



## Lyophilization Temperature Data Logger

### OM-CP-LYOTEMP



Optional

- ✓ Ultra Low Operating Temperature Range from -60 to 75°C (-76 to 167°F)
- ✓ Hermetically Sealed Thermistor Probe
- ✓ LED Status Indicators
- ✓ Manual Start and Stop Options
- ✓ Configurable Alarms
- ✓ Password Protection
- ✓ Real Time Recording

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 to 75°C (-76 to 167°F), 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.

This 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. This data logger 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.

The OM-CP-LYOTEMP utilizes a USB docking station (sold separately), to communicate with a personal computer or laptop. The OM-CP-LYOTEMP provides date and time stamped temperature readings. Our easy-to-use Windows® software does the rest. The user can view the data in graphical or tabular form. High and low alarm limits and high and low warning limits can be programmed through the software. Other software features include: multiple graph overlay, statistics, digital calibration, zoom in/zoom/out, lethality equations (F<sub>0</sub>, PU), mean kinetic temperature, data annotation, min/max/average lines, data table view, automatic report generation and summary view.

The OM-CP-MICRODISC is a surface temperature probe attachment designed to be used with the OM-CP-LYOTEMP data logger. This rugged disc probe attachment is made of brass and is formed to connect directly to the tip of the OM-CP-LYOTEMP's thermistor temperature probe. The OM-CP-MICRODISC is specifically designed to give the user the ability to perform processes that require surface temperature monitoring.



With its compact size, puck like shape and wide operating range, the OM-CP-MICRODISC allows for close contact with flat surfaces ensuring accurate temperature monitoring of shelving during the lyophilization process. The OM-CP-MICRODISC is fitted with a silicone rubber insert that secures the probe connection throughout the data logging process.

### SPECIFICATIONS

**Temperature Sensor:** NTC Thermistor

**Temperature Range:** -60 to 75°C (-76 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

**Power:** 3.6V lithium battery (included), 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 (-112°F)

**Computer Interface:** USB docking station to PC; 38,400 baud

**Software:** XP SP3/Vista/7 and 8 (32-bit and 64-bit)

**Operating Environment:** -60 to 75°C (-76 to 167°F); 0 to 100% RH

## Dimensions:

**Body:** 82.5 H x 53.3 W x 10.3 mm D (3.25 x 2.1 x 0.41")

**Probe Length:** 121.9 cm (48")

**Ingress Protection (IP Rating):** IP50

**Enclosure:** ABS plastic, white, polycarbonate labeling

**Weight:** 1.4 oz (40 g)

## OM-CP-MICRODISC

**Material:** Brass (C46400), silicone rubber insert

**Dimensions:** 6.5 H x 25 mm dia (0.25 x 0.97")

**Operating Environment:** -60 to 177°C (-75 to 350°F), 0 to 100% RH



OM-CP-IFC300, Windows software displays data in graphical or tabular format (sold separately).



OM-CP-LYOTEMP shown with OM-CP-IFC300 docking station (sold separately).

## To Order

Model No.	Description
OM-CP-LYOTEMP	Lyophilization temperature data logger
OM-CP-LYOTEMP-CERT	Lyophilization temperature data logger with NIST calibration certificate
OM-CP-IFC300	Windows software, docking station and 2 m (6.6') USB interface cable
OM-CP-SVP-SYSTEM	FDA 21 part 11 compliant IQ/OQ/PQ secure software validation workbook and software package (unlimited users, license per computer)
OM-CP-WM-300	Wall mount station for data logger
OM-CP-MICRODISC	Surface temperature probe attachment

Comes complete with 3.6V lithium battery. Operator's manual is included with the OM-CP-IFC300 Windows software, docking station and USB cable (required to operate the data logger and sold separately).

**Ordering Example:** OM-CP-LYOTEMP lyophilization temperature data logger and OM-CP-IFC300 Windows software with docking station and USB cable.