# EL-USB-1
# Temperature Data Logger
# with USB Interface

## FEATURES

- -35 to +80°C (-31 to +176°F) measurement range
- USB interface for set-up and data download
- User-programmable alarm thresholds
- Status indication via red, green and orange LEDs
- Supplied with replaceable internal lithium battery and Windows control software
- Environmental protection to IP67

This standalone data logger measures and stores up to 16,382 temperature readings over a -35 to +80°C (-31 to +176°F) range. The user can easily set up the logging rate and start-time, and download the stored data by plugging the data logger into a PC's USB port and running the purpose designed software under Windows 2000, XP and Vista (32-bit). Data can then be graphed, printed and exported to other applications. The data logger is supplied complete with a long-life lithium battery which can typically allow logging for 1 year. Correct functioning of the unit is indicated by flashing red, green and orange LEDs. The data logger is protected against moisture to IP67 standard when the protective cap is fitted.

| Specifications | Minimum | Typical | Maximum | Unit |
|---|---|---|---|---|
| Measurement range | -35 (31) | | +80 (+176) | °C (°F) |
| Internal resolution | | 0.5 (1) | | °C (°F) |
| Accuracy (overall error) | | ±1 (±2) | | °C (°F) |
| Logging rate | every 10s | | every 12hr | - |
| Operating temperature range | -35 (-31) | | +80 (+176) | °C (°F) |
| 1/2AA 3.6V Lithium Battery Life | | 1* | | Year |

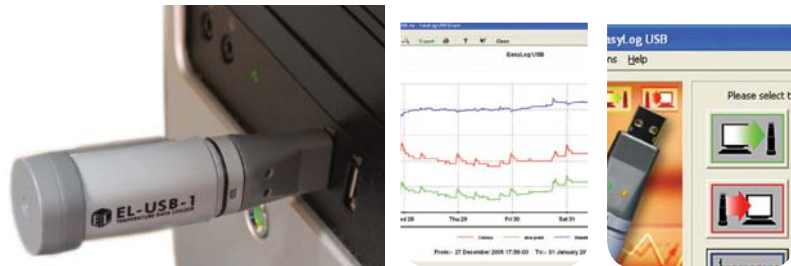\* At 25°C and 1 m logging rate.

## EL-WIN-USB (CONTROL SOFTWARE)

Lascar's EasyLog USB control software is supplied free of charge with each data logger. Easy to install and use, the control software runs under Windows 2000, XP, Vista & 7. The software is used to set-up the data logger as well as download, graph and export data to Excel.

The software allows the following parameters to be configured:

- Logger name (up to 16 characters)
- °C or °F
- Logging Rate (10s, 1m, 5m, 30m, 1hr, 6hr, 12hr)
- High and low alarm levels
- Start date and time

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

# EL-USB-1
## Temperature Data Logger with USB Interface

### LED FLASHING MODES

EL-USB-1 features 2 LEDs.
- The first LED flashes green or red to indicate alarm level status.
- The second LED flashes orange to indicate a problem condition on the EL-USB-1.

It will flash red when the logged temperature has exceeded a Low or High alarm level. By default hold is disabled. In this mode the red LED will no longer continue to flash after the logged temperature has returned to normal from an alarm condition.

Hold can be turned on via the control software. In this mode the red LED that indicates an alarm condition will continue to flash, even after the logged temperature has returned to normal. The red LED will effectively have latched into its alarm condition. This feature ensures that the user is notified that an alarm level has been exceeded, without the need to download the data from the logger.

Red/Green LED    Orange LED

**Green double flash**
The data logger is not currently logging, but is primed to start at a later date and time (delayed start).

**Green single flash**
The data logger is currently logging. No alarm.

**Green and Orange single flash**
The data logger is full and has stopped logging. No alarm.

**Red single flash**
The data logger is currently logging. Low alarm.

**Red and Orange single flash**
The data logger is full and has stopped logging. Low alarm.

**Red double flash**
The data logger is currently logging. High alarm.

**Red and Orange double flash**
The data logger is full and has stopped logging. High alarm.

**Orange single flash**
The battery is running low as its voltage has dropped below 3.3V. Data logging will continue until the battery voltage drops below 2.8V.

**No LEDs flash**
The data logger is stopped, the battery is empty or there is no battery

# EL-USB-1
## Temperature Data Logger with USB Interface

## DIMENSIONS

All dimensions in mm (inches)

Internal Temperature Sensor Location

26.8 (1.05)

26.0 (1.02)

98.0 (3.86)

## BATTERY REPLACEMENT

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

The EL-USB-1 does not lose its stored readings when the battery is discharged or when the battery is replaced; however, the data logging process will be stopped and cannot be re-started until the battery has been replaced and the logged data has been downloaded to a PC.

Only use 3.6V 1/2AA lithium batteries. Check with your supplier that the battery you are ordering is 'press fit' and is not fitted with solder tags. Before replacing the battery, remove the EL-USB-1 from the PC.

**Note:**
Leaving the EL-USB-1 plugged into the USB port for longer than necessary will cause some of the battery capacity to be lost.

## WARNING

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

# EL-USB-1
## Temperature Data Logger with USB Interface

### THE EASYLOG USB RANGE

Each EL-USB data logger features the direct-to-USB connection and easy-to-use functionality that the range is known for. The range comprises 14 data loggers as detailed in the following table:

| Part No | Function | Range | Accuracy (overall error) Typ. | Max. | Readings | Battery | Battery Life* |
|---|---|---|---|---|---|---|---|
| EL-USB-1 | Temperature | -35 to +80°C (-31 to +176°F) | ±1°C (±2°F) | | 16,382 | 3.6V ½AA | 1 Year |
| EL-USB-1-PRO | High Temperature | -40 to +125°C (-40 to +257°F) | ±0.2°C (±0.4°F) | ±0.5°C (±1°F) | 32,510 | 3.6V ⅔AA | 3 years |
| EL-USB-1-RCG | Temperature with rechargeable battery | -20 to +60°C (-4 to +140°F) | ±1°C (±2°F) | | 32,510 | Lithium Ion | 1 month (rechargeable) |
| EL-USB-2 | Temperature, humidity & dew point | -35 to +80°C (-31 to +176°F) / 0 to 100%RH | ±0.5°C (±1°F) / ±3%RH | ±2°C (±4°F) / ±6.0%RH | 16,382 | 3.6V ½AA | 1 year |
| EL-USB-2+ | Increased accuracy temperature, humidity & dew point | -35 to +80°C (-31 to +176°F) / 0 to 100%RH | ±0.3°C (±0.6°F) / ±2.0%RH | ±1.5°C (±3°F) / ±4.0%RH | 16,382 | 3.6V ½AA | 1 year |
| EL-USB-2-LCD | Temperature, humidity & dew point with LCD | -35 to +80°C (-31 to +176°F) / 0 to 100%RH | ±0.5°C (±1°F) / ±3.0%RH | ±2°C (±4°F) / ±6.0%RH | 16,379 | 3.6V ½AA | 1 year |
| EL-USB-2-LCD+ | Increased accuracy temperature, humidity & dew point with LCD | -35 to +80°C (-31 to +176°F) / 0 to 100%RH | ±0.3°C (±0.6°F) / ±2.0%RH | ±1.5°C (±3°F) / ±4.0%RH | 16,379 | 3.6V ½AA | 1 year |
| EL-USB-3 | Voltage | 0 to 30V d.c. | ±1% | | 32,510 | 3.6V ½AA | 1 year |
| EL-USB-4 | Current loop | 4 to 20mA | ±1% | | 32,510 | 3.6V ½AA | 1 year |
| EL-USB-5 | Counter, Event & State | N/A | | ±3 secs/24 hrs | 32,510 | 3.6V ½AA | 1 year |
| EL-USB-TC | Thermocouple (J, K and T-type) K-type probe included | -200 to +1350°C (-328 to +2462°F) (K-type) / -200 to +1190°C (-328 to +2174°F) (J-type) / -200 to +390°C (-328 to +734°F) (T-type) | ±1°C (±2°F) | | 32,510 | 3.6V ½AA | 6 months |
| EL-USB-TC-LCD | Thermocouple with LCD (J, K and T-type) K-type probe included | -200 to +1350°C (-328 to +2462°F) (K-type) / -200 to +1190°C (-328 to +2174°F) (J-type) / -200 to +390°C (-328 to +734°F) (T-type) | ±1°C (±2°F) | | 32,510 | 3.6V ½AA | 6 months |
| EL-USB-CO | Carbon monoxide | 0 to 1000ppm **NOT A LIFE SAVING DEVICE** | ±6ppm | | 32,510 | 3.6V ½AA | 3 months |
| EL-USB-CO300 | Carbon monoxide | 0 to 300ppm **NOT A LIFE SAVING DEVICE** | ±4ppm | | 32,510 | 3.6V ½AA | 3 months |
| EL-USB-LITE | Low cost temperature | -10°C to +50°C (+14 to +122°F) | ±1°C (±2°F) | | 4,080 | CR1620 Lithium coin cell | 1 month |
| EL-USB-RT | Real-time temperature & humidity monitor | -20 to +70°C (-4 to +158°F) | ±1.5°C (±3°F) / ±4.5%RH | | 7 days | N/A | N/A |

*Depending on logging rate, ambient temperature, and use of alarm LED

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

**EasyLog**  www.lascarelectronics.com  **LASCAR electronics**

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for* Data Logging & Acquisition *category:*

*Click to view products by* Electronic Assembly *manufacturer:*

Other Similar products are found below :

PCI-6208A  DAQe-2502  ACL-8112DG  SpotBotBLE  MCM-204  DAQM909A  ACL-7130  PXES-2780 Rack-Mount kit  USB-4761-BE  SE028  USB-4702-AE  USB-4704-AE  USB-4716-AE  USB-4750-BE  USB-4751-AE  USB-4751L-AE  PCI-1710UL-DE  PCI-1710U-DE  PCI-1710HGU-DE  AR207/8/S1/PPPP/IP30  U2781A  4610  EL-USB-5  AR207/8/S2/PPPP/IP30  ACL-8112PG  cPCI-7248  cPCI-7433  DAQ-2204  DAQ-2208  ND-6024  ND-6053  ND-6060  ND-6063  PCI-7230  PCI-7432  PCI-7442  PCI-9112  PCI-9112A  PCI-9113A  PCI-9221  PCM-7248+  USB-1902  USB-1903  USB-2401  MIC-1810-U0A1E  PCIE-1802L-AE  PCIE-1813-AE  USB-5862-AE  DAS50  DAS30