

EL-GFX-DTP

Dual Channel Temperature Probe Data Logger with Graphic Screen

ORDERING INFORMATION

Standard Data Logger (Data Logger, 2 x Batteries, USB cover, Mounting Clip, 2 x 1m Thermistor probes, Micro USB cable)	EL-GFX-DTP
Replacement Battery (2 Required)	BAT 3V6 ½AA

Visit www.lascarelectronics.com for all available Thermistor probes and extension cables

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 1.0m type 2 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 thermistor probes over a -40 to +125 °C (-40 to +257 °C) range at a resolution of 0.1°C.

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-GFX-DTP

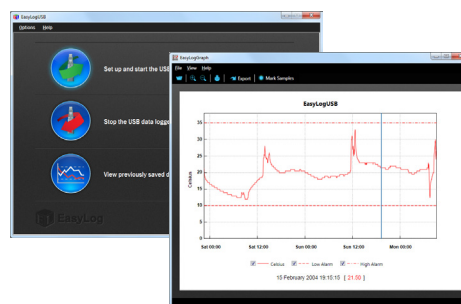
Dual Channel Thermistor Probe Data Logger with Graphic Screen

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 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


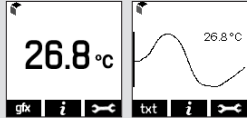







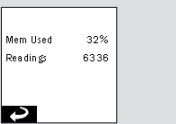

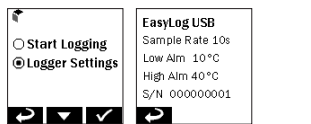



All dimensions in mm (inches)



EL-GFX-DTP

Dual Channel Thermistor Probe Data Logger with Graphic Screen

MENU BUTTON FUNCTIONS AND LED SCREEN INDICATION

<p>ARMED! Press button to start logging</p> 	<p>DELAYED START Starts logging at 10:30:00 04/03/12</p>	<p>DELAYED START Starts logging when temperature above 36.2°C</p>	<p>START LOGGER</p> <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 		<p>DISPLAY DATA</p> <ul style="list-style-type: none"> 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 	
<p>ON-SCREEN ICONS</p>    <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 			<p>STOP/START LOGGING & MUTE ALARM</p>    <ul style="list-style-type: none"> By pressing the stop 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 			
<p>Temperature Max 34.8°C Min 22.8°C Since 10:30 24/09/2012</p> 	<p>Mem Used 32% Readings 6336</p> 	<p>SUMMARY DATA</p> <ul style="list-style-type: none"> 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 			<p>Locked Mode</p> 	<p>LOCKED MODE</p> <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
<p>EasyLog USB Sample Rate 10s Low Alm 10°C High Alm 40°C S/N 000000001</p> 		<p>LOGGER SETTINGS</p> <ul style="list-style-type: none"> To view a summary of the logger's settings press the stop button, then click 'Logger Settings' 			<p>Time & date not set Start unit logging using PC</p> 	<p>Memory is 90% full Download data to a PC to clear</p>  <p>Memory full, logger stopped Download data to a PC to clear</p> 

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 1/2AA 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.

EL-GFX-DTP

Dual Channel Thermistor Probe Data Logger with Graphic Screen

THERMISTOR PROBE

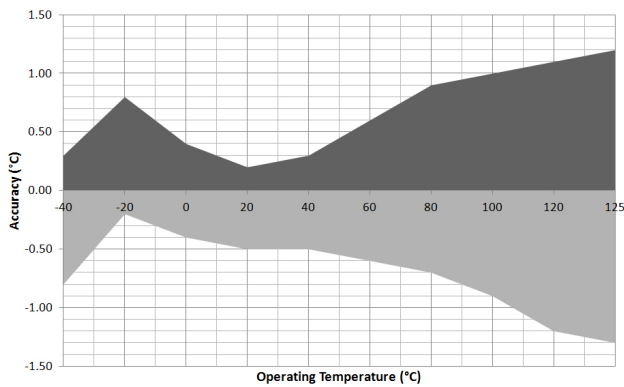
The probes supplied with the EL-GFX-DTP uses a precision thermistor to sense the temperature. Alternative lengths and probe options are available.

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.

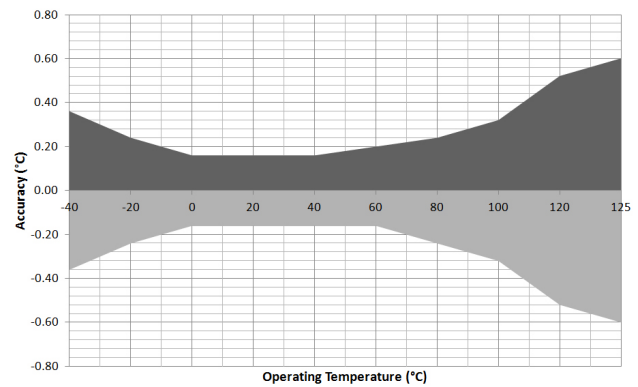
Note: The thermistor is externally isolated from the probe tip.

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

PROBE MEASUREMENT ACCURACY



Supplied 'Type 2' Thermistor Probe
Part number: EL-PROBE2-1.0M-TP



'Type A' Thermistor Probe - sold separately.
See www.lascarelectronics.com

Module House
Whiteparish, Salisbury
Wiltshire SP5 2SJ
UK
T +44 (1794) 884567
F +44 (1794) 884616
E sales@lascar.co.uk

4258 West 12th Street
Erie
PA 16505
USA
T +1 (814) 835 0621
F +1 (814) 838 8141
E us-sales@lascarelectronics.com

8th Floor, China Aerospace Centre
143 Hoi Bun Road
Kwun Tong, Kowloon
HONG KONG
T +852 2797 3219
F +852 2343 6187
E saleshk@lascar.com.hk



www.lascarelectronics.com

