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

### FEATURES

- Wirelessly stream and view data via WiFi on PC or EasyLog Cloud
- Easy sensor set-up using free PC software application (downloadable from web)
- View and analyse multiple sensors, including graphing of historic data
- Temperature measurement range -20 to +60°C
- Configurable high and low alarms with indicator
- Sensor memory stores all data even if WiFi is temporarily disconnected

The EL-WiFi-TH in the EasyLog range of sensors measures the temperature and humidity of the environment in which it is situated. This sensor is typically accurate to ±0.3°C (+5 to +60°C) and ±2.0%RH (20 to 80%RH @ 25°C). Data is streamed wirelessly over any WiFi network and can be viewed on a PC or the EasyLog Cloud using the free software package.

During configuration, the sensor will search for an existing wireless network whilst physically connected to the PC. It 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 user can also turn off the PC without loss of data. Although the EasyLog WiFi sensors have an impressive range this can be increased by using WiFi extenders.

The EL-WiFi-TH is a battery powered device with an internal rechargeable lithium polymer battery. The battery life of the sensor is variable, see section below.

The LCD display includes several features including Max and Min readings, and an indicator for low battery, WiFi connection and signal strength.

The sensor is IEEE 802.11b compliant, supports WEP, WPA/WPA2 encryption and enterprise networks.

The software installed on the PC will allow set-up, data logging and data review. Set-up features include sensor name, °C/°F, sample rate, and high/low alarms. Once configured, historic data can be viewed via the graphing tool or exported in various formats. This software is available to download for free.

The sensor has a protection rating of IP55. It is a freestanding unit, however, it can be attached to a wall or surface using the bracket provided. Adhesive bracket pads are also available.

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| Specifications | Minimum | Typical | Maximum | Unit |
|---|---|---|---|---|
| USB supply voltage | 4.5 | 5 | 5.5 | Vdc |
| Operating temperature range | -20 | | +60 | °C |
| Logging period (user configurable) | 10 sec | 10 min | 12 hrs | |
| Transmission period (user configurable) | 1 min | 1 hr | 24 hrs | |
| Temperature measurement range | -20 | | +60 | °C |
| Humidity measurement range | 0 | | 100 | %RH |
| Temperature measurement resolution | | 0.1 | | °C |
| Humidity measurement resolution | | 1.0 | | %RH |
| Temperature display resolution | | 0.5 | | °C |
| Humidity display resolution | | 1 | | %RH |
| Temperature accuracy | | ±0.3 (+5 to +60°C) | ±0.8 (-20 to +60°C) | °C |
| Humidity accuracy (@ +25°C) | | ±2.5 (20 to 80%) | ±5.0 (0 to 100%) | %RH |

*Warning - do not exceed operating temperatures*

## BATTERY LIFE AND POWER SUPPLY

The product will arrive partly charged but ideally you should charge it for 24 hours before use for optimum performance. 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.

## PHYSICAL DIMENSIONS
All dimensions in millimetres (mm)

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Specifications liable to change without prior warning          Data Sheet - Issue 1FTTA          02/2014          SL          Applies to EL-WiFi-TH          Page 2 of 2