



Data Logging Solutions from Lascar Electronics



# EasyLog® USB



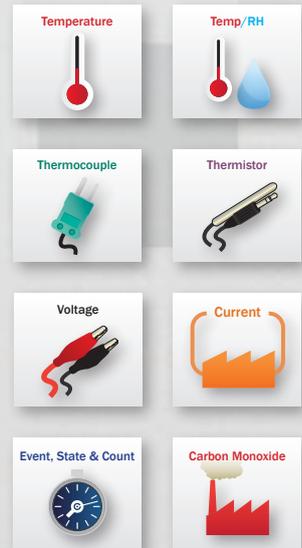
## Simple, Low-Cost Data Logging

Each standalone USB data logger fulfils a specific logging function including the monitoring of temperature, humidity, voltage, current, 4-20mA, event/count/state or carbon monoxide over a period of time.

The EasyLog® USB data loggers connect directly into a USB port of a PC. The Windows software for set up and data download is both streamlined and easy to use; users can change the logger name, sample rate, alarm levels and start mode before recording. After data has been collected it can be graphed or exported to Excel for further analysis.

Each data logger is supplied with a battery and features red/green LEDs to indicate data logging status. Some models include an LCD and push-button to show the most recent, maximum and minimum readings whilst logging. Most temperature and temperature & humidity data loggers also provide waterproof protection for outdoor use.

### In this range:



Products shown:  
EL-USB-2-LCD, EL-USB-1  
EL-USB-1-PRO, EL-DataPad

## EL-DataPad

### Handheld Data Collector & Programmer

Designed to work with temperature, humidity and thermocouple USB data loggers this touch-screen device allows users to download data and analyse the results in the field as well as setting up and restarting data loggers.

The EL-DataPad has capacity for data from more than 500 full logging sessions and can be connected to a PC via a micro-USB cable, allowing the saved data to be graphed in the software. The EL-DataPad also gives users with Mac or Linux operating systems a means of employing EasyLog USB data logger solutions.

### EL-USB-2

Temperature & Relative Humidity  
USB Data Logger



Temp/RH



-35 to +80°C &  
0 to 100% RH range

+ High Accuracy available

- Supplied with wall-mounting clip
- Low-cost for volume applications
- Data exported to Excel for further analysis

## Application Focus

### Social Housing - EL-USB-2

The EL-USB-2 temperature and humidity data logger is commonly used as a means of determining whether damp problems in social housing are caused by the tenant's lifestyle or are related to the fabric of the building.

A data logger is placed in each room where signs of damp have been observed on the walls. Sudden peaks in humidity tend to indicate tenant activity whilst consistently high humidity, when compared to outside conditions, indicate that damp problems are structural.



# EasyLog® GFX

## Advanced Data Logging



The EasyLog® GFX range brings a more advanced feature set to the monitoring of temperature and humidity, or temperature only using an internal sensor or external probes.

The GFX range of data loggers features an increased memory capacity (250,000 readings per channel) and 0.1 digit resolution across all parameters, as well as a graphics display which shows real-time trend graphs and data summaries. A menu provides the capability for users to start, stop and restart the data logger in the field.

Connecting to the PC via a micro-USB cable, the EasyLog® GFX range uses the EL-WIN-USB software for set up and download with additional functions including conditional start mode, delayed alarm function and probe calibration.

The range includes dual-channel data loggers, for reduced cost per channel.

### In this range:



Products shown:  
EL-GFX-1, EL-GFX-2,  
EL-GFX-DTC, EL-GFX-DTP

## Glycol Probes



These glycol-filled probes are designed to provide a buffered response to changes in temperature. This helps to simulate the thermal lag experienced by products stored in the monitored environment.

Glycol probes are available for all thermocouple and thermistor probe temperature data loggers.

### EL-GFX-DTC

Dual Channel Thermocouple Data Logger with Graphic Screen



-200 to +1350°C  
(J, K & T-type)

- Monitor two fridges with one data logger
- Glycol probe accurately simulates vaccine temperature
- Reset Max/Min used as inspection point

## Application Focus

### Vaccine Monitoring - EL-GFX-DTC

The EL-GFX-DTC dual-thermocouple data logger is used in conjunction with specially designed glycol filled probes to monitor up to two medical fridges which are used for the storage of vaccines.

Regulations state that vaccines must be stored at between 2 and 8°C at each stage of the supply chain, with temperatures above or below these levels rendering the vaccines unusable. The EL-GFX-DTC provides a verifiable record of the temperatures experienced by the vaccines whilst stored in the environment being monitored.



# WiFi Sensors

## Wireless Data Logging



The WiFi range of temperature data loggers provides the capability to remotely monitor an environment. Data is uploaded periodically using a standard WiFi network without the need to physically collect and connect the units.

Each unit features a rechargeable battery or can be permanently powered by mains. The large LCD on the face of the product provides an up-to-date reading, whilst the button cycles through the maximum and minimum readings.

The range includes data loggers for monitoring internal temperature, humidity, thermocouple temperature and thermistor probe temperature.

In this range:



Products shown:  
EL-WiFi-TP, EL-WiFi-TH  
EL-WiFi-TC, EL-WiFi-WIN

## WiFi Communication Software

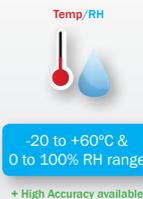


Users can interface with their data loggers via a local PC, using Lascar's free WiFi software, or by subscribing to the cloud-based data hosting service\* which allows access to data from any internet enabled device such as tablets, smartphones and computers.

Both interfaces provide access to the stored data and real-time alerts of alarm conditions; users can also remotely change sample rates, scales and alert settings. The cloud based service adds email alerts for both alarm conditions and power outages.

\* Available late 2013

### EL-WiFi-TH WiFi Temperature & Humidity Data Logging Sensor



+ High Accuracy available

- Uses existing WiFi infrastructure
- Up to 255 data loggers on one network
- Real-time alerts for high/low alarms

## Application Focus

### Warehouse Monitoring - EL-WiFi-TH

A number of EL-WiFi-TH data loggers are fixed in key locations throughout a warehouse to provide the manager with remote monitoring of temperature and humidity on a Windows PC.

As well as providing real-time alerts the data is permanently saved to provide evidence that goods stored in the environment have been kept within the correct parameters.



# EL-WIN-USB

## Intuitive, Powerful & Free Windows Control Software

Lascar's free data logging control software provides an intuitive and easy-to-use interface for communicating with the EasyLog® USB and GFX data logger ranges.

Compatible with all Windows 8, 7, Vista and XP PC's the software uses a wizard format to guide users through the set up and download processes.

The software includes a powerful graphing module for analysing the downloaded data. It is also possible to export the data to Microsoft Excel, PDF and jpeg formats.



## Applications

### Storage & Logistics

A number of USB data loggers are small enough to be placed alongside or within goods as they move through a supply chain. This provides a means of producing a temperature record from manufacture, through storage, into transportation and finally on to the end user.

### Refrigeration

With both food and medicine, it is increasingly important for manufacturers, suppliers and end users to have verifiable evidence that correct storage conditions have been provided from the moment of manufacture to the time that the goods are used. Lascar's data loggers can provide a permanent record to show that these conditions have been correctly maintained.



### Working Environment

Sub-optimal conditions in a working environment can significantly affect productivity levels. EasyLog data loggers provide an unobtrusive means of determining where problems in a building are likely to occur.



### Museums & Preservation

Exposure to extremes of temperature or humidity can cause textiles, canvas and wood to quickly deteriorate. To support the preservation of exhibits EasyLog data loggers provide a record of these environmental factors over a period of time, helping to identify potential problems before damage occurs.

### Industrial Processes

Many industrial sensors output an analogue voltage, 4-20mA loop, or volt-free contact to provide information about a particular process. Lascar's voltage, current, 4-20mA and event/count/state loggers can be used to record this output over a period of time to ensure correct operation has occurred.

## Calibration

Every data logger includes a warranty that it will perform to specification. However, some regulations require accompanying test certificates confirming that the data loggers are within calibration. Lascar can provide UKAS traceable certificates with any temperature, humidity, thermocouple or thermistor data logger.



## EL-USB Range

**EL-USB-1**  
Temperature Data Logger  
Temperature  
-35 to +80°C range

**EL-USB-1-PRO**  
Industrial Temperature Data Logger  
Temperature  
-40 to +125°C range

**EL-USB-2**  
Temperature & Relative Humidity Data Logger  
Temp/RH  
-35 to +80°C & 0 to 100% RH range  
+ High Accuracy available

**EL-USB-3**  
Voltage Data Logger  
Voltage  
0 to 30V d.c. range

**EL-USB-5**  
Event, Count & State Data Logger  
Event, State & Count  
Up to 100Hz

**EL-USB-TC**  
Thermocouple Data Logger  
Thermocouple  
-200 to +1350°C (J, K & T-type)

**EL-USB-TP-LCD**  
Thermistor Probe Data Logger with LCD  
Thermistor  
-40 to +125°C  
+ High Accuracy available

**EL-USB-1-LCD**  
Temperature Data Logger with LCD  
Temperature  
-35 to +80°C range

**EL-USB-1-RCG**  
Temperature Data Logger with Rechargeable Battery  
Temperature  
-20 to +80°C range

**EL-USB-2-LCD**  
Temperature & Relative Humidity Data Logger with LCD  
Temp/RH  
-35 to +80°C & 0 to 100% RH range  
+ High Accuracy available

**EL-USB-4**  
4 - 20mA Data Logger  
Current  
4 - 20mA range

**EL-USB-CO**  
Carbon Monoxide Data Logger  
Carbon Monoxide  
0 to 300ppm & 0 to 1000ppm range

**EL-USB-TC-LCD**  
Thermocouple Data Logger with LCD  
Thermocouple  
-200 to +1350°C (J, K & T-type)

**EL-USB-ACT**  
AC and DC Millivolt Data Logger with Current Clamp Input  
Current  
0-707mV a.c. & ±100mV d.c.

## EL-GFX Range

**EL-GFX-1**  
Temperature Data Logger with Graphic Screen  
Temperature  
-30 to +80°C range

**EL-GFX-2**  
Temp & RH Data Logger with Graphic Screen  
Temp/RH  
-30 to +80°C & 0 to 100% RH range

**EL-GFX-DTC**  
Dual Channel Thermocouple Data Logger with Graphic Screen  
Thermocouple X2  
-200 to +1350°C (J, K & T-type)

**EL-GFX-DTP**  
Dual Channel Thermistor Probe Data Logger with Graphic Screen  
Thermistor X2  
-40 to +125°C  
+ High Accuracy available

## EL-WiFi Range

**EL-WiFi-T**  
WiFi Temperature Data Logging Sensor  
Temperature  
-20 to +60°C range  
+ High Accuracy available

**EL-WiFi-TH**  
WiFi Temperature & Humidity Data Logging Sensor  
Temp/RH  
-20 to +60°C & 0 to 100% RH range  
+ High Accuracy available

**EL-WiFi-TC**  
WiFi Thermocouple Data Logging Sensor  
Thermocouple  
-270 to +1300°C (J, K, N & T-type)  
+ High Accuracy available

**EL-WiFi-TP**  
WiFi Thermistor Probe Data Logging Sensor  
Thermistor  
-40 to +125°C  
+ High Accuracy available

## Accessories

**EL-DataPad**  
Handheld Programmer and Data Collector for EL-USB Data Loggers

**TP Glycol Probe**  
NTC Thermistor Probe in Glycol Solution

**TC Glycol Probe**  
K-type Thermocouple Probe in Glycol Solution

**Calibration Certificates**  
UKAS-Traceable Test Certificates for EasyLog® Data Loggers

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