EL-WiFi-21CFR-TH
21CFR Remote WiFi Temperature & Humidity Sensor

- 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
- -20 to +60°C (-4 to +140°F) temperature and 0 to 100% humidity measurement range
- Wirelessly stream and view data on the 21CFR Cloud
- Easy sensor set-up using free 21CFR WiFi Sensor Software
- Configurable high and low alarms with indicator

The EL-WiFi-21CFR-TH measures the temperature and humidity of the environment in which it is situated.

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. 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 21CFR Cloud (max 30 days at 10 second sample interval). The unit is freestanding, but it can be attached to a wall or surface using the bracket provided. The sensor is IEEE 802.11bgn* (2.4GHz) compliant, supports WEP, WPA/WPA2 encryption and enterprise networks (PEAP, TTLS, FAST).

EL-WiFi-21CFR-TH has a protection rating of IP55. The unit is freestanding, but it 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

<table>
<thead>
<tr>
<th>Specification</th>
<th>Minimum</th>
<th>Typical</th>
<th>Maximum</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery life</td>
<td>&gt;6 Months</td>
<td></td>
<td></td>
<td>Years</td>
</tr>
<tr>
<td>USB supply voltage (@500mA)</td>
<td>4.5 Vdc</td>
<td>5.0 Vdc</td>
<td>5.5 Vdc</td>
<td></td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>-20 (-4) °C</td>
<td>+20 (+140) °C</td>
<td></td>
<td>°C/°F</td>
</tr>
<tr>
<td>Logging period (user configurable)</td>
<td>10 sec</td>
<td>10 min</td>
<td>12 hrs</td>
<td></td>
</tr>
<tr>
<td>Transmission period (user configurable)</td>
<td>1 min</td>
<td>1 hr</td>
<td>24 hrs</td>
<td></td>
</tr>
<tr>
<td>Temperature measurement range</td>
<td>-20 (-4) °C</td>
<td>+20 (+140) °C</td>
<td></td>
<td>°C/°F</td>
</tr>
<tr>
<td>Temperature measurement resolution</td>
<td>0.1 (0.2) °C</td>
<td></td>
<td></td>
<td>°C/°F</td>
</tr>
<tr>
<td>Temperature display resolution</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature accuracy</td>
<td>±0.3/±0.6**</td>
<td></td>
<td></td>
<td>°C/°F</td>
</tr>
<tr>
<td>Humidity measurement range</td>
<td>0</td>
<td>100</td>
<td></td>
<td>%RH</td>
</tr>
<tr>
<td>Humidity measurement resolution</td>
<td>1</td>
<td></td>
<td></td>
<td>%RH</td>
</tr>
<tr>
<td>Humidity display resolution</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humidity accuracy (@ 25°C)</td>
<td>±2**</td>
<td></td>
<td></td>
<td>%RH</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP55 (Bung fully inserted, not permanently powered, device mounted vertically.)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Dimensions</td>
<td>82 x 70 x 23mm</td>
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</tbody>
</table>

### ACCESSORIES

- **PSU-SVDC-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
- **CABLE USB A-MICRO B** USB Type A to Micro B

### 21CFR COMPLIANCE

- Permission based use and access ✔️
- Authority based action sign-off ✔️
- Data records cannot be edited or deleted ✔️
- Complete system audit trail ✔️

For a detailed compliance checklist, please visit [www.lascarelectronics.com/markets/21cfr](http://www.lascarelectronics.com/markets/21cfr)

### CALIBRATION CERTIFICATES NOW AVAILABLE

Lascar now offers a Traceable Calibration Certificate Service on Temperature Data Loggers. 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 visit [www.lascarelectronics.com/calibration](http://www.lascarelectronics.com/calibration).
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21CFR WIFI SENSOR SOFTWARE
EasyLog 21CFR WiFi software* is available as a free download from download.filestruthetheair.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 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.

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.

BATTERY LIFE AND POWER SUPPLY
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
Therefore when comparing multiple devices or calibrating them, any temperature variations must be considered.

Relative humidity of ~90%RH at ambient temperature, a variation in temperature of 1°C will result in a change of up to -5%RH. It is worth remembering that the value of relative humidity is of course sensitive to temperature variation. As an example, at a relative humidity of ~90%RH at ambient temperature, a variation in temperature of 1°C will result in a change of up to -5%RH. Therefore when comparing multiple devices or calibrating them, any temperature variations must be considered.