.5 YEAR WARRANTY

MADE IN USA

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ΩΞ OMEGA®

User's Guide

ALERT
WARN
OK

RANGE:
-60°C TO 75°C
-76°F TO 167°F

OM-CP-LYOTEMP
LYOPHILIZATION DATA LOGGER

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START
●
MARK

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OM-CP-LYOTEMP
Lyophilization Data Logger

Product Overview

The OM-CP-LYOTEMP Data Logger is designed for use in ultra-low operating temperatures for processes such as Lyophilization. The OM-CP-LYOTEMP has an operating range of -60 °C to 75 °C, and is designed with a hermetically sealed thermistor temperature sensing element in a long thin flexible cable form, making it ideal for monitoring products during the lyophilization process. The OM-CP-LYOTEMP data logger offers a smart, affordable solution for a wide range of applications including the preparation of biological pharmaceuticals, monitoring plasma and red cell freezers or dry ice shipments.

The compact size and simple operation make the OM-CP-LYOTEMP user friendly and reliable. The OM-CP-LYOTEMP has three LED indicators to alert or inform the user of the logging status and manual start and stop options available at the device. Other features of the OM-CP-LYOTEMP include delayed start configuration, real-time recording, user configurable alarms and password protection. The OM-CP-LYOTEMP requires minimal maintenance and with average use will require annual calibration.

Product Notes

Manual Start
To start the data logger with the **Manual Start** option, use the magnetic wand provided (*in the OM-CP-IFC300*) to touch the start/mark switch. (*manual start is defaulted to a 10 minute reading rate*) The reading rate can be modified in the Omega Software. Connect the data logger, touch the wand to the start/mark switch, the green LED (*OK*) will blink 5 times followed by the yellow LED (*WARN*) and the red LED (*ALARM*), indicating the device is recording. The logger must be manually stopped through the Omega software.

Marking Feature
A date and time stamp may be placed in the recorded data, by touching the magnetic wand to the start/mark switch. The marking feature may be configured to clear the alarm and warn indicators, while the logger is still active.

Ingress Protection/IP Rating
The OM-CP-LYOTEMP is rated IP50.

To start the device, hold the magnetic wand over the start/mark switch. (Also indicated below)

LED Indicators
• **Green:** Blinks to indicate safe conditions during logging.
• **Yellow:** Blinks to indicate warn limits have been exceeded.
• **Red:** Blinks to indicate alarm criteria (limits/delay) have been exceeded.
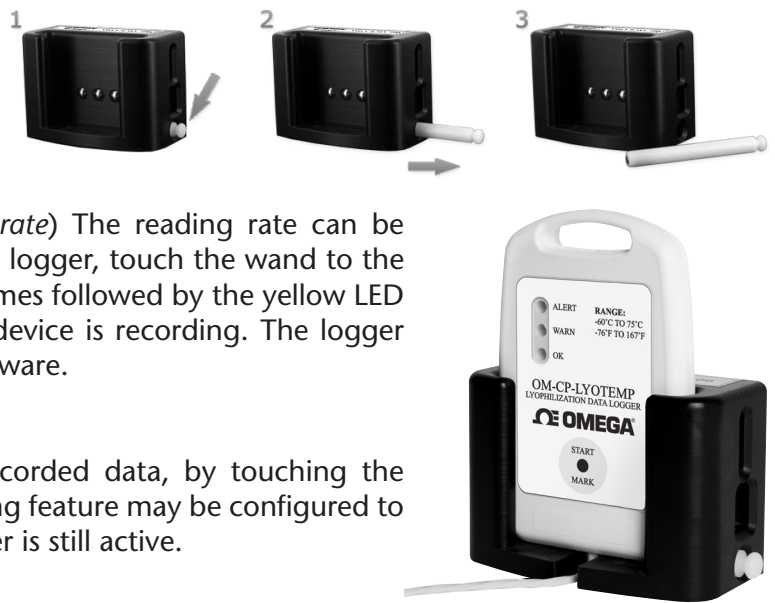
Alarm Settings
To change the settings for the temperature alarm;
- Select **Alarm Settings** from the **Device Menu** in the Omega Software. A window will appear allowing to set the high and low temperature alarms and warning alarms.
- Press **Change** to edit the values.
- Check **Enable Alarm Settings** to enable the feature and check each high and low, warn and alarm box to activate it. The values can be entered in the field manually or by using the scroll bars.
- Click **Save** to save the changes. To clear an active alarm or warn, press the **Clear Alarm** or **Clear Warn** button.
- To set an alarm delay, enter the duration of time into the **Alarm Delay** box in which the readings can be outside of the alarm parameters.
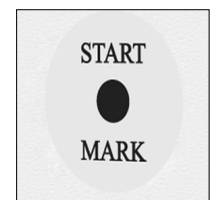
Close-up of the start/mark switch

Set Password
To password protect the device so that others cannot start, stop or reset the device;
- In the **Connected Devices** panel, click the device desired.
- On the **Device** Tab, in the **Information** Group, click **Properties**. Or, right-click the device and select **Properties** in the context menu.
- On the **General** Tab, click **Set Password**.
- Enter and confirm the password in the box that appears, then select **OK**.

Installation Guide

Installing the Interface cable
- OM-CP-IFC300
  Refer to the "Quick Start Guide" included in the package.

Installing the software
Insert the Omega Software Flash Drive in an open USB port. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the Installation Wizard.

Device Operation

Connecting and Starting the data logger
- Once the software is installed and running, insert the OM-CP-LYOTEMP into the OM-CP-IFC300 docking station.
- Connect the USB end of the interface cable into an open USB port on the computer.
- The device will appear in the Connected Devices list, highlight the desired data logger.
- For most applications, select "**Custom Start**" from the menu bar and choose the desired start method, reading rate and other parameters appropriate for the data logging application and click "Start". (*"Quick Start" applies the most recent custom start options, "Batch Start" is used for managing multiple loggers at once, "Real Time Start" stores the dataset as it records while connected to the logger.*)
- The status of the device will change to "**Running**", "**Waiting to Start**" or "**Waiting to Manual Start**", depending upon your start method.
- Disconnect the data logger from the docking station and place it in the environment to measure.
Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Downloading data from a data logger
- Connect the logger to the interface cable.
- Highlight the data logger in the Connected Devices list. Click "**Stop**" on the menu bar.
- Once the data logger is stopped, with the logger highlighted, click "**Download**". You will be prompted to name your report.
- Downloading will offload and save all the recorded data to the PC.

Device Maintenance

Battery Replacement
The OM-CP-LYOTEMP must be returned to the factory for battery replacement.

OM-CP-LYOTEMP General Specifications

Temperature Sensor	NTC Thermistor
Temperature Range	-60 °C to +75 °C (-76 °F to +167 °F)
Temperature Resolution	0.1 °C
Calibrated Accuracy	±0.5 °C
Reading Rate	1 reading every 5 seconds up to 1 reading every 30 minutes
Memory	32,767 readings; software configurable memory wrap
Start Modes	Software programmable immediate start, delay start up to 30 days in advance or manual start with magnetic switch.
Temperature Alarm	Software programmable high and low alarm limits, high and low warn limits each set point may be individually enabled or disabled
Alarm Delay	Software programmable time delay for warn/alarm limits. Logger will not indicate out of range status until the temperature has been out of range for a set period of time.
LED Status Indicators	• Green: Blinks to indicate safe conditions during logging • Yellow: Blinks to indicate warn limits have been exceeded • Red: Blinks to indicate alarm criteria (limits/delay) have been exceeded
Password Protection	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	3.6V lithium battery, **factory replaceable only**
Battery Life	1 year typical at a 10 minute reading rate
Data Format	Date and time stamped °C, °F, K, °R
Time Accuracy	±5 minutes/month at -80 °C
Computer Interface	USB docking station to PC (OM-CP-IFC300); 38,400 baud
Software	XP SP3/Vista/Windows 7/Windows 8
Operating Environment	-60 °C to +75 °C (-76 °F to +167 °F); 0 to 100% RH

OM-CP-LYOTEMP General Specifications Continued

Dimensions	Body: 3.25" x 2.10" x 0.41" (82.5 mm x 53.3 mm x 10.3 mm) Probe Length: 48" (1219 mm)
Ingress Protection (IP Rating)	IP50
Enclosure	ABS plastic, white, polycarbonate labeling
Weight	1.4 oz (40 g)
Approvals	CE

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 100 °C (212 °F).

Specifications subject to change.
See Omega's terms and conditions at www.omega.com

Still need help? For more troubleshooting tips and information, refer to the built in help section visit us online at www.omega.com or contact us for support at 1 (800) 872-9436.

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WARNING: These products are not designed for use in, and should not be used for, human applications.

MADE IN USA

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **61 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **five (5) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

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.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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