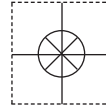


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OM-EL-GFX-2-PLUS
Temperature and Humidity Data Logger
With Graphic Screen



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One Omega Drive, P.O. Box 4047
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e-mail: info@omega.com

Canada:

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Laval (Quebec) H7L 5A1, Canada
TEL: (514) 856-6928 FAX: (514) 856-6886
e-mail: info@omega.ca

For immediate technical or application assistance:

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Mexico:

En Español: (001) 203-359-7803 e-mail: espanol@omega.com
FAX: (001) 203-359-7807 info@omega.com.mx

Servicing Europe:

Benelux:

Postbus 8034, 1180 LA Amstelveen, The Netherlands
TEL: +31 (0)20 3472121 FAX: +31 (0)20 6434643
Toll Free in Benelux: 0800 0993344
e-mail: sales@omegaeng.nl

Czech Republic:

Frystatska 184, 733 01 Karviná, Czech Republic
TEL: +420 (0)59 6311899 FAX: +420 (0)59 6311114
Toll Free: 0800-1-66342 e-mail: info@omegashop.cz

France:

11, rue Jacques Cartier, 78280 Guyancourt, France
TEL: +33 (0)1 61 37 2900 FAX: +33 (0)1 30 57 5427
Toll Free in France: 0800 466 342
e-mail: sales@omega.fr

Germany/Austria:

Daimlerstrasse 26, D-75392 Deckenpfronn, Germany
TEL: +49 (0)7056 9398-0 FAX: +49 (0)7056 9398-29
Toll Free in Germany: 0800 639 7678
e-mail: info@omega.de

United Kingdom:

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One Omega Drive, River Bend Technology Centre
Northbank, Irlam, Manchester
M44 5BD United Kingdom
TEL: +44 (0)161 777 6611 FAX: +44 (0)161 777 6622
Toll Free in United Kingdom: 0800-488-488
e-mail: sales@omega.co.uk

It is the policy of OMEGA Engineering, Inc. to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

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

OM-EL-GFX-2-PLUS

High Accuracy Temp/RH

Data Logger with Graphic Screen

FEATURES

- Higher accuracy sensor when compared with the OM-EL-GFX-2
- Rugged and robust, IP67 construction
- -30 to +80 °C and 0 to 100% RH measurement ranges
- Logging rates between 10 seconds and 1 hour
- Stores over 250,000 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, push-button or temperature/RH triggered start mode
- User-programmable alarm thresholds
- Graphic LCD shows real-time readings, graph and current status
- Resettable Min/Max readings may be viewed on the LCD
- User set audible alarm
- Highly visible confidence/alarm LEDs
- Supplied with user replaceable ½ AA batteries



The OM-EL-GFX-2-PLUS standalone USB data logger measures and stores up to 252,928 temperature and humidity readings over a -30 to +80°C (-22 to 176°F) and 0 to 100%RH range at a resolution of 0.1°C (0.1°F) and 0.1%RH.

Using the Windows control software (available as a free download from www.omega.com) the user can quickly set up the logger name, sample rate, alarm settings and start mode (immediate start, push to start, delayed start or temperature/humidity triggered start). This software can later be used to download the stored data which can be graphed, printed and exported to other applications.

The data logger features a dot-matrix LCD and three face-buttons to navigate through an on-screen menu. This menu provides the user with access to real-time trend analysis, data summaries and the ability to start, stop and restart the data logger without the need to connect the data logger to the host-PC. Users can reset the maximum/minimum reading using the on-screen menu; this introduces an 'event marker' into the data which can later be viewed in the graphing software ('Mark Events' option) and the data file after download.

Specifications		Minimum	Typical	Maximum	Unit
Relative Humidity	Measurement range	0		100	%RH
	Internal resolution		±0.1		%RH
	Accuracy (overall error)		±1.8*	±4.0	%RH
	Repeatability		0.1		%RH
	Long term stability		<0.5		%RH/year
Temperature	Measurement range	-30(-22)		+80 (+176)	°C (°F)
	Internal resolution		0.1 (0.1)		°C (°F)
	Accuracy (overall error)		±0.2 (±0.4)	±0.8 (±1.6)	°C (°F)
	Repeatability		±0.1 (±0.2)		°C (°F)
Dew Point	Accuracy (overall error)		±1.1 (±2.0)**		°C (°F)
Logging Rate		Every 10 seconds		Every 1 hour	Time
Operating Temperature Range***		+30 (-22)		+80 (+176)	°C (°F)
2 x ½AA 3.6V Lithium Battery Life			4†		Months

* This specifies the overall error in the logged readings, for relative humidity measurements between 20 and 80%RH.

** This specifies the overall error in the calculated dew point for relative humidity measurements between 40 and 100%RH at 25 °C.

*** At temperatures below -5 °C the LCD will exhibit slower response times. The LCD will be disabled at temperatures under -20 °C and above 70 °C.

† At 25 °C and 10 minute logging rate, with no alarm LEDs or sounder and minimal LCD use.

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OM-EL-GFX-2-PLUS

High Accuracy Temp/RH Data Logger with Graphic Screen

OM-EL-WIN-USB (CONTROL SOFTWARE)

Omega's USB control software is available to download from www.omega.com. Easy to install and use, the control software runs under Windows XP, Vista Windows 7 and Windows 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 (°C or °F)
- Logging Rate (customizable between 10 seconds and 1 hour)
- High and low temperature alarms
- Immediate, delayed, push-button or temperature/humidity triggered start mode
- Disable or enable LEDs and sounder with delayed activation
- Display and backlight behaviour after button press



The latest version of the control software may be downloaded free of charge from www.omega.com

DIMENSIONS

All dimensions in mm (inches)



OM-EL-GFX-2-PLUS

High Accuracy Temp/RH Data Logger with Graphic Screen

MENU BUTTON FUNCTIONS AND LED SCREEN INDICATION

ARMED! Press button to start logging 	DELAYED START Starts logging at 10:30:00 04/03/12	DELAYED START Starts logging when temperature above 36.2°C	START LOGGER <ul style="list-style-type: none">Loggers can be started immediately on a button press, delayed to a specific time or delayed to specific temperature reading	 DISPLAY DATA <ul style="list-style-type: none">Data can be displayed on screen in tabular or graphical formatYou can switch between these views by pressing the gfx txt buttons at the bottom-left of your screen
ON-SCREEN ICONS <ul style="list-style-type: none"> When this EasyLog cube is spinning in the top-left corner your logger is logging High/Low Alarm indicators are displayed at the top of your screen This icon indicates that your battery is low and will need to be replaced soon				STOP/START LOGGING & MUTE ALARM <ul style="list-style-type: none">By pressing the button, you can stop your logger, or view logger settings. If you have already stopped logging, this option will change to 'Start Logging'. The audible alarm can be muted from this menu if enabled
 SUMMARY DATA <ul style="list-style-type: none">Summary screen displays max/min log and last log. Reset function clears summary if requiredThese screens can be reached by pressing the i button		 LOCKED MODE <ul style="list-style-type: none">When in locked mode - an option during PC set-up - the logger can only be stopped and re-started using a PC loaded with the unit's configuration software		
 LOGGER SETTINGS <ul style="list-style-type: none">To view a summary of the logger's settings press the button, then click 'Logger Settings'		 POP-UP MESSAGES <ul style="list-style-type: none">A message will overlay the screen - if there is an issue - the next time a button is pressed, e.g. if the logger is running low on memory		

Please note that screens may vary slightly depending on model. OM-EL-GFX-1 screens shown.

BATTERY INFORMATION

We recommend that you replace the batteries every 4 months, or prior to logging critical data.

Replacement

The OM-EL-GFX-2-PLUS does not lose its 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 OM-EL-GFX-2-PLUS will retain its settings (internal clock and logging mode). This will allow logging to be restarted without additional connection to a PC via USB.

Only use 2 x OM-EL-BATT lithium batteries. Do not mix battery types and do not mix new and old batteries. Before replacing the batteries, unplug the OM-EL-GFX-2-PLUS from the PC.

WARNING

Handle lithium batteries carefully, observe warnings on battery casing. Dispose of in accordance with local regulations.

Passivation

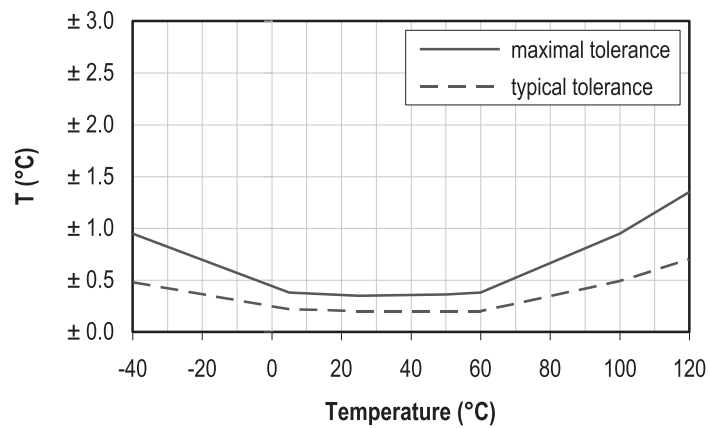
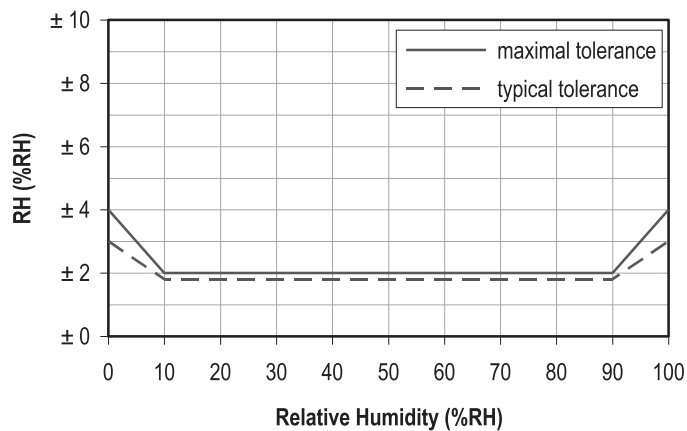
If left unused for extended periods of time, the Lithium batteries used in the Omega's range of data loggers naturally form a non-conductive internal layer, preventing them from self-discharge and effectively increasing their shelf life. When first installed in the data logger, this may cause a momentary drop in the battery voltage (the Transient Minimum Voltage) as the internal layer is broken down, resulting in the data logger resetting. Inserting the batteries in the data logger and leaving it connected to a PC for about 30 seconds will remove this layer. After this, remove and re-install the batteries to reset the data logger. Overall battery life will not be affected.

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OM-EL-GFX-2-PLUS

High Accuracy Temp/RH Data Logger with Graphic Screen

MEASUREMENT ACCURACY



WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) 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.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

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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