

#### **PRODUCT GUIDE**



# Data Logging Solutions Vour Data. Anytime. Anywhere.

# WiFi sensors & remote monitoring



# **WiFi Sensors**

The EL-WiFi range of temperature and humidity data loggers provides the capability to remotely monitor any environment. Data is uploaded using a standard WiFi network without the need to physically 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 screen displays real-time data, while the button cycles through the maximum and minimum readings.

%RH

The range includes data loggers for monitoring temperature, using internal and external temperature probes, and humidity. Sensors are also available in single and dual channel formats.

#### In this range:







Temperature

Temp/RH Thermocouple

Thermistor



# 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<sup>™</sup> Cloudbased 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 other device settings including sample rates, alarms and alert settings.

Back to TestFlig



# EL-MOTE Remote, flexible data logging with years of battery life

The new EL-MOTE WiFi data logger range combines an unobtrusive, waterproof design with interchangeable measurement probes, up to two channels and up to 2 years of potential battery life.

In this range:



# 24/7 monitoring and alerts in a simple-to-use package

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- Wirelessly stream, record and view temperature and humidity on the Cloud, using any web browser, smart phone or tablet
- Simple device setup using our smartphone App
- Single and dual channel temperature and humidity recording using a choice of interchangeable probes
- Configurable high and low alarms with on-board indicator and sounder
- Industry leading battery life of up to 2 years
- Discreet design with waterproof enclosure
- View and analyse multiple sensors, including graphing of historic data

# **Smart Probes**

This two-channel device supports interchangeable probes.

Need to exchange your probe for a higher accuracy version? Your device will support both standard and + version probes. Simply purchase a new probe.

Smart probes are pre-calibrated. No need to take your data loggers out of action every twelve months for calibration checks. Simply fit a new probe in a few seconds. 3 Simple Steps

Connect your EL-MOTE to the Cloud using a simple step-by-step App or the PC and start monitoring data and alarms from any web-enabled device immediately.

1. Buy a EL-MOTE

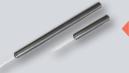




3. Connect to the Cloud

Probe T & Probe T+ External temperature probe. Standard and higher accuracy options.

Probe TH & Probe TH+ External temp/humidity probe. Standard and higher accuracy options.



EL-MOTE: Unobtrusive, waterproof design

with up to 2 years battery life

Probe TP & Probe TP+ External thermistor probe. Standard and higher accuracy options.



e Monitorin Kemot <u> WiFi Sensors</u>

# Your Data. Anytime. Anywhere.

The FilesThruTheAir™ Cloud makes data from your WiFi sensor universally accessible from any internet enabled device. You can manage your devices and make changes to any sensor setting remotely, including changing alarm levels. This gives you the power to monitor and manage potentially hundreds of WiFi sensors in different countries completely remotely.

The system easily scales to meet your needs. Perfect for compact systems with just a few measuring points, or corporate solutions with hundreds of sensors around the globe.

A Cloud account is created during the WiFi sensor set-up process. You can choose from three different Cloud account types depending on which features you need.



# Features at a glance\*



Monitor sensors from multiple sites in one account



View data from any sensor on any web-enabled device Receive email alerts to take action if

required

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Allow multiple users and assign variable account privileges



Store your data safely online in the Cloud Export and print data

for analysis & reporting



Optional security enhancements

eatures dependent on account type.

# **FilesThruTheAir<sup>™</sup> Apps**

With the new easy to use FilesThruTheAir<sup>™</sup> Apps for Android and Apple iPhone and iPad, monitor and manage WiFi sensors on the go. Free to download, the new Apps include 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

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# **Remote Monitoring**

When using a PC or laptop to configure and download data just isn't possible, then Lascar have a variety of remote options covering a multitude of communication platforms.

Select Bluetooth, NFC or SMS options for seamless, remote communication with your data logger, using one of Lascar's easy to use Apps.

No need for a WiFi signal. Use your smartphone or tablet to configure your device. Let the unit log, before collecting saved data on the same device. Simple, easy, remote data logging options for smart phone and tablet users.



**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.

#### In this range:







#### **EL-NFC-1** Near field communication temperature data logger



The EL-NFC-1 is a small, waterproof temperature data logger that transmits data to an NFC enabled Android<sup>™</sup> device. An App enables users to change the logger's name, temperature scale and alarm levels. Once the data has been downloaded, the App presents users with a graph of the session as well as summary details such as minimum, maximum and average values, mean kinetic temperature and time in any alarm conditions.

#### **EL-SMS-2G-TP** Temperature monitor with SMS alerts



The battery operated EL-SMS-2G-TP is a temperature alert module communicating daily, weekly or monthly temperature summaries via SMS. Perfect for applications where instant notifications of alarm breaches is vital, high and low level alarms are set using the free Android<sup>™</sup> or iOS Apps sending text messages to pre-selected phones when an alarm is triggered.

# **Standalone Data Logging**





# EasyLog USB Simple & low-cost

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

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 pushbutton 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:













Thermocouple

Thermistor

Voltage

Current

Event, State, Count Carbon Monoxide

#### **EasyLog USB software** Intuitive, powerful & free Windows<sup>™</sup> control software

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

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

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





# **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 and analyse results as well as set up and restart data loggers in the field without the need for a PC.

The EL-DataPad can hold information 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. **EL-EnviroPad-TC** Thermometer with inbuilt data logging & graphing

The EL-EnviroPad-TC is a robust and easy to use device which records temperature with its attached K-type probe.

The unit has three modes: Data Logging when the unit is left to take and store 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 and lastly Checklist which allows users to create a customised list of measurement items using its accompanying free software.



ALARM ( 26.8 °C 56.2 m

EL-GFX-2



▲ EL-GFX-DTC

# EL-GFX-DTP

# EasyLog GFX Advanced data logging

EL-GFX-1

The robust EasyLog GFX range brings a more advanced feature set to the monitoring of

resolution across all parameters, LED and audible alarms, as well as a graphic display which shows real-time trend graphs and data summaries. 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 EasyLog USB software for set up and download with additional functions function and probe calibration.

for reduced cost per channel.

#### In this range:





Temperature

Thermocouple

Thermistor





# EasyLog Cold Chain

Lascar's Cold Chain family of loggers provides users with cost effective, loggers for all stages of Cold Chain logistics. Available with pre-programmed sample rates and alarms for monitoring a variety of goods, simply press an on-board button to start logging.

Status LEDs indicate whether the unit is in logging mode, an alarm has been activated or the battery is low. Download data by inserting the logger into a PC or laptop to view a graph of the logging session as a CSV file or PDF.

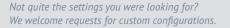
EL-PDF-1 eliminates the need for software with Start and Stop Logging buttons on-board and an auto-generate PDF report when inserted into a USB port.

 $\mathsf{EL-CC-1:}$  Temperature devices for monitoring Chilled Goods, Frozen Goods and Ripening Goods.

EL-CC-2: Temperature and humidity devices for monitoring Pharmaceutical and Food goods.

EL-PDF-1: Temperature devices for monitoring Chilled Goods, Frozen Goods and Ripening Goods. No software required.

In this range:



Temperature Temp/RH

# 4-Channel, OEM data logging displays

EL-SGD 43-ATP and EL-SGD 70-ATP are four-channel temperature data loggers based on PanelPilotACE technology and ideal for anyone that needs to quickly add temperature monitoring to an existing panel or standalone product. Both the 4.3" or 7" panel mounted display modules include a four-channel thermistor temperature board and four compatible temperature probes.

Both displays are pre-loaded with an advanced logging application which shows real-time readings for all four temperature channels, live trend graphs and access to a suite of real-time data analysis information. The loggers can store up to 100,000 readings per channel at sample rates from 15 seconds to 12 hours.

In this range:



Thermistor

#### www.lascarelectronics.com/data-loggers

ndalone

# **EL-Vaccination Range**

The Lascar EL-Vaccination family of data loggers is a specialised series of USB and WiFi-enabled sensors allowing discrete and continuous temperature monitoring of vaccines.

Exceeding Center of Disease Control (CDC) guidelines on data loggers used in vaccination storage, these units are available with external thermistor glycol bottles and calibration certificates.

- ✓ High/low alarms to alert out of range temperatures
- Display of current, min and max temperature and reset button
- ✓ Low battery indicator
- ✓ Accuracy ±0.1°C / ±0.2°F
- ✓ Over 250,000 readings stored
- $\checkmark$  Data loops when memory is full
- ✓ Detachable temperature buffered probe
- ✓ User programmable logging rates
- ✓ Integral magnet to affix logger to outside of storage unit

#### In this range:



Thermistor



# EL-WiFi-TP+-PROBE-G

The EL-WiFi-TP+-PROBE-G allows remote vaccine monitoring and data collection over a WiFi network, viewable from any internet enabled device including smartphone, tablet or PC using the FilesThruTheAir<sup>™</sup> Cloud service. Set-up high and low alarms and receive instant email alerts when temperatures become too hot or cold in the fridge or freezer.

The logger can be battery powered or used with a USB wall adapter.

# EL-WiFi-DTP+-PROBE-G

The dual channel EL-WiFi-DTP+-PROBE-G can measure two areas at the same time - two areas of the same refrigerator, two refrigerators or perhaps a refrigerator and freezer.

The logger can be battery powered or used with a USB wall adapter.







This USB-based system allows continual temperature monitoring of refrigerated and frozen vaccines using a simple-to-use data logger and glycol bottle.

Simply name the device, choose samples rates and set high and low alarms using its free and easy-to-use software. Place the glycol bottle in the vaccine refrigerator and place the data logger on the outside of the fridge. View latest, highest and lowest logs from its integral LCD screen. An on-board red LED will flash if an alarm has been breached.

The logger is battery powered.

# **EL-GFX-DTP-PROBE-G**

The EL-GFX-DTP-PROBE-G is a vaccination monitoring kit combining a high accuracy USB dual channel data logger with two glycol bottle probes allowing continuous measurement of two environments simultaneously.

The unit stores over 250,000 readings, has an on-screen display showing max, min and last log as well as an on-board graph of the data collected. Buttons allow the user to start, stop and restart the logger in the field and alarm breaches are registered with both LED and audible alarms.

The logger can be battery powered or used with a USB wall adapter.



# 21 CFR Compliance

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 Lascar's 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. EasyLog21CFR software provides a full audit trail of activities, with users able to add comments to specific readings before being approved by an authorised 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.





### **EL-21CFR USB**

EasyLog 21CFR software is compatible with seven standalone USB devices monitoring standard temperature, relative humidity and dew point; temperature using an external probe; temperature with an on-board sensor and temperature using a external K type thermocouple.

#### In this range:





# EL-21CFR WiFi

For users seeking a remote option, Lascar's EL-WiFi-21CFR Series provides WiFi-based sensors wirelessly capturing and storing data for access from any internet-enabled device. Available units measure temperature using an on-board sensor, temperature using an external thermistor or thermocouple probe and temperature, relative humidity and dewpoint.

#### In this range:





# CFR Data Logging



EL-WiFi-T

EL-WiFi-TH

EL-WiFi-TC

EL-WiFi-DTC

FI -WiFi-TP

-40 to +125°C (-40 to +257°F) range

WiFi Temperature data logging sensor

WiFi Temperature & humidity data logging sensor -20 to +60°C (-4 to +140°F) & 0 to 100% RH range

WiFi Thermocouple data logger with graphic screen

K type probe provided 0 to +200°C (+32 to +392°F)

-20 to  $+60^{\circ}$  (-4 to  $+140^{\circ}$ F) range

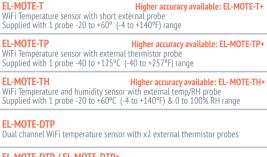


Higher accuracy available: WiFi-T+

Higher accuracy available: WiFi-TH+



**EL-MOTE** range









EL-MOTE-DTP / EL-MOTE-DTP+ Higher accuracy dual channel WiFi temperature sensor with x2 external thermistor probes

EL-MOTE-PROBE-T JE Short temperature probe

Higher accuracy available: EL-MOTE-PROBE-T+



EL-MOTE-PROBE-2M-TH Higher accuracy available: EL-MOTE-PROBE-2M-TH+ Temperature and humidity probe with 2 metre cable



EL-MOTE-PROBE-1M-25-TP / EL-MOTE-PROBE-3M-25-TP / EL-MOTE-PROBE-3M-75-TP+ 25mm or 75mm temperature probe with 1 or 3 metre cable

**EL-MOTE WALL BRACKET** Wall mounting bracket for EL-MOTE transmitter

#### POWER-SUPPLY-14-004 EL-MOTE mains power adapter

-270 to +1300°C (-454 to +2372°F) (J. K. N & T-type) WiFi Dual-channel thermocouple data logger with graphic screen K type probe provided 0 to +200°C (+32 to +392°F) -270 to +1300°C (-454 to +2372°F) (J.K.N & T-type) Higher accuracy available: WiFi-TP+ WiFi Thermistor probe data logger with graphic screen



EL-WiFi-DTP+ Higher accuracy dual-channel thermistor probe data logger with graphic screen -40 to +125°C (-40 to +257°F) range



**EL-WiFi-ALERT** 

WiFi Sensor alert module with audible and visual alarm

www.lascarelectronics.com/data-loggers

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# **EL-WiFi range**

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#### **EL-USB** range



# Range Guide





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### Cold Chain range (Custom configurations are available on request)



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EasyLog

<b>EL-CC-1-001</b> Temperature - Chilled Goods, +2 to +8°C alarm threshold -30 to +60°C (-22 to +140°F) range
<b>EL-CC-1-002</b> Temperature - Frozen Goods, -20 to -16°C alarm threshold -30 to +60°C (-22 to +140°F) range
EL-CC-1-003 Temperature - Ripening Goods,+12 to +14°C alarm threshold -30 to +60°C (-22 to +140°F) range
EL-CC-2-001 PK10 (Pack of 10) Temp/RH - Chilled Goods, +2 to +8°C alarm threshold -30 to +60°C (-22 to +140°F) 0 to 100% RH range
EL-CC-2-002 PK10 (Pack of 10) Temp/RH - Frozen Goods, -20 to -16°C alarm threshold -30 to +60°C (-22 to +140°F) 0 to 100% RH range
EL-CC-2-003 PK10 (Pack of 10) Temp/RH - Ripening Goods, +12 to +14°C alarm threshold -30 to +60°C (-22 to +140°F) 0 to 100% RH range
EL-CC-2-004 PK10 (Pack of 10) Temp/RH - Ambient Pharma, +2° to +8°C alarm threshold -30 to +60°C (-22 to +140°F) 0 to 100% RH range
EL-CC-2-005 PK10 (Pack of 10) Temp/RH - Blood Transportation, +1 to +10°C alarm threshold -30 to +60°C (-22 to +140°F) 0 to 100% RH range
EL-CC-2-006 PK10 (Pack of 10) Temp/RH - Platelets Transportation,+20 to +24°C alarm threshold -30 to +60°C (-22 to +140°F) 0 to 100% RH range
<b>EL-PDF-1-001</b> Temperature - Chilled Goods,+2 to +8°C alarm threshold -30 to +60°C (-22 to +140°F) range. No Software Required
EL-PDF-1-002 Temperature - Frozen Goods, -20 to -16°C alarm threshold -30 to +60°C (-22 to +140°F) range. No Software Required

# **EL-Vaccination range**



#### EL-USB-TP-LCD-PROBE-G

Kit combining a USB data logger with a glycol thermistor probe -40 to +125°C (-40 to +257°F) range



#### EL-GFX-DTP-PROBE-G

Kit combining a USB dual channel data logger with two glycol probes -40 to +100°C (-40 to +212°F) range



#### EL-WiFi-TP+-PROBE-G Kit combining a WiFi data logger with glycol thermistor probe -40 to +125°C (-40 to +257°F) range



#### EL-WIFI-DTP+-PROBE-G Kit combining a WiFi dual channel data logger & two glycol probes -40 to +125°C (-40 to +257°F) range

# **Remote monitoring range**



#### EL-BT-2

Bluetooth Temperature & humidity with App -20 to +60°C (-22 to +176°F) & 0 to 100% RH range



EL-NFC-1 NFC Temperature -20 to +60°C (-4 to +140°F) range



EL-SMS-2G-TP SMS Temperature & relative humidity alert module -40 to +125°C (-40 to +257°F) range

#### EL-PDF-1-003

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Temperature - Ripening Goods, +12 to +14°C alarm threshold -30 to +60°C (-22 to +140°F) range. No Software Required



# 21CFR Compliant range





EL-21CFR-2-LCD Higher accuracy available: EL-21CFR-2-LCD+ USB Temperature & relative humidity with LCD -35 to +80°C (-31 to +176°F) 0 to 100% RH range



EL-21CFR-TP-LCD Higher accuracy available: EL-21CFR-TP-LCD+ USB Thermistor probe with LCD -40 to +125°C (-40 to +257°F) range



EL-21CFR-TC USB Thermocouple data logger K type probe provided 0 to +200°C (+32 to +392°F) -200 to +1350°C (-328 to +2462°F) range (J, K, N & T-type)



EL-21CFR-TP-LCD-PROBE-G Kit combining a USB data logger and glycol bottle thermistor probe -40 to +125°C (-40 to +257°F)



**EL-WiFi-21CFR-T Higher accuracy available: EL-21CFR-T+** WiFi Temperature data logging sensor -20 to +60°C (-4 to +140°F) range



#### EL-WiFi-21CFR-TH Higher accuracy available: EL-WiFi-21CFR-TH+ Temperature & relative humidity data logging sensor -20 to +60°C (-4 to +140°F) range. 0 to 100% RH range



**EL-WiFi-21CFR-TP Higher accuracy available: EL-WiFi-21CFR-TP+** WiFi Thermistor probe data logger with graphic screen -40 to +125°C (-40 to +257°F) range



#### EL-WiFi-21CFR-DTP+





**EL-WiFi-21CFR-TC** WiFi Thermocouple data logger with graphic screen -200 to +1350°C (-328 to +2462°F) range (J, K, N & T-type)



**EL-WiFi-21CFR-DTC** WiFi Dual-channel thermocouple data logger with graphic screen K type probe provided 0 to 200°C (32 to 392°F) -200 to +1350°C (-328 to +2462°F) range (J, K, N & T-type)



#### EL-WiFi-21CFR-TP+-PROBE-G

Kit combining a WiFi data logger and glycol bottle thermistor probe -40 to +125°C (-40 to +257°F) range



EL-WiFi-21CFR-DTP+-PROBE-G Kit combining a WiFi dual channel data logger and two glycol bottle probes -40 to +125°C (-40 to +257°F) range

# **ange Guid**





#### **Accessories**



EL-DataPad Handheld programmer and data collector for EL-USB data loggers



PAD-BOOT-BLACK Protective rubber casing for EL-DataPad and EL-EnviroPad-TC



EL-CC-BAG Pack of 5 waterproof bags for use when reusing all EL-CC-1 data loggers



EL-USB-CASE Protective metal case for EL-USB-1

# USB-LINK-IR





EL-WiFi-ALERT WiFi Sensor alert module with audible and visual alarm

**EL-WIFI WALL BRACKET** Spare wall mount bracket for EL-WiFi sensor units

# **EL-GFX** range



USB Temperature with graphic screen -30 to +80°C (-22 to +176°F) range EL-GFX-2

Higher Accuracy Available: EL-GFX-2+

USB Temperature & relative humidity with graphic screen -30 to +80°C (-22 to +176°F) & 0 to 100% RH range



EL-GFX-1

USB Thermocouple with graphic screen K type probe provided 0 to +200°C (+32 to +392°F) -200 to +1350°C (-328 to +2462°F) (J,K & T-type)

#### EL-GFX-DTC

USB dual channel thermocouple with graphic screen K type probe provided 0 to +200°C (+32 to +392°F) -200 to +732°C (-328 to +2462°F) (J. K & T-type)

EL-GFX-DTP

USB dual channel thermistor with graphic screen -40 to +125°C (-40 to +257°F) range

# **4-Channel range**



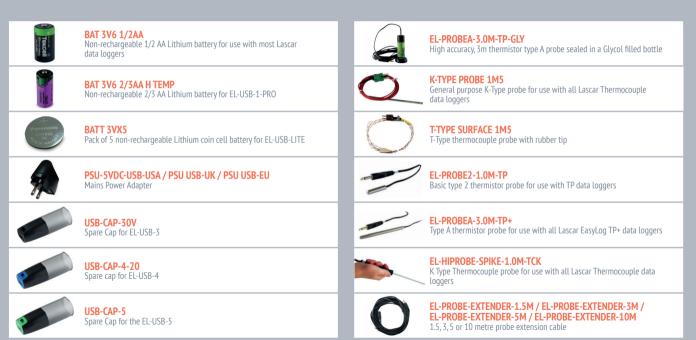
#### EL-SGD 43-ATP

4.3" panel mounted display module with capacitive touch screen, a four-channel thermistor temperature board, x4 temperature probes -40°C to +125°C (-40°F to +257°F) range



#### EL-SGD 70-ATP

7" panel mounted display module with capacitive touch screen, a four-channel thermistor temperature board, x4 temperature probes -40°C to +125°C (-40°F to +257°F) range





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