Test Equipment Depot
1-800-517-8431

99 Washington Street
Melrose, MA 02176
Phone 781-665-1400
Toll Free 1-800-517-8431

Visit us at www.TestEquipmentDepot.com

ORDERING INFORMATION

Standard Data Logger	EL-GFX-DTP+
(Data Logger, 2 x Batteries, USB cover, Mounting Clip, 2 x 3m Thermistor probes, Micro USB cable)	
Replacement Battery	BAT 3V6 ½AA
(2 Required)	

EL-GFX-DTP+
Dual Channel High Accuracy Temperature Probe Data Logger with Graphic Screen

FEATURES

- Rugged and robust construction
- Dual channel -40 to +125°C (-40 to +257°F) probe measurement range
- Logging rates between 2 seconds and 1 hour
- Stores over 250,000 readings per channel
- On screen menu to start, stop, review and restart the logger in the field
- Micro USB interface for PC based set-up and data download
- 3.5mm jack socket for connection of supplied thermistor probes
- Supplied with 2 x 3.0m type A sensor probes
- Immediate, delayed, push-button or temperature triggered start mode
- Graphic LCD shows real-time readings, data summary, graph and current status
- User set audible alarm
- Highly visible confidence/alarm LEDs
- Supplied with user replaceable ½ AA batteries

This standalone USB data logger measures and stores over 250,000 temperature readings from two high accuracy thermistor probes over a -40 to +125°C (-40 to +257°C) range at a resolution of 0.1℃.

Using the Windows control software (available as a free download from www.easylogusb.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 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.

The data logger is supplied with two replaceable ½AA batteries.

Specifications	Minimum	Typical	Maximum	Unit
Supplied probe measurement range	-40 (-40)		+125 (+257)	°C (°F)
Internal resolution		0.1 (0.2)		°C (°F)
Accuracy (logger error)		±0.1 (±0.2)*		°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		4**		Months

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

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

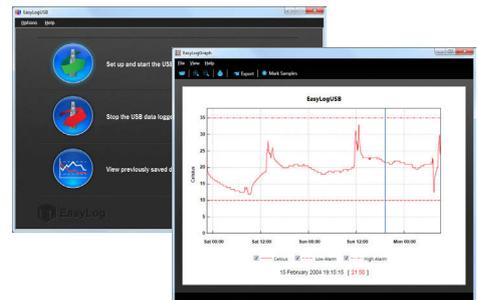**EL** **EasyLog**

LASCAR electronics

EL-GFX-DTP+
Dual Channel High Accuracy Temperature Probe Data Logger with Graphic Screen

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, 7 & 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 (ºC or ºF)
- 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

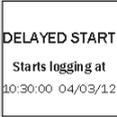The latest version of the control software may be downloaded free of charge from **www.easylogusb.com**

DIMENSIONS
All dimensions in mm (inches)

101.0 (3.98)

48.5 (1.91)

30.5 (1.20)

EasyLog

LASCAR electronics

EL-GFX-DTP+
Dual Channel High Accuracy Temperature Probe Data Logger with Graphic Screen

MENU BUTTON FUNCTIONS AND LED SCREEN INDICATION

START LOGGER
- Loggers can be started immediately on a button press, delayed to a specific time or delayed to specific temperature reading

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
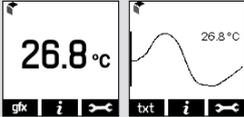
DISPLAY DATA
26.8 °C gfx i ✂ | 26.8°C txt i ✂
- Data can be displayed on screen in tabular or graphical format
- You can switch between these views by pressing the **gfx** / **txt** buttons at the bottom-left of your screen

ON-SCREEN ICONS
- When this EasyLog cube is spinning in the top-left corner your logger is logging

↑ ALARM / ↓ ALARM
- 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

◉ Stop Logging ○ Logger Settings ↵ ▼ ✓

◉ Start Logging ○ Logger Settings ↵ ▼ ✓

◉ Mute Alarm ○ Stop Logging ○ Logger Settings ↵ ▼ ✓

- 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

Temperature Max 34.8°C Min 22.8°C **Since** 10:30 24/09/2012 ▼ reset
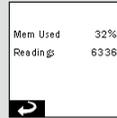
Mem Used 32% Readings 6336 ↵

- Summary screen displays max/min log and last log. Reset function clears summary if required
- These screens can be reached by pressing the **i** button

LOCKED MODE
🔒 **Locked Mode** gfx i ✂
- 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

○ Start Logging ◉ Logger Settings ↵ ▼ ✓

EasyLog USB Sample Rate 10s Low Alm 10°C High Alm 40°C S/N 000000001 ↵

- To view a summary of the logger's settings press the ✂ button, then click 'Logger Settings'

POP-UP MESSAGES

Time & date not set Start unit logging using PC gfx i ✂

Memory is 90% full Download data to a PC to clear gfx i ✂

Memory full, logger stopped Download data to a PC to clear gfx i ✂

- 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. 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 EL-GFX-DTP+ 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-DTP+ 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-DTP+ 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 EasyLog 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.

EasyLog

LASCAR electronics

EL-GFX-DTP+
Dual Channel High Accuracy Temperature Probe Data Logger with Graphic Screen
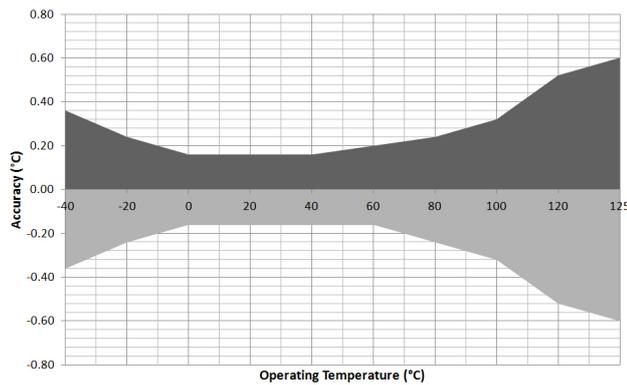
THERMISTOR PROBE

The probes supplied with the EL-GFX-DTP+ use a precision thermistor to sense the temperature. Alternative lengths and probe options are available.

Alternatively, the probe length may be extended by the use of a suitable extension cable. We recommend twisted pair with high quality 3.5mm jack socket/plugs for best results.

Note: The thermistor is externally isolated from the probe tip.

The available options are listed online at **www.lascarelectronics.com**

PROBE MEASUREMENT ACCURACY

Supplied 'Type A' Thermistor Probe
Part number: EL-PROBEA-3.0M-TP+

EL EasyLog

LASCAR electronics