



Data Logging Solutions



Remote Monitoring



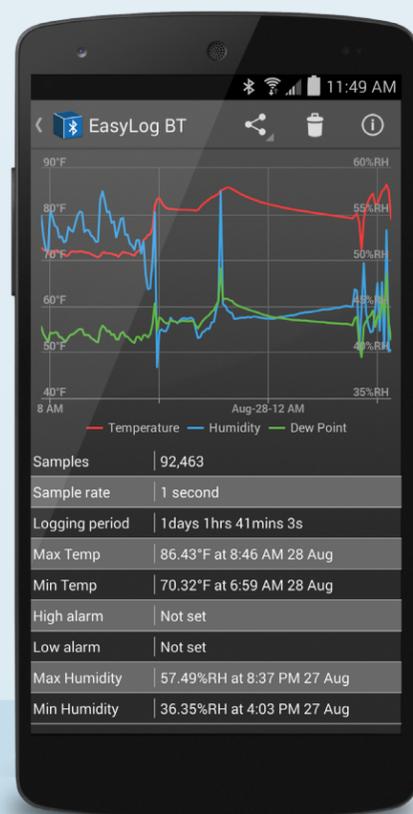
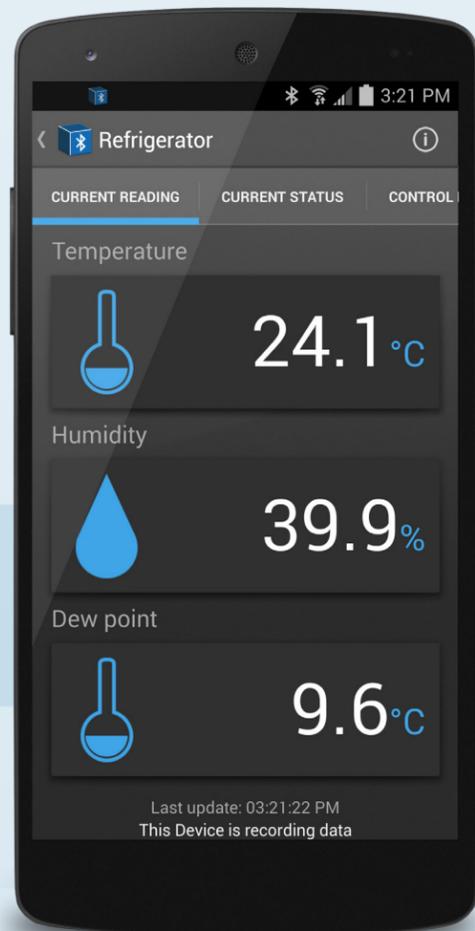
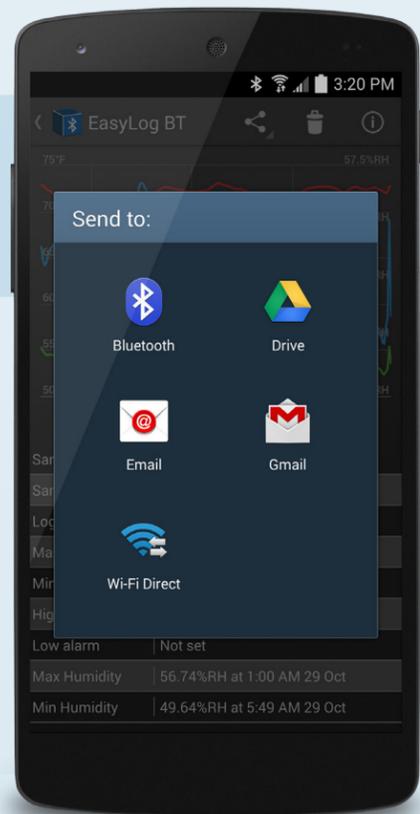
EL-BT-2



Bluetooth Temperature and Humidity Data Logging

The EL-BT-2 data logger measures and stores over half a million temperature and humidity readings. The user can easily set up the logger and view downloaded data remotely on any suitable Android device via Bluetooth connection. Downloaded data can then be saved, uploaded or emailed. The LCD screen on the device indicates Bluetooth connection status as well as logger operation. The push button allows cycling of current, minimum and maximum recorded values. The EL-BT-2 comes with rechargeable battery or can be used with a USB wall charger.

EL-BT-2 Android App



WiFi Sensors

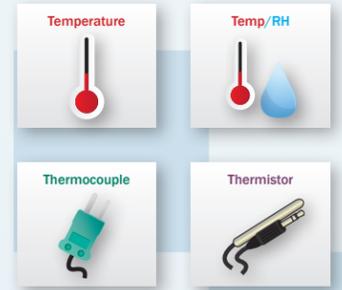


The EL-WiFi range of temperature and humidity data loggers provides the capability to remotely monitor an environment. Data is uploaded periodically using a standard WiFi network without the need to physically collect and connect the units to a PC.

Each sensor features a rechargeable battery or can be permanently powered using a USB wall adapter. The large LCD on the face of the product provides an up-to-date reading, while the button cycles through the maximum and minimum readings.

The range includes data loggers for monitoring temperature, humidity, thermocouple and thermistor probes and is available in single and dual channel format.

In this range:



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 FilesThruTheAir™ Cloud-based data hosting service which allows access to data from any internet enabled device such as tablet, smartphone or computer.

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.



Cloud Monitoring



FilesThruTheAir™ Cloud service takes Lascar's WiFi sensors to a new level, unlocking them from the PC and allowing them to be managed and monitored over the internet from any location in the world.

Learn to Fly in 3 Easy Steps

1. Buy a Lascar WiFi sensor.
2. Visit www.easylogcloud.com to download WiFi sensor software onto your PC and sign up for a Cloud account. Choose from one of three options:



Basic

- 45 days of data storage
- 100 email alerts/month
- 2 devices max

Personal

- Unlimited data storage
- Unlimited email alerts
- Multi-format data export
- Report printing

Professional

- Unlimited data storage
- Unlimited email alerts
- Multi-format data export
- Report printing
- Multiple locations
- Multiple users
- Administration panel
- Device audit trail

3. View sensors from any internet enabled device, anywhere in the world. Receive instant email alerts when alarms are breached.

Features at a Glance

- View Anywhere** Change settings or view data from any sensor on any web-enabled device including smartphone, tablet or computer.
- Alerts** Receive email alerts if required on breaches in temperature and humidity levels, low battery warnings, AC mains disconnection or probe malfunction.
- Storage** Cloud-based storage means data is protected, secure and limitless.
- Multiple Sites** Link sensors from multiple sites in one account.
- Multiple Users** Allow multiple users Cloud access. Determine which users have access to which data and assign account privileges.



Features dependent on account type.

FilesThruTheAir Android & iOS Apps

With the new easy to use FilesThruTheAir™ Apps for Android and iOS platforms, monitor and manage WiFi sensors on the go. Free to download, the new app includes features such as:

- Quick overview of any loggers in alarm
- Ability to change devices settings on the go
- Favorites tab for a quick view of the most vital sensors
- View graphs and data
- View and close events



EL-WiFi-Alert Audible and Visual Alarm

The WiFi-Alert receives alarm messages from any WiFi sensor connected to the same wireless network. An email, text or on-screen alarm may not be enough. The WiFi-Alert indicates an alarm activation by flashing a strong, red light under its translucent plastic housing and emitting one of 9 alarm tones.



Standalone Data Logging

EasyLog® USB



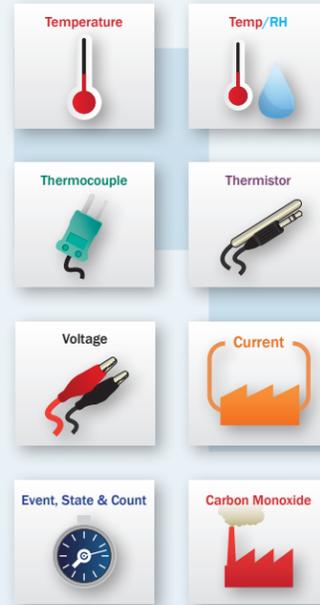
Simple, Low-Cost Data Logging

Lascar's standalone USB data loggers measure a number of parameters including temperature, humidity, voltage, current, 4-20mA, event/count/state and carbon monoxide over a period of time.

EasyLog® USB data loggers connect directly into the USB port of a PC or Laptop. The free Windows software for set-up and data download is both streamlined and easy to use. Choose a logger name, sample rate, alarm levels and start mode before recording. After data has been collected, it can be graphed or exported to Excel, PDF, graph, data or summary report 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 while logging. Most temperature and temperature & humidity data loggers also provide waterproof protection for outdoor use.

In this range:



EL-DataPad

Handheld Data Collector & Programmer

Designed to work with temperature, humidity, thermocouple and thermistor USB data loggers, this touch-screen device allows users to download data and analyze 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 to download data at a later time. The EL-DataPad also gives users with Mac or Linux operating systems a means of employing EasyLog® USB data loggers without the need for PC set-up and download.

EL-DataPad



EL-EnviroPad-TC

Thermometer with Inbuilt Data Logging & Graphing

The EL-EnviroPad-TC is a robust and easy to use handheld device which takes and records temperature readings via the attached K-type probe. A large touch-screen, color display indicates temperature, maximum and minimum readings and will produce a graph of the data. The unit has three modes: **Data Logging**, when it can be set up and left to take temperature readings at pre-determined intervals for a desired length of time. **Spot Measurement**, when it can be used as a thermometer to capture one-off temperature readings displayed on screen and **Checklist** which allows users to create a customized list of measurement items using its accompanying free software.



EL-EnviroPad-TC

EasyLog® GFX



Advanced Data Logging

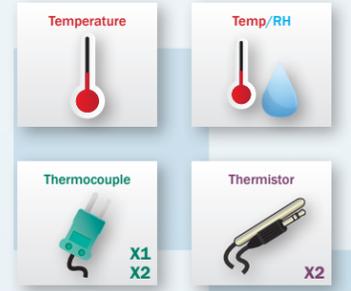
The EasyLog® GFX range brings a more advanced feature set to the monitoring of temperature and humidity.

The GFX products feature an increased memory capacity (250,000 readings per channel), 0.1 digit resolution across all parameters, as well as a graphics display which shows real-time trend graphs and data summaries. An on-screen 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 also 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

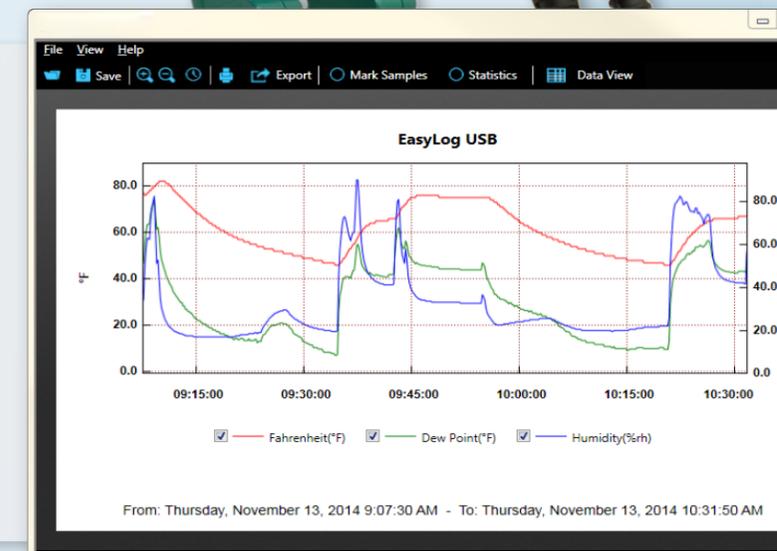
EL-WIN-USB

Intuitive, Powerful & Free Windows Control Software

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

Compatible with all Windows operating systems, the software employs a wizard format to guide users through the set up and download process.

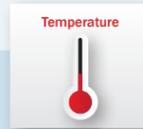
A powerful graphing module for analyzing downloaded data, it also allows export of the data to Microsoft Excel, PDF and jpeg formats.



Cold Chain Monitoring



In this range:



EasyLog Cold Chain



Low-Cost Cold Chain Data Logging

Lascar's EL-CC-1 family of loggers provides users with cost effective, multi-use loggers for all stages of the Cold Chain process. Pre-programmed with set sample rates and alarms for monitoring Chilled Goods, Frozen Goods and Ripening Goods, simply press an on-board button to start logging. Status LEDs indicate whether the unit is currently in logging mode, an alarm has been met during the session or the battery is low. Download data by inserting the logger into a PC or laptop USB port to view a graph of the logging session in CSV format, or generate a PDF.



EL-Vaccination Range

The Lascar EL-Vaccination family of data loggers is an inexpensive series of USB and WiFi-enabled sensors allowing discrete and continuous temperature monitoring of vaccines. Exceeding CDC guidelines on data loggers used in vaccination storage, these units are available with external thermistor glycol bottles and calibration certificates.

Lascar's Line of Vaccination Loggers Exceeds CDC Guidelines

- ✓ High/low alarms to alert out of range temperatures
- ✓ Display of current, min and max temperature readings
- ✓ Reset button for min and max readings
- ✓ Low battery indicator
- ✓ Accuracy $\pm 0.1^{\circ}\text{C}$ / $\pm 0.2^{\circ}\text{F}$
- ✓ Over 250,000 readings stored
- ✓ Data loops when memory is full
- ✓ Detachable temperature buffered probe
- ✓ User programmable logging rates are available
- ✓ Integral magnet to affix logger to outside of storage unit



21 CFR Compliant Software

Lascar's latest software offering allows users to store data in compliance with the regulations of 21CFR Part 11. As well as the core offerings of the existing EasyLog software, individual users can now be assigned specific permissions. The readings collected from the data logger are stored in an encrypted format which cannot be edited. In addition, the EasyLog21CFR software provides a full audit trail of activities, with users able to add comments to specific readings before being approved by an authorized user. Electronic signatures are added to all of the reports to show who has started, stopped and approved the session data. The software is compatible with data loggers monitoring temperature, relative humidity and dew point.



Software Audit

User	Action	Date/Time	Serial Number	Session Comments
Michael Fedak	User Logged In	11/7/2014 3:35:06 PM		
Michael Fedak	User Logged Out	11/7/2014 3:34:37 PM		
Michael Fedak	User Logged In	11/7/2014 3:34:30 PM		
Michael Fedak	User Logged Out	11/5/2014 10:04:45 AM		Closed application
Michael Fedak	Data Exported	11/5/2014 9:11:42 AM	010075891	2 C:\Documents and Settings\Lascar\Guest\OF
Michael Fedak	User Logged In	11/5/2014 9:09:52 AM		
Michael Fedak	User Logged Out	11/5/2014 9:09:10 AM		
Michael Fedak	Data Downloaded	11/5/2014 9:07:09 AM	010075891	2 Username:michael@ Data Location:C:\Documents and Settings\L
Michael Fedak	Logger Stopped	11/5/2014 9:06:51 AM	010075891	2 Username:michael@ Company:Lascar Electronics Full name:Michael Fedak
Michael Fedak	Logger Initialised	11/5/2014 9:06:15 AM	010075891	2 Name: EasyLog USB Temperature scale: °C Interval: 10 Secs LCD: Always on Mode: Stops Temperature High Alarm: --- Temperature Low Alarm: --- Humidity High Alarm: --- Humidity Low Alarm: --- Start Mode: Immediate Start
Michael Fedak	Software Settings Changed	11/5/2014 9:03:45 AM		Email:michael.fedak@lascarelectronics.com SMTF:outlook.office365.com

EL-WiFi Data Loggers

EL-WiFi-T WiFi Temperature Data Logging Sensor -4 to +140°F / -20 to +60°C range High Accuracy available: WiFi-T+	EL-WiFi-TH WiFi Temperature & Humidity Data Logging Sensor -4 to +140°F / -20 to +60°C & 0 to 100% RH range High Accuracy available: WiFi-TH+	EL-WiFi-TC Thermocouple Data Logger with Graphic Screen -454 to +2372°F / -270 to +1300°C (J, K, N & T-type)	EL-WiFi-DTC Dual-channel Thermocouple Data Logger with Graphic Screen -454 to +2372°F / -270 to +1300°C (J, K, N & T-type)	EL-WiFi-TP Thermistor Probe Data Logger with Graphic Screen -40 to +257°F / -40 to +125°C High Accuracy available: WiFi-TP+
EL-WiFi-DTP+ Higher Accuracy Dual-Channel Thermistor Probe Data Logger with Graphic Screen -40 to +257°F / -40 to +125°C	EL-WiFi-THP External Temperature and Humidity Probe Data Logger with Graphic Screen -4 to 148°F / -20 to +60°C 0 to 100% RH High Accuracy available: WiFi-THP+	EL-WiFi-Alert WiFi Sensor Monitoring System with Audible & Visual Alarm		



EL-USB Data Loggers

EL-USB-1 Temperature -31 to +176°F / -30 to +80°C range	EL-USB-1-LCD Temperature with LCD -31 to +176°F / -35 to +80°C range
EL-USB-1-PRO Industrial Temperature -40 to +257°F / -40 to +125°C range	EL-USB-1-RCG Temperature with Rechargeable Battery -4 to +140°F / -20 to +60°C range
EL-USB-2 Temperature & Relative Humidity -31 to +176°F / 35 to +80°C 0 to 100% RH range Higher Accuracy Available: EL-USB-2+	EL-USB-2-LCD Temperature & Relative Humidity with LCD -31 to +176°F / -35 to +80°C 0 to 100% RH range Higher Accuracy Available: EL-USB-2-LCD+
EL-USB-LITE Low Cost USB Temperature -14 to +122°F / -10 to +50°C range	EL-USB-RT Real-Time Temperature, Relative Humidity and Dew-Point -4 to +158°F / -10 to +60°C 0 to 100% RH range
EL-USB-3 Voltage 0 to 30V d.c. range	EL-USB-4 4 - 20mA 4 - 20mA range
EL-USB-5 Event, Count & State Up to 50Hz	EL-USB-CO Carbon Monoxide 0 to 1000ppm range Higher Accuracy Available: EL-USB-CO300
EL-USB-TC Thermocouple -328 to +1350°F / -200 to +732°C (J, K & T-type)	EL-USB-TC-LCD Thermocouple with LCD -328 to +1350°F / -200 to +732°C (J, K & T-type)
EL-USB-TP-LCD Thermistor Probe with LCD -40 to +257°F / -40 to +125°C Higher Accuracy Available: EL-USB-TP-LCD+	EL-USB-ACT AC and DC Millivolt with Current Clamp Input 0-707 mV a.c. & ±1000mV d.c.

EL-EnviroPad Thermometer with Inbuilt Data Logging, Graphing, Spot Measurement and Checklist Mode -454 to +2372°F / -270 to +1300°C (J, K, N & T-type)	EL-DataPad Handheld Programmer and Data Collector for EL-USB Data Loggers
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Accessories

EL-USB-CASE Protective Metal Case for EL-USB-1	PAD-BOOT-BLACK Protective Rubber Casing for EL-DataPad and EL-EnviroPad-TC	BAT 3V6 1/2AA Non-rechargeable 1/2 AA Lithium Battery for Use with Most Lascar Data Loggers
BAT 3V6 2/3AA H TEMP 2/3 AA Lithium Battery for EL-USB-1-PRO	BATT 3VX5 Non-rechargeable Lithium Coin Cell Battery for EL-USB-LITE	PSU-5VDC-USB-USA / PSU USB-UK / PSU USB-EU Mains Power Adapter

EL-GFX Data Loggers

EL-GFX-1 Temperature -22 to +176°F / -30 to +80°C range	EL-GFX-2 Temp & RH -22 to +176°F / -30 to +80°C range 0 to 100% RH range High Accuracy available: EL-GFX-2+	EL-GFX-TC Thermocouple -328 to +2462°F / -200 to +1350°C (J, K & T-type)	EL-GFX-DTC Dual Thermocouple -328 to +2462°F / -200 to +732°C (J, K & T-type)	EL-GFX-DTP Dual Thermistor Probe -40 to +257°F / -40 to +125°C High Accuracy available: EL-GFX-DTP+
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Remote Monitoring Range

EL-BT-2 Bluetooth Temp and RH with Android and iOS Compatibility -22 to +176°F / -20 to +60°C 0 to 100% RH range

Cold Chain Monitoring Range

EL-CC-1 Cold Chain Temperature Monitor -001 Chilled Goods, 35-46°F Alarm Threshold -002 Frozen Goods, 3-68°F Alarm Threshold -003 Ripening Goods, 53-57°F Alarm Threshold -22 to +140°F / -30 to +60°C
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EL-Vaccination Range - Data Logger, Glycol Bottle and Calibration Certificate in One Complete Kit

EL-USB-TP-LCD-PROBE-G External Temperature with LCD and Thermistor Glycol Probe. Includes Fridge/Freezer Calibration Certificate	EL-GFX-DTP-PROBE-G Dual-channel Temperature Thermistor with Glycol Probe. Includes Fridge/Freezer Calibration Certificate	EL-WiFi-TP+-PROBE-G Remote External Temperature with Thermistor Glycol Probe. Includes Fridge/Freezer Calibration Certificate Available in Dual Channel: EL-WiFi-DTP+-Probe-G
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21CFR Compliant Range

EL-21CFR-2-LCD 21CFR Compliant Temp/RH USB Data Logger High Accuracy available: EL-21CFR-2-LCD+	EL-21CFR-TP-LCD 21CFR Compliant Thermistor Probe USB Data Logger High Accuracy available: EL-21CFR-TP-LCD+	EL-21CFR-1-LCD 21CFR Compliant Temperature USB Data Logger
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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 NIST / UKAS traceable certificates with any temperature, humidity, thermocouple or thermistor data logger.



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