

# EL-WiFi-TH

## WiFi Temperature & Humidity Data Logging Sensor

### ORDERING INFORMATION

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

### FEATURES

- Built in temperature and humidity sensor with WiFi capabilities and integrated display
- Temperature selection in °C and °F
- Data can be viewed via the graphing tool or can be exported to Excel
- Measurement range from -20 to +60 °C (-4 to +140 °F)
- Humidity measurement range from 0 to 100%
- Configurable high and low alarms with indicator
- Wireless connectivity to PC via WiFi
- Easy sensor set-up using free PC software application (downloadable from the Corintech website)
- Max and Min readings
- View and analyse multiple sensors using the PC application, including immediate graphing of historic data
- 802.11b compliant
- Sensor memory stores all data even if WiFi is temporarily disconnected
- Capable of logging greater than 500,000 data set entries
- Protection rating IP55
- Rechargeable internal lithium polymer battery
- Full featured LCD segment display
- Low battery indicator
- WiFi connection indicator
- USB port used for recharging (can only be recharged when unit is between 0 - 40 °C)
- Supplied with wall bracket and micro USB lead



The EL-WiFi-TH sensor measures the temperature and humidity of the environment in which it is situated. Data is transmitted wirelessly via a WiFi network to a PC and viewed using a 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 (max 120 days at 10 second sample interval). The range of the sensor can be increased by using WiFi extenders.

The EL-WiFi-TH is a low powered battery device. When configured using typical transmission periods (e.g. once every 5 minutes) the sensor will operate for over one year. The battery can then be recharged via a PC or USB +5V wall adapter using the USB lead provided.

# EL-WiFi-TH

## WiFi Temperature & Humidity Data Logging Sensor

The software installed on the PC will allow set-up, data logging and data review. Set-up features will include sensor name, °C/°F, sample rate, and high/low alarms. Once configured, historic data can be viewed via the graphing tool or exported into Excel. This software is available to download for free from [www.lascarelectronics.com](http://www.lascarelectronics.com).

The sensor stands alone by itself on a horizontal surface and comes with a wall bracket that can be screwed onto a wall or flat surface. The sensor clips into the bracket.

Specifications	Minimum	Typical	Maximum	Unit
Battery life		>1*		Year
USB supply voltage	4.5v		5.5v	V d.c.
Temperature measurement range	-20 (-4)		+60 (+140)	°C (°F)
Humidity measurement range	0		100	%RH
Temperature Internal resolution		0.1 (0.18)		°C (°F)
Humidity Internal resolution		1.0		%RH
Temperature accuracy (overall error between -20°C and +60°C)		±0.4(0.7)	±1.2(2.1)	°C (°F)
Temperature accuracy (overall error between +5°C and +60°C)		±0.3(0.5)	±0.4(0.7)	
Humidity accuracy (overall error between 20%RH and 80%RH)		±2.0	±3.0	%RH
Logging rate (user configurable)	Every 10s	30 seconds	Every 12hrs	Transmission rate
Operating temperature range	-20 (-4)		+60 (+140)	°C (°F)

\* Typical but will be less if frequent transmissions

*Warning - do not exceed operating temperatures*

### PHYSICAL DIMENSIONS

All dimensions in millimetres (mm)



# EL-WiFi-TH

## WiFi Temperature & Humidity Data Logging Sensor

### THE EASYLOG USB RANGE

Each EL-USB data logger features the direct-to-USB connection and easy-to-use functionality that the range is known for. The range comprises of the following data loggers:

Part No	Function	Range	Accuracy (overall error)		Readings	Battery	Battery Life*
			Typ.	Max.			
EL-USB-1	Temperature	-35 to +80 °C (-31 to +176 °F)	±1°C (±2°F)		16,382	3.6V ½AA	1 Year
EL-USB-1-LCD	Temperature with LCD	-35 to +80 °C (-31 to +176 °F)	±0.5°C (±1°F)	±1.5°C (±3°F)	16,382	3.6V ½AA	1 Year
EL-USB-1-PRO	High Temperature	-40 to +125 °C (-40 to +257 °F)	±0.2°C (±0.4°F)	±0.5°C (±1°F)	32,510	3.6V ¾AA	3 years
EL-USB-1-RCG	Temperature with rechargeable battery	-20 to +60 °C (-4 to +140 °F)	±1°C (±2°F)		32,510	Lithium Ion	1 month (rechargeable)
EL-USB-2	Temperature, humidity & dew point	-35 to +80 °C (-31 to +176 °F) 0 to 100%RH	±0.5°C (±1°F) ±3%RH	±2°C (±4°F) ±6.0%RH	16,382	3.6V ½AA	1 year
EL-USB-2+	Increased accuracy temperature, humidity & dew point	-35 to +80 °C (-31 to +176 °F) 0 to 100%RH	±0.3°C (±0.6°F) ±2.0%RH	±1.5°C (±3°F) ±4.0%RH	16,382	3.6V ½AA	1 year
EL-USB-2-LCD	Temperature, humidity & dew point with LCD	-35 to +80 °C (-31 to +176 °F) 0 to 100%RH	±0.5°C (±1°F) ±3.0%RH	±2°C (±4°F) ±6.0%RH	16,379	3.6V ½AA	1 year
EL-USB-2-LCD+	Increased accuracy temperature, humidity & dew point with LCD	-35 to +80 °C (-31 to +176 °F) 0 to 100%RH	±0.3°C (±0.6°F) ±2.0%RH	±1.5°C (±3°F) ±4.0%RH	16,379	3.6V ½AA	1 year
EL-USB-3	Voltage	0 to 30V d.c.	±1%		32,510	3.6V ½AA	1 year
EL-USB-4	Current loop	4 to 20mA	±1%		32,510	3.6V ½AA	1 year
EL-USB-5	Counter, Event & State	N/A		±3 secs/24 hrs	32,510	3.6V ½AA	1 year
EL-USB-TC	Thermocouple (J, K and T-type) K-type probe included	-200 to +1350°C (-328 to +2462°F) (K-type) -200 to +1190°C (-328 to +2174°F) (J-type) -200 to +390°C (-328 to +734°F) (T-type)	±1°C (±2°F)		32,510	3.6V ½AA	6 months
EL-USB-TC-LCD	Thermocouple with LCD (J, K and T-type) K-type probe included	-200 to +1350°C (-328 to +2462°F) (K-type) -200 to +1190°C (-328 to +2174°F) (J-type) -200 to +390°C (-328 to +734°F) (T-type)	±1°C (±2°F)		32,510	3.6V ½AA	6 months
EL-USB-CO	Carbon monoxide	0 to 1000ppm <b>NOT A LIFE SAVING DEVICE</b>	±6ppm		32,510	3.6V ½AA	3 months
EL-USB-CO300	Carbon monoxide	0 to 300ppm <b>NOT A LIFE SAVING DEVICE</b>	±4ppm		32,510	3.6V ½AA	3 months
EL-USB-LITE	Low cost temperature	-10 °C to +50 °C (+14 to +122 °F)	±1°C (±2°F)		4,080	CR1620 Lithium coin cell	1 month
EL-USB-RT	Real-time temperature & humidity monitor	-20 to +70 °C (-4 to +158 °F)	±1.5°C (±3°F) ±4.5%RH		7 days	N/A	N/A

\*Depending on logging rate, ambient temperature, and use of alarm LED

