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)	EL-GFX-DTC
Replacement Battery (2 Required)	BAT 3V6 ½AA

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 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. Using the Windows control software (available as a free-download from www.easylogusb.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 these are valid from, can be displayed on the LCD (**i** 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 whilst 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 replaceable ½AA 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.

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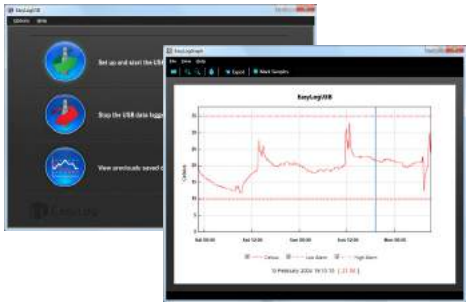
EL-WIN-USB (CONTROL SOFTWARE)

Lascar's Easylog USB control software is available to download from www.easylogusb.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 (customisable 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 behaviour after button press



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

DIMENSIONS

All dimensions in mm (inches)

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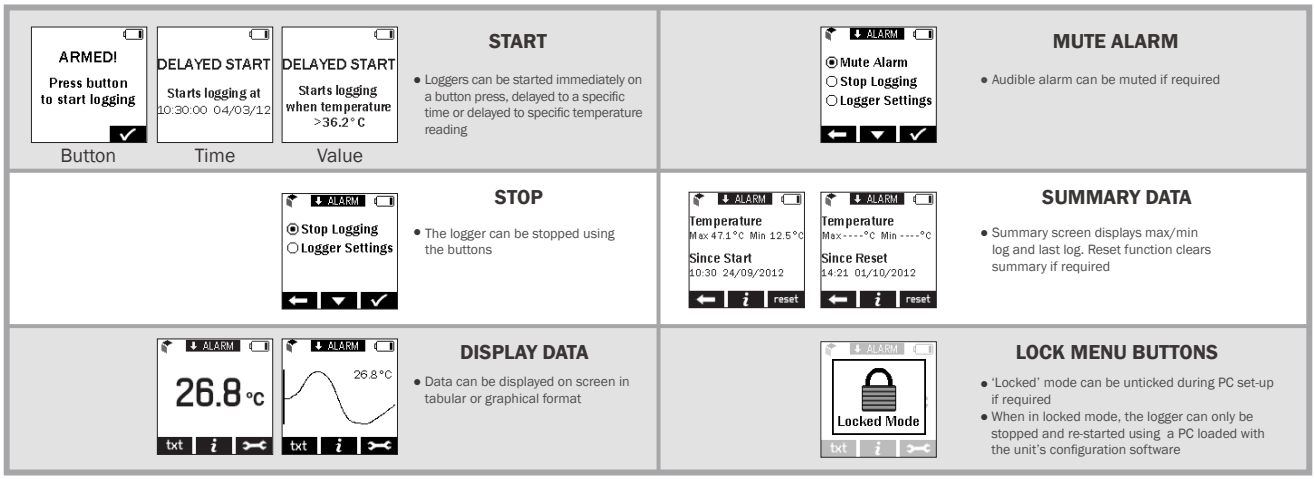
MENU BUTTON FUNCTIONS AND LED SCREEN INDICATION



BATTERY REPLACEMENT

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

The 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 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 3.6V ½AA lithium batteries. Do not mix battery types and do not mix new and old batteries. Before replacing the batteries, unplug the 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 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 Lascar recommends that electrically isolated probes are always used.

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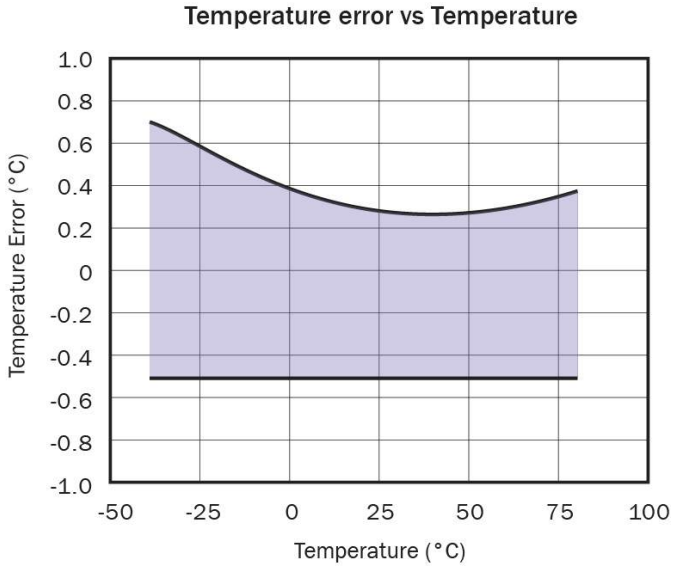
INTERNAL TEMPERATURE ACCURACY
(Cold-junction Compensation)



MERSERWIS®

ul. Gen. Wł. Andersa 10,
00-201 Warszawa
POLAND

tel/fax: +48 22 831 42 56, 22 831 25 21, 22 635 82 54
www: http://www.merserwis.pl
sklep: http://www.sklep.merserwis.pl
mail: merserwis@merserwis.com.pl