDs blink for two runs.
- Window Automatic playback is displayed.
- Click on Open folder to view files.
- Open the file "PDF Logger Configuration Tool. exe".
- The default language is English, you may change it to German, French, Italian or Spanish per your need. The generated PDF report will be identical to the language you choose.
- To review the instruction manual, you may click "Manual" to open the manual PDF file.
- To check the calibration report of the logger, you may click "Certificate" to open the corresponding file.

-The definition of each programmable parameters are:

to activate the logging function is 5 mins after you pressing the START key so the first data is logged 10 mins after pressing START key.

★Temp. Unit

Select the temperature displayed unit you want to see on PDF report. It can be Celsius or Fahrenheit.

★Password

The password security function is default as off. You may enable it and input at most 16 characters (alphabets or numbers) to prevent an unauthorized re-programming.

★Company Name

Your company name will be displayed on PDF report as title.(Max. 20 characters)

★Alarm types

No matter what alarm types is picked up, the LED will not stop flashing once it is triggered as ON even if the measured value later returnes to normal range.

Single: a LED alarm is triggered immediately when the measured value exceeds the alarm threshold.

Cumulative: a LED alarm is not triggered when the measured value exceeds the alarm threshold, but only once the overall average value during alarm delay duration exceeds the alarm threshold.

Disable: No LED alarm function during the logging process

★Alarm delay

The preset alarm delay time for single alarm type is always zero.

The adjustable alarm delay time for cumulative type is 5 min to 2 hours.

★Alarm Limits

Select the alarm threshold value. For example, if choosing 2~8℃ means the measured value below 2℃ or above 8℃ will trigger the LED indicator. *To summarize, to activate a LED flashing when 30- min average value of hazardous alarm delay period is higher than 8℃, please program the alarm delay as 30 mins, alarm type as cumulative and range as 2~8℃*

★Time zone

The logger will be auto synchronized to your PC time when you press "Save" to confirm the settings. Any time zone changes during the measurement are not taken into account.

The default value of above parameters are:

Sampling rate: 5 min Alarm Type: Single

Start delay: 0 min Alarm delay: 0 min

Temp. Unit: °C Alarm Limits: 15 – 25°C

Password:disable

Company Name: blank

Language: English

Once all the programming is done, press "Save" to confirm the setting and then you may close the setup window and remove the logger from PC USB port.

Step2 Start logging

-When logger is successfully programmed, the green LED blink triple every 5 seconds to indicate the logger is in standby mode.

-Please seal the zipped bag well and then press "START" key for two seconds when you want to start the logging.

-Red LEDs will flash three runs to indicate the logging is activated.

-During the logging, the green LED will blink every two seconds. If battery power is too low to maintain a normal operation, red LED blinks.

- To place a bookmark manually during the delivery transition, press MARK key.

Step3 Download data

-Press "STOP" key for two seconds to stop the logging. You may also directly plug logger into PC USB port to stop the logging and generating PDF file.

-It takes just few seconds to generate a PDF report. The status LEDs blink while logger is generating PDF report.

Technical data

Model	PDF data logger, single use
Temp. measurement	By NTC thermistor, -30~70°C (-22~158°F)
Temp. resolution	0.1°C (0.1°F)
Temp. accuracy	+/-0.5°C
Logging Type	Single Use
Sampling points	8192 readings
Shelf Life	12 months shelf time
Operating temp.	-30~70°C (Logging status); room temp.(PC status)
Operating RH%	Humidity < 80%
Storage temp.	-40~85°C
Storage RH%	Humidity <90%
Weight	~10g
Battery	1PC 3.0V CR2032 (installed before shipment)
Sampling interval	30 seconds, 5, 10, 30, 60, 90, 120 minutes
Start delay	0, 5, 30, 45, 60, 90,120 minutes
Alarm range	-20~ -10 °C, -10~0 °C, 2~8 °C, 0~15 °C, 0~25 °C, 15~25 °C or other values
Alarm delay	0, 5, 30, 45, 60, 90, 120 minutes
Alarm type	Single, Cumulative, Disable
Operation keys	2 Keys, Start/Stop & Mark
LED indicator	REC, Low Bat., High /Low alarm
Protection class	IP65
Directives	EN12830, FDA21 CFR Part 11
Operating System	Windows only

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1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.