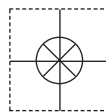


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OM-EL-GFX-DTC

**Dual Channel Thermocouple Data Logger
With Graphic Screen**



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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-DTC

Dual Channel K, J and T type Thermocouple Data Logger with Graphic Screen

ORDERING INFORMATION


Standard Data Logger (Data Logger, 2 x Batteries, USB cover, Mounting Clip, 2 x TC probes, Micro USB cable)	OM-EL-GFX-DTC
Replacement Battery (2 Required)	OM-EL-BATT

FEATURES

- Rugged and robust construction
- Dual channel, compatible with K, J and T type Thermocouples
- Logging rates between 2 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 triggered start mode
- 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-DTC standalone USB data logger measures and stores up to 252,928 temperature readings from two J, K, or T-type thermocouple inputs at a resolution of 0.1°C/0.1°F. Using the Windows control software (available as a free-download from www.omega.com), users can quickly set up the data logger and view downloaded data by connecting the device to the PC's USB port using the supplied cable.

The data logger features a high-contrast graphic LCD and three input buttons which allows users to start, stop and restart the data logger using on-screen menus. This menu also provides real-time analysis of data either as a data summary (showing highest & lowest readings and alarm conditions) or as a graph that updates as new data is added. The Max and Min readings and also the Time and Date they occurred, can be displayed on the LCD ( info button). If desired, the user can then reset the Max/Min shown on this screen of the LCD. Each time these maxima and minima are reset while logging, an "Event Marker" is created in the data. When the data has been downloaded to a PC these Events can be viewed on the graph (Mark Events). They also appear in the data file associated with the corresponding log when the reset took place. For certain applications where procedures mandate that a regular physical check of the logger/stats have taken place – this can be useful as an audit / validation tool. Multiple data logging sessions can be stored on the device ready for upload to a PC at a later date.

The two OM-EL-BATT batteries typically allow logging for up to one year.

Specifications		Minimum	Typical	Maximum	Unit
Probe measurement range	K-type	-200 (-328)		+1350 (+2462)	°C (°F)
	J-type	-200 (-328)		+1190 (+2174)	°C (°F)
	T-type	-200 (-328)		+390 (+734)	°C (°F)
Internal resolution			0.1 (0.1)*		°C (°F)
Accuracy (overall error)			±0.5 (±0.9)**		°C (°F)
Logging rate		Every 2 seconds		Every 1 hour	Time
Operating temperature range***		-10 (-14)		+40 (+104)	°C (°F)
2 x ½AA 3.6V Lithium Battery Life			1†		Year

* Above 999.9°C/F display becomes 1°C. Internal resolution remains at 0.1°C/F.

** At 25°C. See internal accuracy curve on page 4. Important - quoted accuracy is for the data logger only when measuring within the specified operating temperature. Thermocouple error is not included and should also be taken into consideration.

*** Operating temperature applies to the data logger module only. Please consult the probe manufacturer for operating temperature of thermocouple.

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

www.omega.com

OM-EL-GFX-DTC

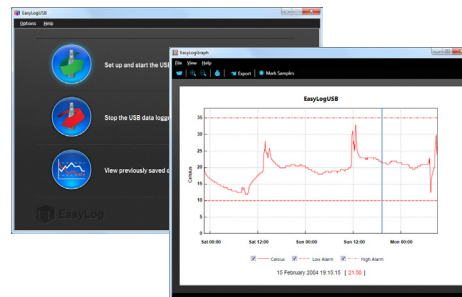
Dual Channel K, J and T type Thermocouple Data Logger with Graphic Screen

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 and Windows 7. 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 2 seconds and 1 hour)
- High and low temperature alarms
- Immediate, delayed, push-button or temperature triggered start mode
- Disable or enable LEDs and sounder with delayed activation
- Display and backlight behavior 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)

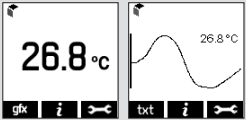






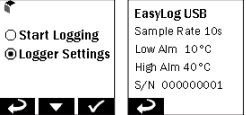



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OM-EL-GFX-DTC

Dual Channel K, J and T type Thermocouple 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 gtx / 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		

BATTERY REPLACEMENT

We recommend that you replace the batteries every 12 months, or prior to logging critical data.

The OM-EL-GFX-DTC 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-DTC 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-DTC from the PC.

WARNING

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

CAUTION

The K-Type thermocouple probes supplied with the OM-EL-GFX-DTC are not electrically isolated from the thermocouple junction, to give a faster response.

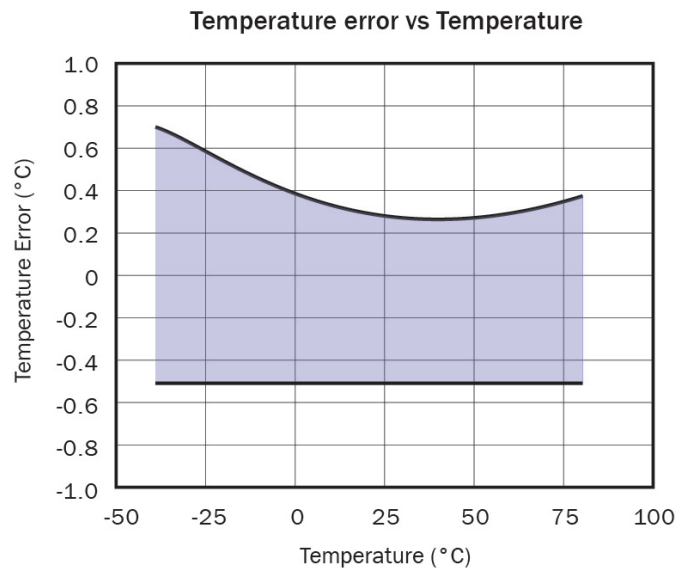
However depending upon application it may be necessary to use electrically isolated thermocouple probes to avoid ground loops, and/or situations where the probes may come into contact with conductors that are at different electrical potentials.

Where doubt exists Omega recommends that electrically isolated probes are always used.

OM-EL-GFX-DTC

Dual Channel K, J and T type Thermocouple Data Logger with Graphic Screen

INTERNAL TEMPERATURE ACCURACY (Cold-junction Compensation)



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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