



opengear

QUICK START GUIDE

Operations Manager 2200

Includes: OM2216, OM2248, OM2248-10G, OM2248-L,
OM2248-10G-L, OM2224-24E,
OM2224-24E-L, OM2224-24E-10G-L



Version 1.0

1. REGISTER

This Quick Start Guide covers basic installation and configuration of your new OM2200. For in-depth guidance, consult the OM2200 User Manual.

Register your product: <https://opengear.com/product-registration>

When you register, you:

- Activate your warranty
- Get notified when firmware updates are released

For licensing information and access to source code, visit:

<https://opengear.com/software-licenses>

2. WHAT'S IN THE BOX?



SFP/Ethernet Gigabit **NET1**

SFP/Ethernet Gigabit **NET2**



For the complete list of what's inside the box, visit:

<https://opengear.com/products/om2200-operations-manager/#inside>



After opening the box:
DO NOT POWER ON RIGHT AWAY

3. ASSEMBLE

NOTE: **OM22xx** models have two SFP/Ethernet Gigabit labeled **NET1** and **NET2**. **OM22xx-10G** models have SFP+ 10 gigabit connection labeled **NET1** and SFP/Ethernet labeled **NET2**.

Connect to a computer or into your network from any **NET** port for initial configuration.

For -L models, attach the included antennas or external mount to the **CELL (M)** and **CELL (A)** connectors. If you have a data plan, insert a carrier-provided mini-SIM into the first SIM CARD slot with contacts facing upward. You should hear a click when it is correctly inserted.

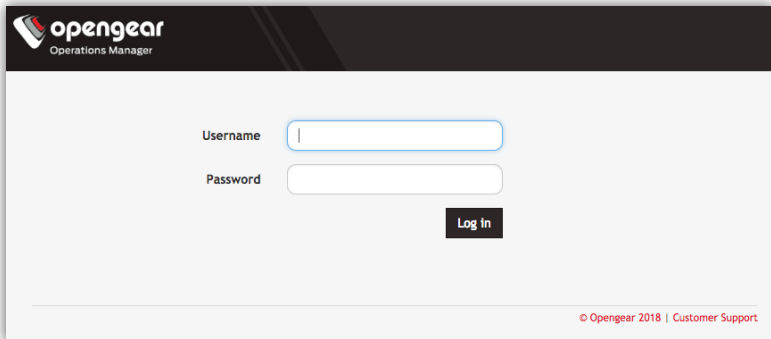
Connect other devices to the serial and USB ports.

Plug in the two 12V DC power supplies and turn on power to the device.

4. LOG IN

Browse to **192.168.0.1** (subnet mask 255.255.255.0) with a computer on the same LAN as the console server.*

NOTE: The device has a self-signed SSL certificate. Untrusted connection errors appear. Click through the errors to the login page.



The screenshot shows the login interface for OpenGear Operations Manager. At the top left is the OpenGear logo with the text "Operations Manager". Below the logo are two input fields: "Username" and "Password". The "Username" field has a blue border and a cursor. Below the "Password" field is a black "Log In" button. At the bottom right, there is a small red link that says "© Opengear 2018 | Customer Support".

Log in with username **root** and password **default**. Click **Submit**.

The ACCESS > Serial Ports page appears with a list of connected serial devices and links to a Web Terminal or SSH connection for each.

*If your computer is not on the same LAN, you can use the *arping* command to set the IP address.

5. CHANGE ROOT PASSWORD

Click **CONFIGURE > User Management > Local Users**.

Click the **Edit** button next to the root user. On the **User Details** page, enter and confirm the new password.

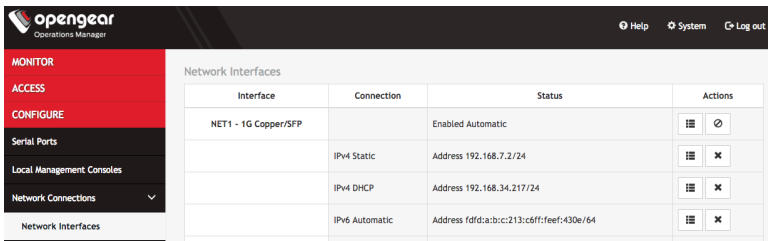
The screenshot shows the OpenGear Operations Manager interface. On the left is a navigation sidebar with a red header containing 'MONITOR', 'ACCESS', and 'CONFIGURE'. Under 'CONFIGURE', 'Local Users' is selected. The main content area is titled 'Edit User' and shows 'User Details' for the 'root' user. The details include fields for Username (root), Description (System wide), Password, and Confirm Password. A table below shows Group Memberships for the user.

Group Memberships	Group Name	Description	Members
<input type="checkbox"/>		Provides users	









Scroll to the bottom of the page and click **Save User**.

6. CHANGE IP SETTINGS

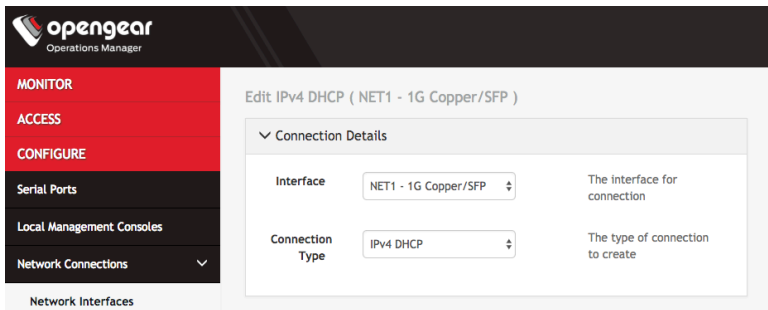
DHCP is enabled by default. To change to a static IP click **CONFIGURE** > **Network Connections** > **Network Interfaces**.



The screenshot shows the OpenGear Operations Manager interface. On the left is a navigation menu with 'CONFIGURE' selected. The main area displays a table of Network Interfaces.

Interface	Connection	Status	Actions
NET1 - 1G Copper/SFP		Enabled Automatic	 
	IPv4 Static	Address 192.168.7.2/24	 
	IPv4 DHCP	Address 192.168.34.217/24	 
	IPv6 Automatic	Address ffd:a:bc:213:cfff:feef:430e/64	 

Click the **Edit** button next to **IPv4 DHCP**, to modify the DHCP setting. Change **Connection Type** and fill in the requested information in the form that appears. Click **Apply**.



The screenshot shows the 'Edit IPv4 DHCP (NET1 - 1G Copper/SFP)' configuration page. The 'Connection Details' section is expanded, showing two dropdown menus.

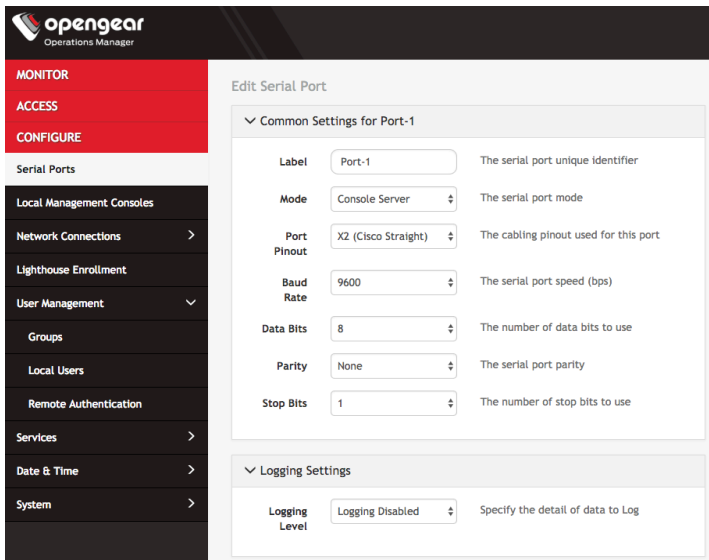
Connection Details

Interface: The interface for connection

Connection Type: The type of connection to create

7. CONFIGURE SERIAL PORTS

To change settings for individual serial ports, click **CONFIGURE > Serial Ports**. Click **Edit** next to the port you wish to modify.



The screenshot displays the OpenGear Operations Manager interface. On the left is a navigation sidebar with a red header containing 'MONITOR', 'ACCESS', and 'CONFIGURE'. Under 'CONFIGURE', 'Serial Ports' is selected. Below this are various system management categories like 'Local Management Consoles', 'Network Connections', 'Lighthouse Enrollment', 'User Management', 'Groups', 'Local Users', 'Remote Authentication', 'Services', 'Date & Time', and 'System'. The main content area is titled 'Edit Serial Port' and is divided into two sections: 'Common Settings for Port-1' and 'Logging Settings'. The 'Common Settings' section includes fields for Label (Port-1), Mode (Console Server), Port Pinout (X2 (Cisco Straight)), Baud Rate (9600), Data Bits (8), Parity (None), and Stop Bits (1). The 'Logging Settings' section includes a Logging Level dropdown set to 'Logging Disabled'.

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Operations Manager

MONITOR
ACCESS
CONFIGURE

Serial Ports

Local Management Consoles
Network Connections >
Lighthouse Enrollment
User Management >
Groups
Local Users
Remote Authentication
Services >
Date & Time >
System >

Edit Serial Port

Common Settings for Port-1

Label The serial port unique identifier

Mode The serial port mode

Port Pinout The cabling pinout used for this port

Baud Rate The serial port speed (bps)

Data Bits The number of data bits to use

Parity The serial port parity

Stop Bits The number of stop bits to use

Logging Settings

Logging Level Specify the detail of data to Log

You can change common settings, logging settings, and set IP aliases per serial port. Click **Apply**.

8. ADD USERS AND GROUPS

To add a new user, click **CONFIGURE > User Management > Local Users**. Scroll to the bottom of the page and click **Add User**.

Enter a **Username** and enter and confirm a **Password**. Select the appropriate groups. Check the **User Enabled** box.

User Details

Username

Description

Password The user's authentication secret. Note: A password may not be required if remote authentication is being used

Confirm Password Re-enter the user's password for confirmation

Group Memberships

<input type="checkbox"/>	Group Name	Description	Members
<input type="checkbox"/>	admin	Provides users with unlimited configuration and management privileges	1
<input type="checkbox"/>	netgrp	Group for users created automatically via network authentication	0

0 / 2 Groups Selected

User Enabled

Click **Save User** to create the new user account.

NOTE: You should create a new administrative user rather than continuing as the root user. To do so, add a new user to the **admin** group with full access privileges. Log out and log back in as this new user for all administrative functions.

Click **CONFIGURE > User Management > Groups**. At the end of the list of existing groups, click the **Add** button.

Enter a new **Group Name**. To control access to specific ports, change the **Role** to **Console User** and select desired ports.

New Group

Group Details

Group Name

Description

Role

Group Enabled

Accessible Port(s)

Select/Unselect all Ports

<input type="checkbox"/> Port 1	<input type="checkbox"/> Port 2	<input type="checkbox"/> Port 3	<input type="checkbox"/> Port 4	<input type="checkbox"/> Port 5	<input type="checkbox"/> Port 6	<input type="checkbox"/> Port 7	<input type="checkbox"/> Port 8
<input type="checkbox"/> Port 9	<input type="checkbox"/> Port 10	<input type="checkbox"/> Port 11	<input type="checkbox"/> Port 12	<input type="checkbox"/> Port 13	<input type="checkbox"/> Port 14	<input type="checkbox"/> Port 15	<input type="checkbox"/> Port 16
<input type="checkbox"/> Port 17	<input type="checkbox"/> Port 18	<input type="checkbox"/> Port 19	<input type="checkbox"/> Port 20	<input type="checkbox"/> Port 21	<input type="checkbox"/> Port 22	<input type="checkbox"/> Port 23	<input type="checkbox"/> Port 24
<input type="checkbox"/> Port 25	<input type="checkbox"/> Port 26	<input type="checkbox"/> Port 27	<input type="checkbox"/> Port 28	<input type="checkbox"/> Port 29	<input type="checkbox"/> Port 30	<input type="checkbox"/> Port 31	<input type="checkbox"/> Port 32
<input type="checkbox"/> Port 33	<input type="checkbox"/> Port 34	<input type="checkbox"/> Port 35	<input type="checkbox"/> Port 36	<input type="checkbox"/> Port 37	<input type="checkbox"/> Port 38	<input type="checkbox"/> Port 39	<input type="checkbox"/> Port 40
<input type="checkbox"/> Port 41	<input type="checkbox"/> Port 42	<input type="checkbox"/> Port 43	<input type="checkbox"/> Port 44	<input type="checkbox"/> Port 45	<input type="checkbox"/> Port 46	<input type="checkbox"/> Port 47	<input type="checkbox"/> Port 48

Cancel Save Group

Click **Save Group** to create the new group.

9. ACCESS DEVICE CONSOLES

Your console server is now ready to access device consoles on your network.

SSH:

- Connect to the pmshell chooser menu, SSH to the console server and log in appending `:serial` to your username, e.g. `root:serial`.
- Connect to a given console, SSH to the console server and login adding the port number or port label to your username, e.g. `root:port02` or `root:MyRouter`.
- Connect directly to a given port, SSH to the console server at TCP port 3000 + the port number, e.g. 3002 for serial port 2.

Telnet:

Telnet to the console server at TCP port 2000 + the port number, e.g. 2002 for serial port 2.

Web Terminal or SSH via the Web Interface:

For console access using your browser, click **ACCESS > Serial Ports** and click the port's **Web Terminal** link.

LIGHTHOUSE 5 CENTRALIZED MANAGEMENT

Lighthouse 5 is a powerful tool that simplifies the way you manage your out-of-band network through a single pane of glass. Better control and visibility provides 24/7 resilient access to your connected IT infrastructure.

Lighthouse 5 features:

- Centralized scalable administration and automation of nodes
- Easy to maintain user groups and permissions
- Secure accessibility for all connections using Lighthouse VPN
- Responsive UI designed and built for NetOps
- Integrated RESTful API

“Deployment is made very easy as Lighthouse learns about attached devices during node enrollment and will dynamically update itself as new devices attach.”

– Network Computing Magazine Product Review – Dec 2017



Ready to learn more?

Visit lighthouse.opengear.com to download a free evaluation of Lighthouse 5 (up to 5 nodes) and to learn more about Opengear's Centralized Management solutions.