

## Portable Temperature/Humidity Data Loggers With Graphic Display

All models shown smaller than actual size.

### OM-EL-GFX SERIES



OM-EL-GFX-1, temperature data logger with graphic display.



OM-EL-GFX-TC single channel thermocouple data logger with graphic display.



OM-EL-GFX-DTP, dual channel thermistor data logger with graphic display.



OM-EL-GFX-2 and OM-EL-GFX-2-PLUS temperature/humidity data logger with graphic display.



OM-EL-GFX-DTC, dual channel thermocouple data logger with graphic display.

- ✔ Graphic LCD Shows Real-Time Readings, Graph and Current Status
- ✔ Memory: 252,928 Readings
- ✔ On Screen Menu and Graphing to Start, Stop, Review and Restart the Logger in the Field
- ✔ Micro USB Interface for PC Based Set-Up and Data Download
- ✔ Immediate, Delayed, Pushbutton or Temperature Triggered Start Mode
- ✔ User Programmable Alarm Thresholds
- ✔ User Enabled Audible Alarm
- ✔ Highly Visible Confidence/Alarm LEDs
- ✔ Rugged and Robust IP67 Construction

The OM-EL-GFX Series portable temperature/humidity data loggers measure and store up to 252,928 readings. Using the included Windows® control software users can quickly set up the data logger and view downloaded data by connecting the device to the computer's USB port.

The data logger features a high contrast graphic LCD display and three input buttons. This allows users to start, stop and restart the data logger using on-screen menus. The menu also provides real-time analysis of data either as a data summary (showing highest and lowest readings and alarm conditions) or as a graph that updates as new data is added. The maximum and minimum readings and also the time and date these are valid from can be displayed on the LCD display by using the info button. If desired, the user can then reset the maximum/minimum readings shown. Each time the maximum/minimum readings are reset while logging, an "event marker" is created in the data. When the data has been downloaded to the computer these events can be viewed on the graph (event markers), and they also appear in the data file associated with the corresponding log when the reset took place. This can be useful as an audit/validation tool for certain applications where procedures mandate that a regular physical check of the logger/statistics have taken place. Multiple data logging sessions can be stored on the device ready for upload to the computer at a later time.

The data logger's robust design provides IP67 waterproof protection (OM-EL-GFX-1, OM-EL-GFX-2 and OM-EL-GFX-2-PLUS only).

## CONTROL SOFTWARE

The Easylog USB control software is easy to install and use, and runs under Windows XP, Vista, 7 and 8. The software is used to set-up the data logger as well as download, graph and export data to Excel. Each stored logging session is saved as a separate file.

The software allows the following parameters to be configured:

- Logger name
- Measurement parameter ( $^{\circ}\text{C}$  or  $^{\circ}\text{F}$ )
- Logging Rate (user-selectable between 10 seconds and 1 hour for OM-EL-GFX-1, OM-EL-GFX-2 and OM-EL-GFX-2-PLUS and between 2 seconds and 1 hour for OM-EL-GFX-DTC, OM-EL-GFX-TC and OM-EL-GFX-DTP)
- High and low temperature alarms
- Immediate, delayed, push-button or temperature triggered start mode
- Disable or enable LEDs and audible alarm with delayed activation
- Display and backlight behavior after button press


These data loggers do not lose stored readings when the batteries are discharged or when the batteries are replaced; however, the data logging process will be stopped. If the batteries are changed within a 2 minute window the data loggers will retain its settings (internal clock and logging mode). This will allow logging to be restarted without additional connection to a PC via USB.




Windows software shows data in graphical format.

MENU BUTTON FUNCTIONS AND LED SCREEN INDICATION	
<p><b>ARMED!</b> Press button to start logging.</p> <p>Button</p>	<p><b>START</b></p> <p>Loggers can be started immediately on a button press, delayed to a specific time or delayed to specific temp/RH reading.</p>
<p><b>DELAYED START</b> Starts logging at 10:30:00 04/03/12</p> <p>Time</p>	<p><b>MUTE ALARM</b></p> <p>Audible alarm can be muted if required.</p>
<p><b>DELAYED START</b> Starts logging when temperature &gt;36.2°C</p> <p>Value</p>	
<p><b>STOP</b></p> <p>The logger can be stopped using the on-board buttons.</p>	<p><b>SUMMARY DATA</b></p> <p>Summary screen displays max/min log and last log. Reset function clears summary if required.</p>
<p><b>DISPLAY DATA</b></p> <p>Data can be displayed on screen in tabular or graphical format.</p>	<p><b>LOCK MENU BUTTONS</b></p> <p>Locked mode can be unlocked during PC set-up if required.</p> <p>When in locked mode, the logger can only be stopped and re-started using a PC loaded with the unit's configuration software.</p>


**Windows Software**



**Data Logger Setup**



**Alarm Setup**



**Alarm Setup**



## Specifications

### OM-EL-GFX-1

**Measurement Range:** -30 to 80°C (-22 to 176°F)

**Internal Resolution:** 0.1°C (0.1°F)

**Accuracy (Overall Error @ 25°C):** ±0.1°C (±0.2°F) typical; ±0.75°C (±1.5°F) maximum

**Logging Interval:** 1 reading every 10 seconds to 1 every hour

**Battery Life:** 6 months typical at 25°C (77°F) and 10 minute logging rate

**Weight:** 99 g (3.5 oz)

**Dimensions:** 88 H x 48.5 W x 30.5 mm D (3.46 x 1.91 x 1.20")

### OM-EL-GFX-2, OM-EL-GFX-2-PLUS

#### Temperature

**Measurement Range:** -30 to 80°C (-22 to 176°F)

**Repeatability:** ±0.1°C (±0.2°F) typical

**Internal Resolution:** 0.1°C (0.1°F)

#### Accuracy (Overall Error):

**OM-EL-GFX-2:** ±0.5°C (±1.0°F) typical, ±2.0°C (±4.0°F) maximum

**OM-EL-GFX-2-PLUS:** ±0.2°C (±0.4°F) typical, ±0.8°C (±1.6°F) maximum

#### Humidity

**Measurement Range:** 0 to 100% RH

**Repeatability:** ±0.5% RH

**Long Term Stability:** ±0.5% RH/year

**Internal Resolution:** 0.1% RH

#### Accuracy (20 to 80% RH):

**OM-EL-GFX-2:** ±3.0% RH typical, ±5.0% RH maximum

**OM-EL-GFX-2-PLUS:** ±1.8% RH typical, ±4.0% RH maximum

#### Dew Point

**Accuracy (Overall Error in the Calculated Dew Point, for RH Measurement Between 40 to 100% RH @ 25°C):** ±1.1°C (±2.0°F)

**Logging Interval:** 1 reading every 10 seconds to 1 every hour

**Battery Life:** 4 months typical at 25°C (77°F) and 10 minute logging rate

**Dimensions:** 88 H x 48.5 W x 30.5 mm D (3.46 x 1.91 x 1.20")

**Weight:** 99 g (3.5 oz)

### OM-EL-GFX-DTC (2 channels), OM-EL-GFX-TC (1 channel)

#### Temperature Measurement Range:

**Type K:** -200 to 1350°C (-328 to 2462°F)

**Type J:** -200 to 1190°C (-328 to 2174°F)

**Type T:** -200 to 390°C (-328 to 734°F)

**Internal Resolution:** 0.1°C (0.1°F)

**Accuracy (Overall Error @ 25°C):** ±0.5°C (±0.9°F) typical

**Operating Temperature Range:** -10 to 40°C (-14 to 104°F)

**Logging Interval:** 1 reading every 2 seconds to 1 every hour

#### Battery Life:

**OM-EL-GFX-DTC:** 4 months typical at 25°C (77°F) and 10 minute logging rate, no alarm LEDs or audible alarm and minimal LCD use

**OM-EL-GFX-TC:** 1 year typical at 25°C (77°F) and 1 minute logging rate, LCD off

**Weight:** 105 g (3.7 oz)

**Dimensions:** 102 H x 48.5 W x 30.5 mm D (4.06 x 1.91 x 1.20")

### OM-EL-GFX-DTP

**Temperature Measurement Range (with Included Thermistor Probe):** -40 to 125°C (-40 to 257°F)

**Internal Resolution:** 0.1°C (0.2°F)

**Accuracy (Data Logger Error @ 25°C):** ±0.1°C (±0.2°F) typical (does not include thermistor probe error)

**Operating Temperature Range:** -10 to 40°C (-14 to 104°F)

**Logging Interval:** 1 reading every 2 seconds to 1 every hour

**Battery Life:** 4 months typical at 25°C (77°F) and 10 minute logging rate

#### Dimensions:

**Data Logger:** 101 H x 48.5 W x 30.5 mm D (3.98 x 1.91 x 1.20")

**Thermistor Probe:**

**Cable:** 1 m (3')

**Probe Tip:** Stainless steel, 25 L x 5 mm dia (1 x 3/16")

**Weight:** 105 g (3.7 oz)

#### COMMON SPECIFICATIONS

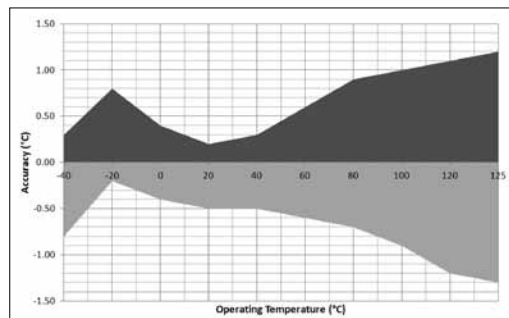
**Memory:** 252,928 readings

**Software:** Windows XP/VISTA/7 and 8 (32 and 64-bit)

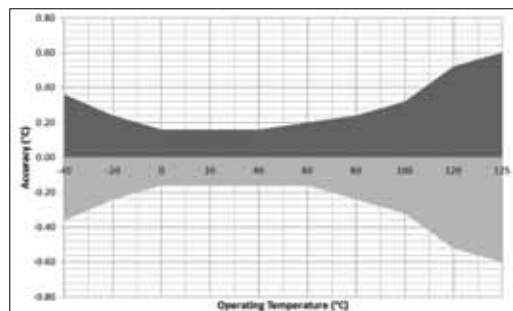
**Power:** 2 1/2 "AA" 3.6V lithium batteries (included)

**Enclosure:** IP67 with USB cover attached (excludes OM-EL-GFX-DTC, OM-EL-GFX-TC and OM-EL-GFX-DTP)

**Display:** High contrast graphic backlit LCD



Accuracy chart for standard OM-EL-PROBE-TP-2-1M thermistor probe (2 included with OM-EL-GFX-DTP).



Accuracy chart for optional OM-EL-PROBE-TP-A-3M thermistor probe (used with OM-EL-GFX-DTP).



OM-EL-GFX-DTP shown smaller than actual size with 2 thermistor probes (included).

OM-EL-GFX-DTC shown smaller than actual size with 2 5SC Series thermocouples (included).



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.

### Free Thermocouple Included!

Model OM-EL-GFX-DTC includes 2 free 1 m (40") Type K insulated beaded wire thermocouple with subminiature connector and wire spool caddy (1 per channel). Model OM-EL-GFX-TC includes 1 free Type K insulated beaded wire thermocouple **Order a Spare! Model No. SC-GG-K-30-36**



## To Order

Model No.	Description
OM-EL-GFX-1	Temperature data logger with graphic display
OM-EL-GFX-2	Temperature and relative humidity data logger with graphic display
OM-EL-GFX-2-PLUS	High accuracy temperature and relative humidity data logger with graphic display
OM-EL-GFX-DTC	Dual channel K, J, and T Type thermocouple data logger with graphic display
OM-EL-GFX-TC	Single channel K, J, and T Type thermocouple data logger with graphic display
OM-EL-GFX-DTP	Dual channel thermistor data logger with graphic display
OM-EL-PROBE-TP-2-1M	Spare standard thermistor probe for OM-EL-GFX-DTP (2 included with data logger), 1 m (3') cable
OM-EL-PROBE-TP-A-3M	Optional higher accuracy thermistor probe for OM-EL-GFX-DTP, 3 m (10') cable
OM-EL-PROBE-TP-A-GLY-3M	Optional higher accuracy thermistor probe (in sealed glycol filled chamber for temperature stabilization) for OM-EL-GFX-DTP, 3 m (10') cable
OM-EL-PROBE-EXT-CAB-1.5M	Thermistor probe extension cable, 1.5 m (5') for OM-EL-GFX-DTP
OM-EL-PROBE-EXT-CAB-5M	Thermistor probe extension cable, 5 m (16.5') for OM-EL-GFX-DTP
OM-EL-PROBE-EXT-CAB-10M	Thermistor probe extension cable, 10 m (33') for OM-EL-GFX-DTP
OM-EL-BATT	Replacement 3.6V lithium battery (2 required)

Comes complete with Windows software and operator's manual on CD-ROM, two replaceable 1/2 AA 3.6V lithium batteries, USB cover, mounting clip and 1 m (3.2') USB cable. OM-EL-GFX-DTC also includes 2 Type K insulated beaded wire thermocouples. OM-EL-GFX-TC includes 1 Type K insulated beaded wire thermocouple. OM-EL-GFX-DTP includes 2 OM-EL-PROBE-TP-2-1M standard thermistor probes. **Ordering Example: OM-EL-GFX-DTC**, dual channel K, J and T Type thermocouple data logger with graphic display, **OCW-1 OMEGACARE<sup>SM</sup>** extended warranty adds 1 year to standard 1 year warranty, and two **OM-EL-BATT** replacement batteries.