

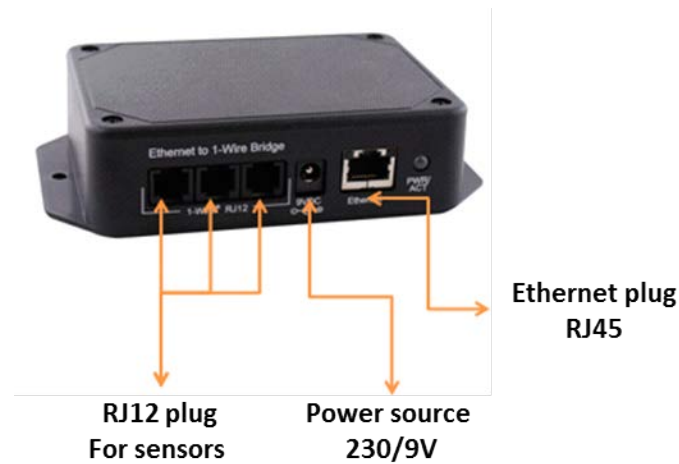
OW-SERVER



www.AgileBio.com

Quick Start Guide

Getting started with the OW-SERVER is simple. Just follow a few steps:



1. Apply power to the OW-SERVER. The green PWR/ACT LED will begin to flash at one second intervals, indicating that the product is operating normally.
2. Connect it to your Network. Connect a live network cable to the Ethernet Port on the device. The green LED on the Ethernet connector will illuminate, indicating a valid network connection. The yellow LED on the Ethernet connector blinks only when there is network traffic.
For the OW-SERVER-WiFi-2, you will need to connect to the device wirelessly in order to assign it your wireless network's SSID.
3. Connect a 1-Wire Device. Connect a supported 1-Wire device to any of the 1-Wire RJ12 connectors.
4. Determine the IP address of the OW-SERVER. You need the IP address in order to access the on-board web application for device configuration. If the OW-SERVER does not find a DHCP server running on your network, it will default to the following IP address: 169.254.1.1.

Note: if you are using an OW-SERVER- WiFi-2, it will automatically look for a network with the SSID of EDSWiFi. If it does not find this SSID, it will default to 169.254.1.1 and create an ad-hoc wireless network named EDSWiFi.

5. Configure your device. Type the OW-SERVER's IP address (e.g., <http://192.168.1.27>) into your browser. Select the link on the left called "WEB Setup". When the name and password is requested, enter "admin" for the name and "eds" for the password.

CONGRATULATIONS! You have successfully installed your Embedded Data Systems' OW-SERVER. Please keep reading

OW-Server



to obtain an understanding of the function of each of the web pages served by the OW-SERVER

Some things to keep in mind:

If you are employing an OW-SERVER-WiFi, you will need to connect to it as a device and then access it via its internally-assigned IP address (169.254.1.1) in order to configure it with your network's SSID and security information.

Interface

The OW-SERVER has two forms of interface:

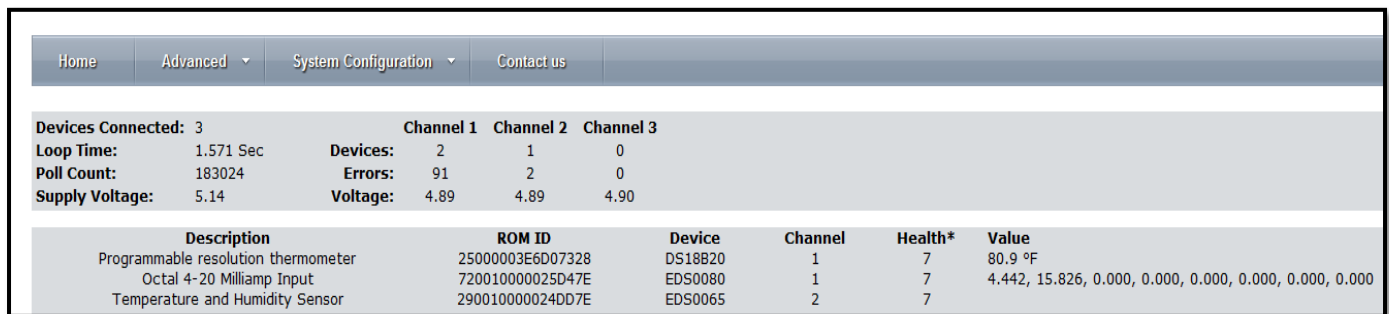
- Web—the on-board web application that provides real-time access of monitoring data
- Programmatic—the methods by which to interface directly with monitoring data Physical

Web

Each OW-SERVER includes an integrated web-server that provides access to monitored data from any Internet connected device such as a web-browser on your PC, smartphone, or even an iPad®!

The Web interface provides you an easy way to configure the OW-SERVER's network settings and is accessible by navigating to the DHCP-assigned address. When you connect the OW-SERVER to your network it will automatically request an IP address from an available DHCPserver.

Simply open a web browser and enter that URL to access the web monitoring application.



Home Advanced ▾ System Configuration ▾ Contact us						
Devices Connected:	3	Channel 1	Channel 2	Channel 3		
Loop Time:	1.571 Sec	Devices:	2	1	0	
Poll Count:	183024	Errors:	91	2	0	
Supply Voltage:	5.14	Voltage:	4.89	4.89	4.90	
Description	ROM ID	Device	Channel	Health*	Value	
Programmable resolution thermometer	25000003E6D07328	DS18B20	1	7	80.9 °F	
Octal 4-20 Milliamp Input	720010000025D47E	EDS0080	1	7	4.442, 15.826, 0.000, 0.000, 0.000, 0.000, 0.000	
Temperature and Humidity Sensor	290010000024DD7E	EDS0065	2	7		

The web interface provides the following menu items:

- Overview—the default, opening screen that provides a snapshot of connected devices and OW-SERVER information
- Devices—displays detailed information about each device connected to the OW-SERVER
- WEB Setup—provides access to configuration fields for activating direct control of the 1-Wire bus through TCP using an ASCII based command set
- 1-Wire Setup—provides access to configuration fields for activating direct control of the 1-Wire bus via TCP using ASCII based command set
- POST Client Setup—specifies a URL where the OW-SERVER can send XML data from connected 1-Wire devices on a timed basis; handled through HTTP Post

LABCOLLECTOR URL

POST Client Configuration

Use this page to configure the automatic sending of data to an HTTP server using POST.

Enable Client:	<input checked="" type="checkbox"/>
URL:	http:// /UserFiles/lclogger_autoload_ow.php
Period:	60 seconds
Enable Proxy:	<input type="checkbox"/>
Proxy URL:	http://myproxy.com:8080
<input type="button" value="Save"/>	

Notes:

The latest device data can be automatically sent to a HTTP Post server using the POST Client feature. Data is sent in XML format.

URL - Where to post the data, as typed into a browser. Examples:

"http://www.embeddeddatasystems.com/upload.htm"
"http://www.embeddeddatasystems.com:12391/files/myfile.htm"
"http://192.168.1.23/upload.htm".

Period - How often, in seconds, to send the data.

HTTP Post can be sent through a proxy server by enabling it and entering the proxy server location in the Proxy URL field using the same rules as above.

- WiFi—provides the WiFi network configuration settings

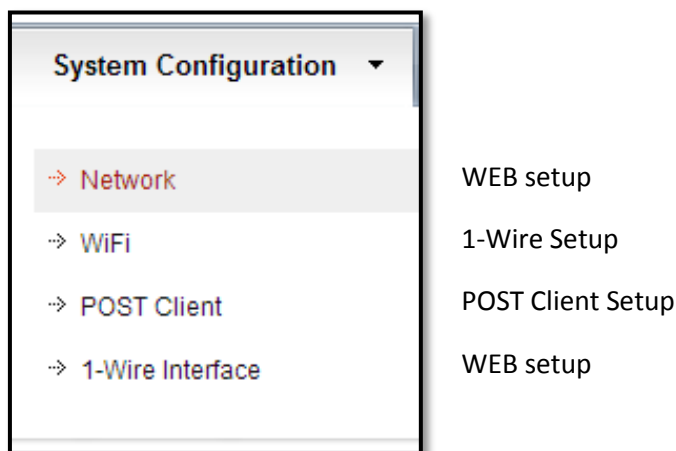
Note: If your network does not have a DHCP server, the OW-SERVER will default to a self assigned address of 169.254.1.1. In the event of this situation, you will need to temporarily reconfigure your computer's network settings to be on the same network as the OW-SERVER in order to talk to the device for the first time. Only when the OW-SERVER is in the same address space as your other computers can you access it via a browser.

Configuration

Any configuration of your OW-SERVER can be carried out through the integrated web application. The on board, web based tools provide a method to configure both the unit itself as well as any attached supported 1-Wire devices.

To access the configuration elements, Navigate to the IP Address your network has assigned to the OW-SERVER. This will open the web interface.

From the default "Overview" screen, you can access the three configuration options using the left-hand menu:



The WEB Setup provides a number of fields to configure how the OW-SERVER operates within your network. This section of the manual covers both the OW-SERVER-ENET-2 and OW-SERVER-WiFi-2.

Note: In order to access this portion of the web tool, you will need a username and password. If you have not set it previously, you can use the factory default user name of “admin”, and password of “eds” (all in lower case).

OW-SERVER-ENET-2

You can configure the following aspects of the OW-SERVER-ENET-2:

Device name—the factory default is OW-SERVER-ENET-2. However this is a user definable name, maximum 24 characters. Alphanumeric characters, dashes, periods, spaces and underscores are permitted. This flexibility allows you to distinguish a device by its location or function for clarity. This field is included in the XML file.

User name—this is the user name, case-sensitive maximum 12 characters, used to access the configuration sections of the on-board web tool and the Telnet interface. Upper case and lowercase Alphanumeric Characters permitted. The factory default is "admin".

Password—this is the password used to access the configuration sections of the on board web tool and the Telnet interface. Uppercase and lowercase Alphanumeric Characters permitted. The factory default is "eds".

Password—confirms the password entered in the previous password field.

Host Name—the factory default name for the OW-SERVER-ENET-2 is EDSOWSERVER. You can change the name but it is limited to 16 UPPERCASE characters. This field is also printed in the XML file

Enable DHCP—check this box to automatically enable the OW-SERVER-ENET-2 to receive an IP address and other network configuration information (such as gateway and subnet mask) from a DHCP provider on your network.

Note: this is the factory default setting of the device. If you elect NOT to enable DHCP, you must manually provide network adapter settings for the device:

- **IP Address**—a standard IPV4 address. **Note:** if you configure the device with an IP Address that is NOT a part of your network IP-range or class you will be unable to access the device unless connected directly to it with a computer configured with the same IP settings
- **Gateway**—the IP address of your network gateway
- **Subnet Mask**—the Subnet mask
- **Primary DNS**—the IP address of the primary DNS server
- **Secondary DNS**—the IP Address of a secondary DNS server. **Note:** this is optional
- **HTTP Port**—the port through which the OW-SERVER will listen for incoming HTTP requests. Normally programmed to 80

Save—when you have finished making settings, click the “Save” button to commit the settings to the device. This will cause the device to reboot

Note: at the time of initial boot-up, the device will look for a DHCP server. If one cannot be found, the following default configuration settings will be applied:

	<input checked="" type="checkbox"/> Enable DHCP
IP Address:	169.254.1.1
Gateway:	169.254.1.1
Subnet Mask:	255.255.0.0
Primary DNS:	169.254.1.1
Secondary DNS:	169.254.1.1
HTTP Port:	80
	Save

OW-SERVER-WiFi

Upon power-up, the OW-SERVER-WiFi-2 is configured from the factory to immediately look for a wireless network with a SSID of EDSWiFi. If the device finds this network (and it is unsecured) the OW-SERVER-WiFi-2 will immediately connect and attempt to gather network configuration information from an available DHCP server. This includes the following information:

IP Address—a standard IPV4 address.

Note: if you configure the device with an IP Address that is NOT a part of your network IP-range or class you will be unable to access the device unless connected directly to it with a computer configured with the same IP settings;

Gateway—the IP address of your network gateway

Subnet Mask—the Subnet mask

Primary DNS—the IP address of the primary DNS

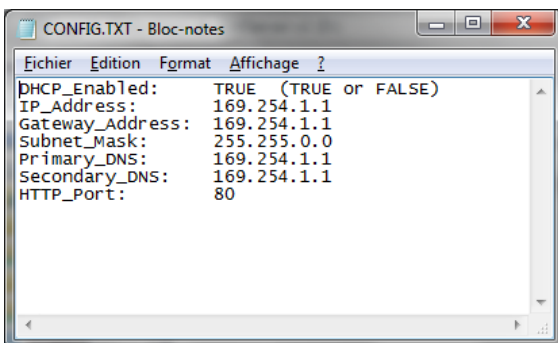
Secondary DNS—the IP Address of a secondary DNS. Note: this is optional

If the device does not find a wireless network with a network SSID of EDSWiFi, you will need to connect to the device to manually configure it.

Manually Configure the OW-SERVER-WiFi-2

In the event that your OW-SERVER-WiFi-2 does not find a wireless SSID of EDSWiFi, it will create an ad-hoc network called EDSWiFi with the following network configuration settings:

- IP Address: 169.254.1.1
- Gateway: 169.254.1.1
- Subnet Mask: 255.255.0.0
- DNS: 169.254.1.1



In order to configure the OW-SERVER-WiFi-2, you will need to connect directly to the ad-hoc network:

- Open your wireless network settings
- Click on the EDSWiFi network under the “Devices” section of your wireless adapter.
- Once the network has connected, open your browser and navigate to the default configuration IP Address: 169.254.1.1.
- This will open the web based configuration application.

In order to get your OW-SERVER-WiFi onto your existing wireless network, you will need to configure its wireless settings. To access the configuration screen:

Click on the “WiFi Setup” menu on the left-hand side. This will open the WiFi Configuration screen. You can specify the following information to configure your OW-SERVER-WiFi:

WLAN Type—use the radio buttons to specify if your wireless network is an ad-hoc collection of devices or a wireless infrastructure. Contact your network administrator to determine the appropriate setting

SSID Name—use the drop-down to select the SSID to which you want the OW-SERVER-WiFi to connect. In the event that your wireless network does not broadcast its SSID, type in the name into the empty field. Contact your network administrator to determine the appropriate setting.

Security Type—use the drop-down to select the type of security on your wireless network. The OW-SERVER-WiFi can authenticate to wireless networks using the following security types:

- o WPA (Personal)
- o WEP (64 and 128-bit)

Security Key—enter the security key for the SSID selected. Contact your network administrator to determine the appropriate setting.

Click the “Apply” button to commit the changes. If a security key has been entered, it may take up to 2 minutes before the OW-SERVER-WiFi becomes accessible on the new network.

Once the changes have been applied, you can connect to the wireless network that the OW-SERVER-WiFi is joining and utilize either your DHCP lease tables or the EDS Appliance Scanner Software to find the device’s new IP address.

The IP address enables access through a web browser.

EDSWiFi SSID Found

In the event that the OW-SERVER-WiFi finds a wireless SSID of EDSWiFi,

Use either your DHCP lease tables or the EDS Appliance Scanner Software to find the device’s IP address

Open your browser and navigate to the IP Address returned from the previous step. This will open the web-based configuration application.

You can make changes to the device’s WiFi configuration details by choosing the “WiFi Setup” menu option on the left-hand side, then specifying the configuration information discussed previously.