EL-WiFi-TC
WiFi Thermocouple Temperature 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 www. lascarelectronics.com)
- View and analyse multiple sensors, including graphing of historic data
- Thermocouple probe temperature measurement range -270 to +1300°C (-454 to +2372°F) (probe dependent)
- Configurable high and low alarms with indicator
- Sensor memory stores all data even if WiFi is temporarily disconnected

The EL-WiFi-TC in the EasyLog range of sensors measures the temperature of the environment in which the probe is situated. This sensor is typically accurate to ±1.5°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 available from www.lascarelectronics.com.

The EL-WiFi-TC 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 from www.lascarelectronics.com. Free firmware downloads are also available from the same web page.

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 from www.lascarelectronics.com.

This sensor is supplied with a removable K type thermocouple probe but supports types J, K, N & T so alternatives can be used providing they operate within the same temperature range.

A range of recommended accessories, including ADSL routers, USB mains chargers and other products are available from www. lascarelectronics.com.

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Specifications	Minimum	Typical	Maximum	Unit
Battery life		1*		Year
USB supply voltage	4.5	5	5.5	Vdc
Operating temperature range (sensor only)	-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 range (probe dependent)	-270 (-454)		+1300 (+2372)	°C (°F)
Temperature measurement resolution		0.1		°C
Temperature display resolution (-99.9 to 999.9 °C)		0.1		°C
Temperature accuracy (probe dependent)		±1.5		°C
Supplied Probe Specifications (K type)				
Temperature accuracy		±1.5		°C
Temperature range	0 (+32)		+400 (+752)	°C (°F)
Probe length			1500	mm

* Dependant on transmission rate, may be less with frequent transmissions
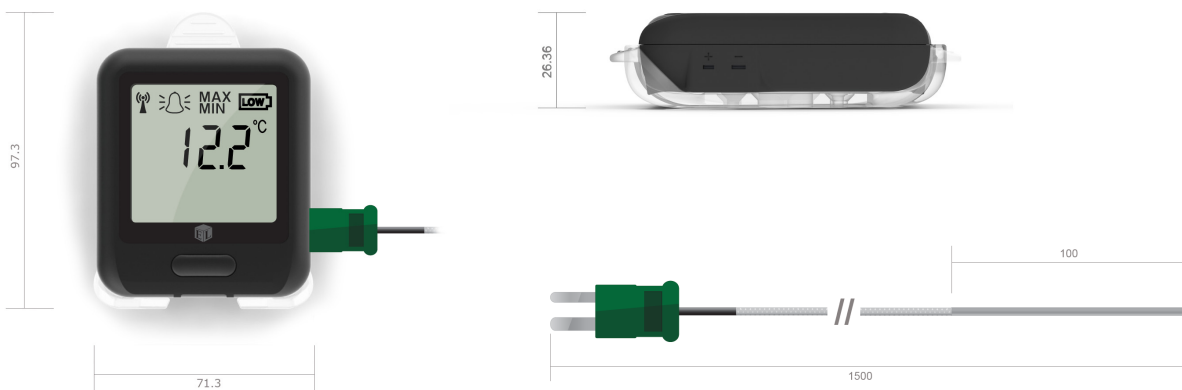
Warning - do not exceed operating temperatures

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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