

EL-WiFi-TP

WiFi Temperature Probe Data Logging Sensor



FEATURES

- Temperature data logging sensor with thermistor probe and integrated display
- Easy sensor set-up using the free PC software application (Downloadable from www.smarttechco.com.vn)
- Wirelessly stream data to PC or Cloud* via WiFi
- View and analyse multiple sensors, including immediate graphing of historic data
- Selectable measurement scale °C / °F
- Temperature accuracy $\pm 0.6^{\circ}\text{C}$ (-10 to $+70^{\circ}\text{C}$)
- Temperature measurement resolution to 0.1°C
- Temperature display resolution to 0.1°C
- Temperature measurement range -40 to $+125^{\circ}\text{C}$ (-40 to $+257^{\circ}\text{F}$)
- Operating temperature range -20 to $+60^{\circ}\text{C}$ (-4 to $+140^{\circ}\text{F}$)
- Configurable high and low alarms with indicator
- Maximum and Minimum readings
- Low battery indicator
- WiFi connection indicator
- Signal strength indicator
- 802.11b compliant
- Protection rating IP55
- Rechargeable internal lithium polymer battery
- Fully featured LCD segment display
- Sensor memory stores all data even if WiFi is temporarily disconnected
- USB port used for recharging (can only be recharged when unit is between 0 - 40°C)
- Firmware upgradable via USB (Downloadable from the SmartTech website)
- PC can be switched off without loss of data
- Supplied with wall bracket, micro USB lead & thermistor probe (IP67)
- Supported Security Protocols WEP, WPA/WPA2 – PSK



Signal Strength Indicator



Temperature Monitoring



Cloud Service



Alarm Levels



Max & Min Readings



Battery Low Indicator

The EL-WiFi-TP sensor measures the temperature of the environment in which it is situated. This sensor is accurate to $\pm 1.0^{\circ}\text{C}$. Data is streamed wirelessly over any WiFi network and can be viewed on a PC using our free software package or on the EL-WiFi-Cloud*. 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 cloud service (max 120 days at 10 second sample interval). Although the EL-WiFi sensors have an impressive range this can be increased by using WiFi extenders.

The EL-WiFi-TP 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 (at room temperature). The battery can then be recharged via a PC or USB +5V wall adapter using the USB lead provided or can be permanently powered by the USB wall adapter.

The software installed on the PC will allow set-up, data logging and data review. Set-up features will include sensor name, $^{\circ}\text{C}/^{\circ}\text{F}$, 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.smarttechco.com.vn

The sensor is a freestanding unit. However, it can be attached to a wall or vertical surface using the bracket and screws / sticky pad provided.

It is supplied with a thermistor probe with an attachment so that it can be securely fixed to flat surfaces. It is perfect for a wide range of temperature monitoring situations e.g. manufacturing processes, cold storage and hot storage. The probe is removable so alternatives can also be used to meet specific requirements providing they operate within the same temperature range.

SPECIFICATIONS

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)	$^{\circ}\text{C}$ ($^{\circ}\text{F}$)
Logging Period (user configurable)	10 sec	10 min	12 hrs	
Transmission Period (user configurable)	1 min	1 hr	24 hrs	
Temperature measurement range	-40 (-40)		+125 (+257)	$^{\circ}\text{C}$ ($^{\circ}\text{F}$)
Temperature measurement resolution		0.1		$^{\circ}\text{C}$
Temperature display resolution		0.1		$^{\circ}\text{C}$
Temperature accuracy (-10 to +70 $^{\circ}\text{C}$)		± 0.6		$^{\circ}\text{C}$
Temperature accuracy (-40 to +125 $^{\circ}\text{C}$)		± 1.0		$^{\circ}\text{C}$

* EasyLog Cloud due to be released late 2013

** Dependent on transmission rate, may be less with frequent transmissions

Warning - do not exceed operating temperatures