# **EL-WiFi-21CFR-VAC** High Accuracy 21CFR Remote WiFi Temperature Sensor External Thermistor with Glycol Bottle

- Can be installed as part of a 21CFR compliant system with additional controls including permission-based use, authority level sign-off and full system audit
- -40°C to +60°C (-40°F to +140°F) temperature measurement range
- Wirelessly stream and view data on the 21CFR Cloud
- · Configurable high and low alarms with indicator
- Easy sensor set-up using free PC software application
- Calibration certificate supplied at 2 and 8°C

The EL-WiFi-VAC measures the temperature of a probe sunk into a glycol bottle, designed to mimic a vaccine sample. Data is streamed wirelessly over any compatible WiFi network to be viewed on the 21CFR Cloud.

During configuration, the sensor will search for an existing wireless network whilst physically connected to the PC. The sensor can then be placed anywhere within range of the network. In a typical usage scenario, the probe is placed next to the vaccines within a fridge, and the ribbon cable fed out to the logger e Sensor

attached to the outside of the fridge using its magnetised wall bracket; the cable is deliberately thin so as not to interfere with the fridge seal. 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 21CFR 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).

The logger unit has a protection rating of IP42 and the probe IP67. 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
USB supply voltage (@500mA)	4.5	5.0	5.5	Vdc
Operating temperature range	-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)	-40 (-40)		+60 (+140)	°C (°F)
Temperature measurement resolution		0.01/0.02		°C/°F
Temperature display resolution		0.01		°C
Temperature accuracy		±0.1 / ±0.2 (-10 to +60/ +14 to +140)	±0.6/±1.1 (-40 to +60/ -40 to +140)	°C/°F
IP Rating	Logger IP42, Probe Tip IP67 (Bung fully inserted, not permanently powered, probe connector fitted and fully inserted, device mounted vertically.)			
Dimensions	82 x 70 x 23mm (3.22 x 2.75 x 0.91")**			

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

### 21CFR COMPLIANCE

Permission based use and access	$\checkmark$		
Authority based action sign-off	$\checkmark$		
Data records cannot be edited or deleted	$\checkmark$		
Complete system audit trail	$\checkmark$		
For a detailed compliance checklist, please visit www.lascarelectronics.com/data-brochur			

## CALIBRATION CERTIFICATES INCLUDED

The EL-WiFi-21CFR-VAC comes with a calibration certificate issued at 2 and 8°C, 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**.

### ACCESSORIES

EL-P-VAC	Replacement thermistor glycol probe
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

### INCLUDED IN THE BOX

EL-WIFI WALL BRACKET	Wall mounting bracket for EL-WiFi sensors
EL-P-VAC	External Thermistor Glycol Probe
CABLE USB A-MICRO B	USB Type A to Micro B
CAL-TEMP-UK	Temperature Calibration Certificate





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### 21CFR WIFI SENSOR SOFTWARE

EasyLog 21CFR WiFi software\* is available as a free download from download.filesthrutheair.com. Easy to install and use, EasyLog 21CFR WiFi Sensor Software allows easy sensor set-up and connection of sensors to a WiFi network and the 21CFR Cloud.

# 21CFR CLOUD

21CFR Cloud subscription delivers all of the flexibility of a remote monitoring system: Interact with sensors via any internet-enabled device; manage and monitor sensors; access event logs and set up email alerts; assign authorisation levels to user accounts and view comprehensive audit trail records. Unlike the standard EasyLog Cloud service, 21CFR

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Cloud includes other controls such as permission-based use, authority sign-off and full system audit to ensure data monitored and collected is regulated to 21CFR Part 11 standard.

For full pricing information and to create an account, please visit https://21cfr.wifisensorcloud.com/. Any queries or questions, please do not hesitate to contact our team.

**APPROVAL REQUIRED** 

Export System Audit

Create New Location

A Cloud account subscription is created during the WiFi sensor set-up process using EasyLog 21CFR WiFi Sensor Software. 21CFR WiFi Sensors are only compatible with the 21CFR Cloud 21cfr.wifisensorcloud.com.

Authority sign-off on actions

### Download the latest version of the software free of charge from download.filesthrutheair.com

# BATTERY LIFE AND POWER SUPPLY

6h 12h 1d 1w 1m 1y Show All Start 06/07/2016 🗮 13:12 💿 End 17/07/2016 🗮

**Detailed data reporting** 

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 \*Requires Windows 7, 8.1, 10





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Detailed system audit reporting



