IIoT Enterprise Setup and Configuration **COMEGA**

The new Omega Enterprise Gateway (OEG) software (*version 2.3 or higher*) now supports Layer N GW-001 models in local-area network environments with the addition of the *Enterprise Mode* feature in Layer N GW-001 models with firmware *version 1.1.0 or higher*. The Enterprise Mode feature provides a local-area solution to sensing and data logging by bringing the advanced sensing suite of Layer N Smart devices to the following paid tiers of OEG:

- Omega Enterprise Gateway Pro
- Omega Enterprise Gateway Business
- Omega Enterprise Gateway Business Pro

What is Needed?

The following materials are required to download OEG, upgrade the GW-001 firmware, and to add the Gateway to OEG.

- A Windows 7, 8, 9, 10, or 11 OS PC to purchase, download, and run OEG.
 The PC will also be used check for the latest GW-001 firmware and will provide access to the internal Gateway
 UI to upgrade the firmware and enable Enterprise Mode.
- A DHCP-enabled router with Internet access and an open RJ45 Ethernet port to upgrade the firmware of the GW-001 for first time setup; also needed if the GW-001 firmware version is outdated.
- One RJ45 Ethernet cable to connect the Gateway to the DHCP-enabled router and to connect to the local area network PC or router after the Enterprise Mode process is complete.
- An assembled GW-001 device.

Download OEG Pro

A qualifying OEG license tier can be purchased and downloaded from the OMEGA Engineering website at the following URL:

https://www.omega.com/en-us/oeg

Note: Omega Link compatibility is only available for **OEG Pro**, **OEG Business**, and **OEG Business Pro** license tiers.

Once a qualifying license tier has been purchased and downloaded on a Windows PC, users may proceed by installing the software on the PC that will run OEG. Exit the software once the download process is complete.

Navigate to the GW-001 User Interface

A successful connection between a GW-001 and OEG requires the GW-001 to run on **firmware version 1.1.0 or higher**. Users can check for the latest firmware by navigating to the **GW-001 User Interface (UI)** on a PC with a web browser.



To access the GW-001 UI for the first time, use an **RJ45 Ethernet Cable** to plug the GW-001 device to a **DHCP-enabled router with Internet access** and follow the steps below:

Step 1: Using a Windows PC on the same network as the connected GW-001, type the following URL:

> http://omegaiotgatewayXXXX. local

(XXXX should be replaced with the last 4 digits of the GW-001 MAC address printed on the label located on the underside of the GW-001 device).



Step 2: From the GW-001 UI login screen, enter the password for the GW-001 (if this is a first-time login, enter the password located on the underside label of the GW-001 device.) When entered successfully, the user will be granted access to the GW-001 UI.

Important: If the user is unable to access the GW-001 UI using the DHCP-enabled router method, the Bonjour service may need to be installed on the PC. The service can be downloaded from the following URL:

http://omegaupdates.azurewebsites.net/ software/bonjour

Download and Install the Latest GW-001 Firmware

From the main page of the GW-001 UI, click the **Settings** tab then click the **System** tab.

CONNECTED		SETTINGS 👻
		Radio
		Network
Add	Search .	Security
		System
_		Log

When presented with the System Settings menu, users may click the Check Online button to check for the latest GW-001 firmware version available.

System Settings		
	Firmware	
Current Firmwar	re Version:1.0.13, Release Date:24, Feb, 2021	
Upload Firmware:	Choose a file Q Upload	
—	Check Online	
System		
Factory Reset Reboot		

The user may then download the latest version and upload it to the GW-001 device by clicking the **Upload Firmware** search bar and selecting the firmware file from the **File Explorer**. A **red** LED will appear on the GW-001 indicating the upgrade is in progress.

Once the update process is complete, the LED on the GW-001 will blink **green**. The GW-001 will reboot and the user will need to log back into the GW-001 UI. The new firmware version will appear on the main page of the GW-001 UI once logged back in.



Enable Enterprise Mode

When the GW-001 has been upgraded to the latest firmware version, Enterprise Mode will be made available in the **Security Settings**. Click the **Settings** tab in the upper right corner of the screen, and clicking **Security** from the dropdown.



From the Security Settings menu, users will be able to disable the cloud registration requirement thus enabling Enterprise Mode. Click the Turn Off Cloud Registration checkbox to disable the feature and to set the GW-001 to Enterprise Mode. Click the Update button to save the change. The GW-001 LED will repeatedly blink amber/orange to indicate the device is in Enterprise Mode.

Security Settings		
Change Admin Password		
Existing Password:		
New Password:		
Confirm Password:		
Use Secure Web:	⊖ on ⊛ off	
Turn off Cloud Registration:		
Update		

Add the GW-001 to OEG as a Device

If the GW-001 will be moved and connected to a local area network, it should be moved at this point and connected directly to a DHCP-enabled, local-area network router or directly to the local-area network Windows PC that has OEG installed. Both methods require a connection via RJ45 Ethernet cable.

Local-Area Network DHCP Router Setup

Local-Area Network Direct-to-PC Setup



Once the GW-001 has been connected to a local-area network router or local-area network PC, launch OEG 2.3 and log in to the OEG account. Follow the steps below to add a GW-001 to OEG as a device:



Step 1: After logging in to the OEG account, from the homepage, click the icon or the Add Devices button. Then select Layer N Gateway from the Product Family dropdown and GW-XXX-X from the Product Model dropdown.

Product Model		Name
GW-XXX-X		Name
~	Product Model	Product Model GW-X00C-X

Step 2: Input the IP Address of the connected GW-001 as it appears in the local-area network.

2. Specify Connection Parameters				
Interface	IP Address	TCP Port		
TCP v	192.168.1.200			
Device ID (For Modbus or RS485 Daisy Chain, please ensure ID matches device address				

Important: If the GW-001 device has been disconnected and moved to a separate DHCP-enabled local-area network router or PC, the user must log back into the gateway internal UI to identify the **new IP Address** that the device has been assigned under new the local-area network.

Step 3: Click Advanced to reveal the text field for Username and Password. The Username will automatically populate to "admin." Input the password required to access the gateway internal UI in the Password textbox.

Advanced		
4. Specify credential. It is	not required for most omega produc	ts.
User Name	Password	
admin		Secure Connection
		Add

Step 4: Click Add to finalize your configuration.

All devices connected to the GW-001 will appear, including those that are offline. The readings from offline devices will display NaN.

Local-Area Network DHCP Router Setup

If a sensing device that has been paired to the GW-001 has been configured or modified after the GW-001 has been added to OEG, the user must reboot the GW-001 and restart the OEG software to sync with the configuration made to the connected device.