Network Requirements and Settings

10 8 7 | PC CLOUD

EasyLog

What is

This help document offers guidance on Network Requirements and Settings for EasyLog™ wireless data logging sensors.

Contents

What Network Requirements are required to use the EasyLog Cloud?

The EasyLog™ wireless data logging devices require an 802.11b, g, n (2.4GHz) network and can support the following encryption methods:

- WPA/WPA2 Pre-shared key (PSK)
- WPA/WPA2 Enterprise (see below for more information)

The following encryption methods are also supported, however no longer recommended for use.

- None. No authentication or encryption
- WEP, 64bit or 128bit encryption. Requires WEP passkey in hexadecimal rather than ASCII passphrase.

By default the WiFi devices will obtain an IP address via DHCP, this is normal for most networks. The IP address can also be manually configured (see below for more information).

An EasyLog Cloud account is required before a device can be configured. www.easylogcloud.com

When connecting to the EasyLog Cloud, the message is transmitted across the internet to the EasyLog Cloud server. This requires the device to be able to access the internet via the wireless network on TCP Port 14354.

Most domestic internet routers do not have restrictions on outbound TCP connections by default. Users on corporate networks may need to contact their IT Administrator to ensure that TCP Port 14354 is open for outbound traffic.

MAC Address filtering on the access point must be disabled or the address of the sensors included in the allowed list. The MAC Address can be found on the serial number label on the back of the unit.

Corporate networks may need additional configuration to allow communication between the sensor and the PC.

All communication is initiated by the device themselves. Whilst not communicating, the devices are in a low power mode with the radio module turned off.

There are two methods for device configuration:

- EasyLog Cloud app for Android and iOS. — Recommended for all devices
- Windows PC software “WiFi Sensor Software” — Some EL-WIFI devices only

If using the Windows PC software for device configuration, the devices and the PC do not need to be on the same wireless network but both require an internet connection during setup.

How do the EasyLog™ WiFi products communicate on the network and what firewall settings may be required?

Android/iOS App Configuration:
When installing the EasyLog Cloud app, please ensure that all permissions requests are granted to enable connection to the EasyLog Cloud. Should these not be granted, it is recommended to uninstall the app and start again, granting permissions.

On some older versions of Android and iOS, you may need to turn off mobile data in order to configure a device.

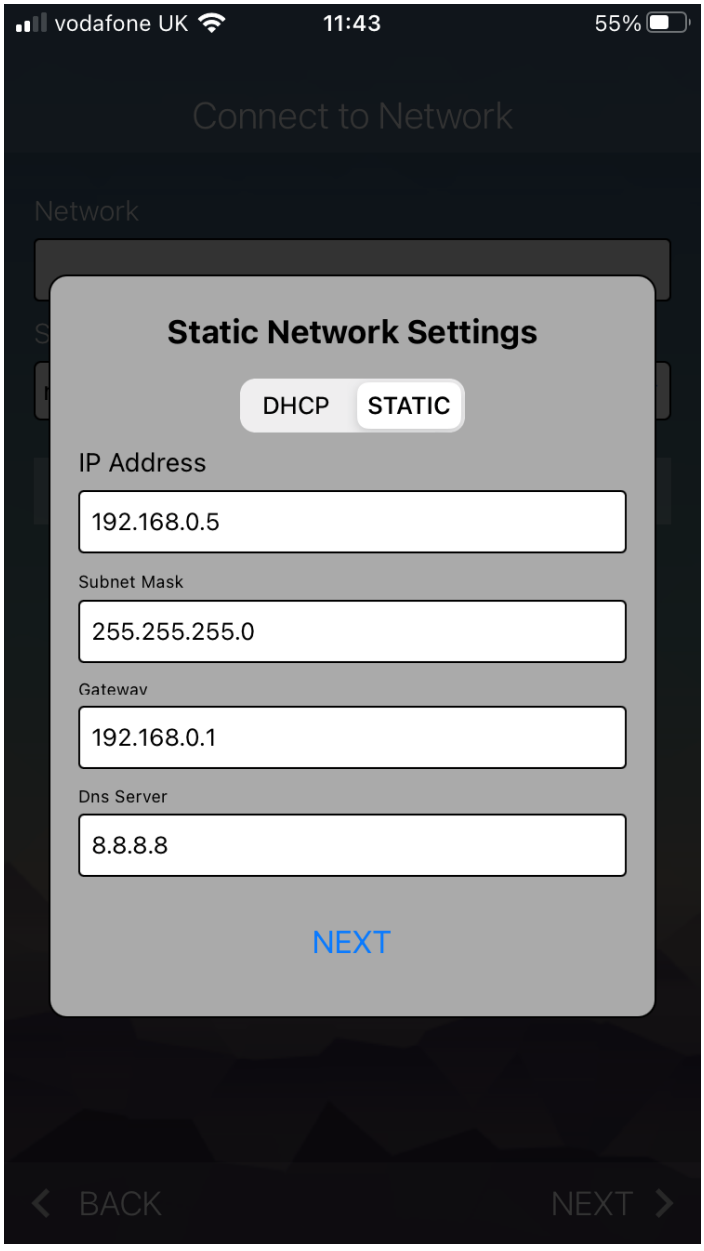
Windows PC Software Configuration:
In order to set up EL-WIFI devices on the EasyLog Cloud, both the PC Software and the device require an internet connection. The PC Software connects to the EasyLog Cloud via an HTTPS connection in order to set up the device. This is only required during initial configuration.

The devices communicate with the EasyLog Cloud using TCP port 14354. Most domestic routers do not have restrictions on outbound TCP connections but corporate networks may require an exception in the router/firewall.

How do I configure my devices with a static IP Address?

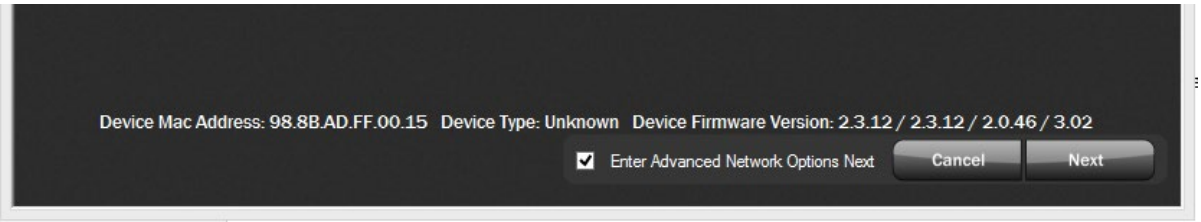
EasyLog Cloud App

If you do not have a DHCP server on your network or wish to manually assign an IP address, these settings are found by selecting the 'Advanced Options' button during device configuration.



WiFi Sensor Software

If you do not have a DHCP server on your network or wish to manually assign an IP address, these settings are found on the Advanced Network Options screen. Ticking the box on the Wireless Network Selection screen then clicking Next will take you to the advanced options.



Can I connect my devices to a wireless network with Enterprise Authentication?

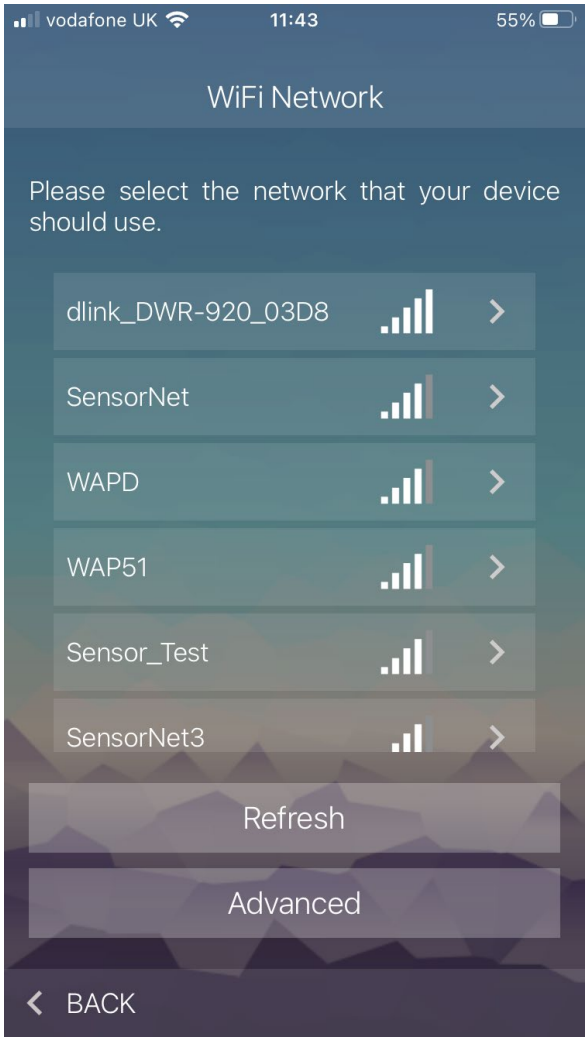
Enterprise Authentication is supported for the following authentication types:

- PEAP/MSCHAPv2
- FAST
- TTLS

We do not support the following types, which require a client certificate to be installed:

- TLS
- GTC
- LEAP

EasyLog Cloud App:



WiFi Sensor Software:

Selecting an Enterprise network will prompt entry of a username and password:

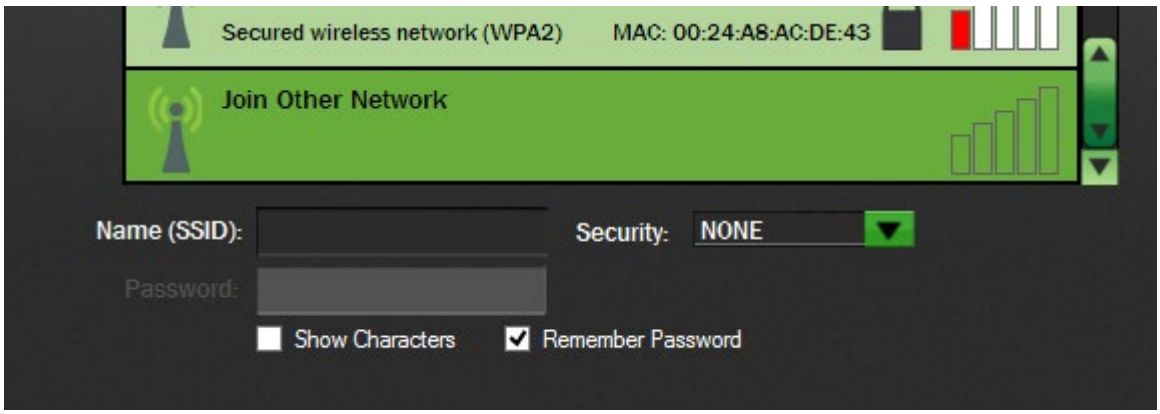
You also need to select the authentication type in the dropdown box. Consult your IT Administrator if you are unsure what type of enterprise network you have.

My Wireless Network doesn't appear in the list, what could be causing this?

If you have refreshed the network list several times but your network does not appear, there are several possible causes:

The wireless network could be out of range of the sensor, try moving the sensor and the access point/router closer together and/or remove obstacles that could cause poor signal and try again.

The wireless network name (SSID) could be hidden. Either change the access point or router configuration to make the SSID visible or use the option to connect to "Join Other Network" and enter the details manually.



The SSID may contain invalid characters. The devices are unable to handle certain special characters such as spaces or commas in the SSID, or trailing spaces at the end. You may need to change the SSID of the network, this also applies to passwords.

I am getting an 'Error Saving Settings' message at the end of the set-up process, what could be causing this?

At the end of the set-up process, the devices transmit a test message in order to confirm that the configuration is correct. This error message is most often due to the test connection failing.

The most common reason for the test connection to fail is the packets being blocked by a firewall on your PC. Please follow our firewall configuration guides to ensure that you have the required TCP ports open.

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There is an Enterprise Level Firewall (eg Sonicwall, Fortigate etc.) on our network; will this stop the devices working on the EasyLog Cloud?

The answer to this depends very much on the configuration of the Firewall. If the Firewall is configured to allow unrestricted outbound traffic, it should not cause any issues.

Some corporate firewalls are configured to only allow traffic from known or authenticated clients, e.g. using Windows Domain Login. As the devices are unable to respond to requests to identify themselves, the Firewall may not allow access through to the internet. In this case, an exception will need to be added for the IP or MAC Address of the device. Please consult your IT Administrator.