EL-USB-1-PRO

Temperature Data Logger with Extended Range

- -40 to +125°C (-40 to +257°F) measurement range
- Stores over 32,000 readings
- EasyLog software available as a free download
- Stainless steel (316 grade) case
- Logging rates between 1 second and 12 hours
- Immediate and delayed logging start
- User-programmable alarm thresholds
- Environmental protection to IP67



This standalone data logger measures and stores more than 32,000 temperature readings over a -40 to +125°C (-40 to +257°F) range with a resolution of 0.1°C (0.2°F).

The stainless steel 316 assembly provides protection from corrosion, impact and water ingress to IP67/NEMA 4X.

The user can easily set up the logger and view downloaded data by plugging the data logger into a PC's USB port and using the free EasyLog software. Data can then be graphed, printed and exported to other applications for detailed analysis.

The data logger is supplied with a lithium metal battery which gives two year's logging life (see specifications table below).

EASYLOG SOFTWARE

Lascar's EasyLog control software is available as a free download from www.easylogusb.com. Easy to install and use, the control software is compatible with 32-bit and 64-bit versions of Windows 7, 8 & 10. The software is used to set up the logger, download, graph and annotate data or export in Excel, PDF and jpeg formats.



The software allows the following parameters to be configured:

- Logger name
- Measurement parameter (°C or °F)
- Logging rate (user selectable between 1 second and 12 hours)
- High and low alarms
- Immediate and delayed logging start

Download the latest version of the software free of charge from www.easylogusb.com

SPECIFICATIONS

Measurement range	-40 to +125°C (-40 to +257°F)
Internal resolution	0.1°C (0.2°F)
Accuracy (overall error)	±0.2°C (±0.4°F) (see page 2)
Logging rate	User selectable between 1 second & 12 hours
Operating temperature range	-40 to +125°C (-40 to +257°F)
Battery Life	2 years (at 80°C and 10 second logging rate)
Readings	32,510
Dimensions	110 x 18mm (4.33 x 0.70")

ACCESSORIES

BAT 3V6 2/3AA	Replacement battery
EL-DataPad	Handheld data logger programmer & collector

INCLUDED IN THE BOX

BAT 3V6 2/3AA	Battery

CALIBRATION CERTIFICATES NOW AVAILABLE

Lascar now offers a Traceable Calibration Certificate Service on Temperature Data Loggers. Using reference equipment which has been calibrated by a UKAS/NIST accredited laboratory and using apparatus traceable to national or international standards. For more information, please see **www.lascarelectronics.com**.

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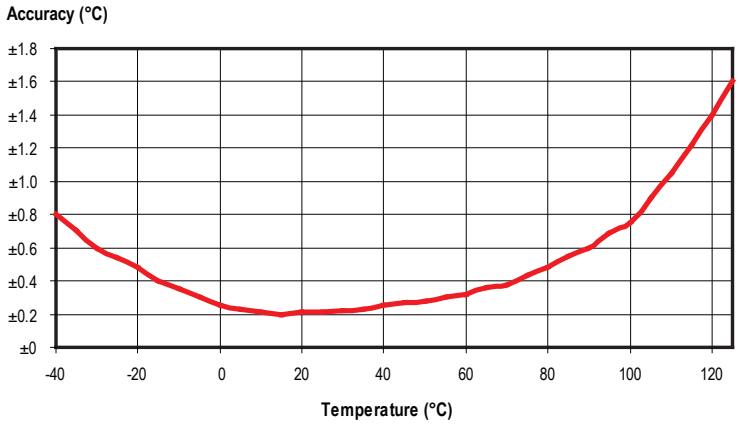
SENSOR ACCURACY & INFORMATION

Typical tolerance for temperature sensor in °C.



BATTERY INFORMATION

Replacement

We recommend that you replace the battery annually, or prior to logging critical data. Only use 3.6V ⅔AA lithium metal batteries. The data logger does not lose its stored readings when the battery is discharged or replaced; however, the data logging process will stop and will not resume until the battery is replaced and the logger restarted by EasyLog software or an EL-DataPad.

Only use an EL-USB-1-PRO battery that is supplied or recommended by Lascar, which is rated for use in high temperatures and has the correct battery terminals. Using non-recommended batteries may result in fire or explosion at high temperatures. Suitable batteries are: Tadiran TLH-5955/S and Tadiran SL-561/S.

Please note that leaving the data logger plugged into the USB port for extended periods will cause some of the battery capacity to be lost.

Passivation

If left unused for extended periods of time the lithium metal batteries, including those 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.

WARNING

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

ADVISORY INFORMATION

Due to the weight of the EL-USB-1-PRO, a USB extension cable is recommended for connection to the USB port of the PC to reduce strain on the USB connection.