



# 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



03042019

## 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>

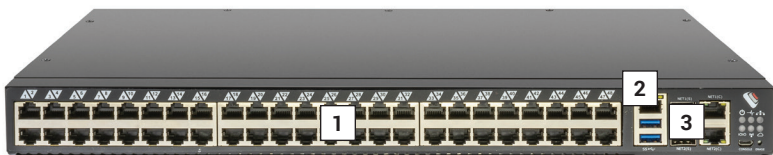
When you register, you:

- 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?



1. Serial Ports

2. Local Console\*

3. NET1 & NET2

\*Console Ports Micro USB/RJ-45



For the complete list of what's inside the box, visit:  
<https://opengear.com/products/om2200-operations-manager/#inside>

Some parts may vary.



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 (Main)** and **CELL (Aux)** 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.

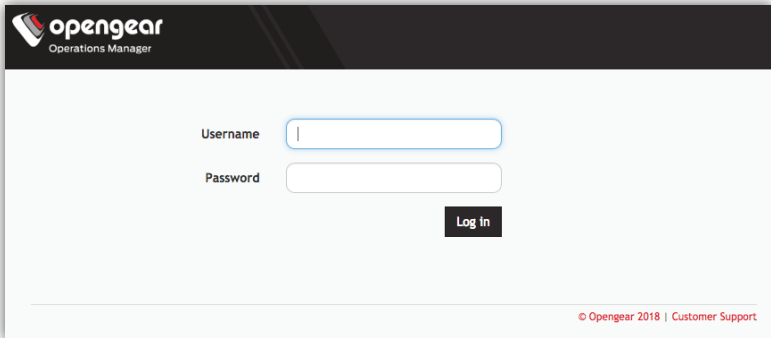
Connect other devices to the serial and USB ports.

Plug in the two 12V AC power supplies.

## 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. The device will also get a DHCP address.

**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, the OpenGear logo and 'Operations Manager' text are displayed. Below this, there are two input fields: 'Username' and 'Password'. The 'Username' field contains a single vertical bar character '|'. To the right of the 'Password' field is a black 'Log In' button. At the bottom right of the page, there is a footer that reads '© Opengear 2018 | Customer Support'.

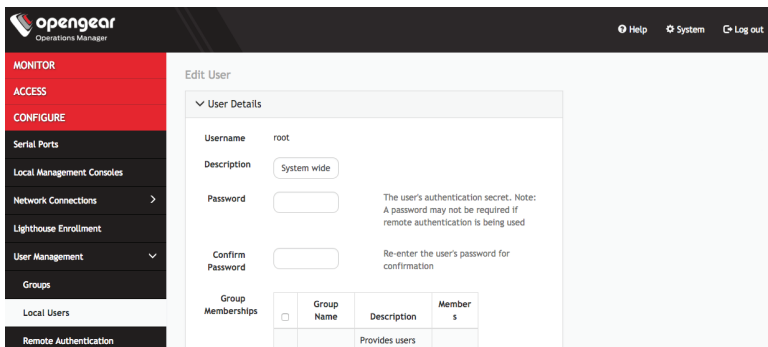
Log in with username **root** and password **default**. Click **Submit**.

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

## 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.



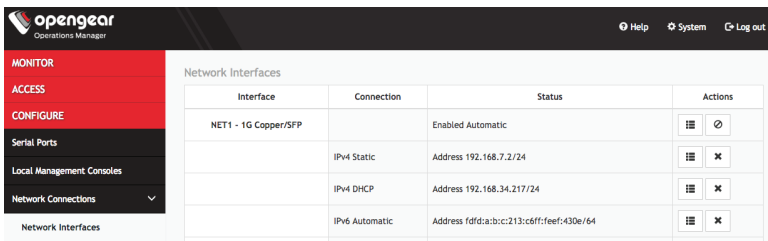
The screenshot shows the OpenGear Operations Manager interface. The left sidebar contains navigation options: MONITOR, ACCESS, CONFIGURE (highlighted), Serial Ports, Local Management Consoles, Network Connections, Lighthouse Enrollment, User Management (expanded), Groups, Local Users, and Remote Authentication. The main content area is titled 'Edit User' and shows the 'User Details' section for the 'root' user. The 'Description' is 'System wide'. The 'Password' and 'Confirm Password' fields are empty. A note states: 'The user's authentication secret. Note: A password may not be required if remote authentication is being used'. Another note states: 'Re-enter the user's password for confirmation'. Below the form is a table for 'Group Memberships'.

| 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

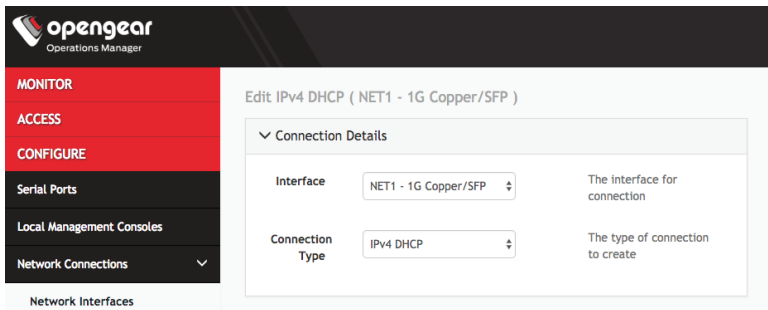
DHCP is enabled by default. To change to a static IP click **CONFIGURE** > **Network Connections** > **Network Interfaces**.



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 fdfd:a:bc:213:c8ff: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 the 'Interface' and 'Connection Type' fields.

**Connection Details**

Interface: NET1 - 1G Copper/SFP  The interface for connection

Connection Type: IPv4 DHCP  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 several menu items: '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'.

**opengear**  
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

Cancel Save User

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.

The screenshot shows a web interface for creating a new group. The title is "New Group". Under "Group Details", there are several fields: "Group Name" (text input), "Description" (text input), "Role" (dropdown menu with "Console User" selected), and "Group Enabled" (checkbox, currently unchecked). Below these is the "Accessible Port(s)" section, which includes a "Select/Unselect all Ports" checkbox and a grid of 48 checkboxes labeled "Port 1" through "Port 48". At the bottom right, there are two buttons: "Cancel" and "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:

- To connect to the pmsHELL chooser menu, SSH to the console server and log in appending *:serial* to your username, e.g. *root:serial*.
- To 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*.
- To 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 CENTRALIZED MANAGEMENT

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