# EL-WiFi-DTC

## Dual Channel External Thermocouple WiFi Temperature Sensor

- Measures temperature range of -270°C to +1372°C (-454°F to +2501°F) (probe dependent)
- Dual channel recording through two external thermocouple probes
- Supplied with K-type probes with a measurement range of 0 to +200°C (+32 to +392°F), for details see TC probes datasheet
- Wirelessly stream and view data on the EasyLog Cloud, App or on a PC
- Easy sensor set-up using free PC software or App
- View and analyse multiple sensors, including graphing of historic data
- Configurable high and low alarms with indicator




The EL-WiFi-DTC measures the temperature of the environment in which its probes are situated. Featuring two industry standard miniature thermocouple connectors, the device is compatible with K, N, J and T-type probes.

Data is streamed wirelessly over any compatible WiFi network and can be viewed on a PC using free software or on the EasyLog Cloud or App.

To configure the sensor for use on a given wireless network, either connect it via USB to a PC running EasyLog WiFi software on the network, or configure wirelessly using the EasyLog Cloud app on a mobile phone with access to the network. The sensor can then be placed anywhere within range of the network. If the sensor temporarily loses connectivity with the network, it will log readings until it is able to communicate again with the PC application or EasyLog Cloud (max 30 days at 10 second sample interval).

The sensor is IEEE 802.11bgn* (2.4GHz) compliant, supports WEP, WPA/WPA2 encryption and enterprise networks (PEAP, TTLS, FAST).

EL-WiFi-DTC has a protection rating of IP40. The unit is freestanding, but can be attached to a wall or surface using the bracket provided. The unit can be clipped in and out of the bracket as required.

## SPECIFICATIONS

| | Minimum | Typical | Maximum | Unit |
|---|---|---|---|---|
| **Battery life** | | >6 | | Months |
| **Probe measurement range** | K-type (supplied) 0 (+32)<br>K-type -270 (-454)<br>J-type -210 (-346)<br>T-type -270 (-454) | | +200 (+392)<br>+1372 (+2501)<br>+1200 (+2192)<br>+400 (+752) | °C (°F) |
| **USB supply voltage (@500mA)** | 4.5 | 5.0 | 5.5 | Vdc |
| **Operating temperature range (logger)** | -20 (-4) | | +60 (+140) | °C (°F) |
| **Logging period (user configurable)** | 10 sec | 10 min | 12 hrs | |
| **Transmission period (user configurable)** | 1 min | 1 hr | 24 hrs | |
| **Temperature measurement resolution** | | 0.1 (0.2) | | °C (°F) |
| **Temperature display resolution** | | 0.1 | | |
| **Temperature tolerance (base unit)** | | ±1.5 (±3) | | °C (°F) |
| **Temperature tolerance (K-type probes supplied)** | | ±2.5 (±4.5) | | °C (°F) |
| **IP Rating** | IP40 (Bung fully inserted, not permanently powered, thermocouple connector fitted and fully inserted, device mounted vertically.) | | | |
| **Dimensions** | 82 x 70 x 36mm (3.22 x 2.75 x 1.41")** | | | |

* MAC Address starting 98:8B:AD:2..... only
**Excluding probe and mounting bracket

## ACCESSORIES

| | |
|---|---|
| **PSU-5VDC-USB-USA** | USB Mains Power Adapter for USA |
| **PSU USB-UK** | USB Mains Power Adapter for UK |
| **PSU USB-EU** | USB Mains Power Adapter for EU |
| **EL-WiFi-Alert** | Audible and Visual Alarm for EL-WiFi Data Logging Sensors |
| **EL-P-TC-K** | Replacement 1.5m K-type thermocouple with stainless steel probe (Class 2) |

## INCLUDED IN THE BOX

| | |
|---|---|
| **EL-WIFI WALL BRACKET** | Wall mounting bracket for EL-WiFi sensors |
| **2x EL-P-TC-K** | 1.5m K-type thermocouple with stainless steel probes (Class 2) |
| **CABLE USB A-MICRO B** | USB Type A to Micro B |

## 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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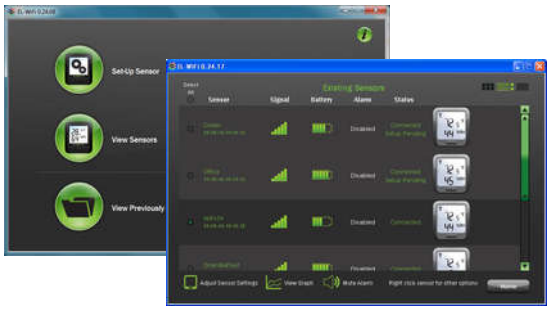
## Dual Channel External Thermocouple WiFi Temperature Sensor



### EL-WiFi-WIN

Lascar's WiFi software is available as a free download from: www.lascarelectronics.com/software/easylog-wifi. Easy to install and use, EL-WiFi-WIN allows easy connection of sensors to a WiFi network. The user can select where data is stored - the PC or the Cloud.

### EasyLog Cloud
### Your Data. Anytime. Anywhere.

EasyLog Cloud harnesses the power of IoT to automate data logging and alert notifications, enabling you to monitor and manage multiple data logging devices in different locations completely remotely. The system easily scales to meet your needs. Perfect for compact systems with just a few measuring points, or corporate solutions with thousands of devices around the globe.

You will need to create an account at www.easylogcloud.com before setting up your cloud-connected data logger.



### Features at a glance*

- Store your data logging records securely on the Cloud
- Connect multiple users with variable account privileges
- Connect data loggers from multiple sites in a single account
- Easily access your most important data, anywhere
- Remotely manage all of your data logging devices
- Never miss a critical event with flexible advanced notifications
- Review and analyse your data with powerful graphing functionality
- Keep track of data events and system activity with a detailed event log

*Features depend on account type.

### Battery Life and Power Supply

The battery can be recharged (unit must be between 0 - 40 °C) via a PC, a USB +5V wall adapter, or a portable USB battery pack using the USB lead provided. It can also be permanently powered by a USB wall adapter or USB battery pack. Readings may be affected while the internal battery is being charged. However, once charged, continued connection of the charger will have no effect.

Battery life is dependent on: transmission period, WiFi encryption method, WiFi encryption key rotation frequency (determined by the router/access point), signal strength between router/access point and WiFi device, presence volume and type of WiFi traffic from other devices, sample rate and operating temperature.

Specifications liable to change without prior warning