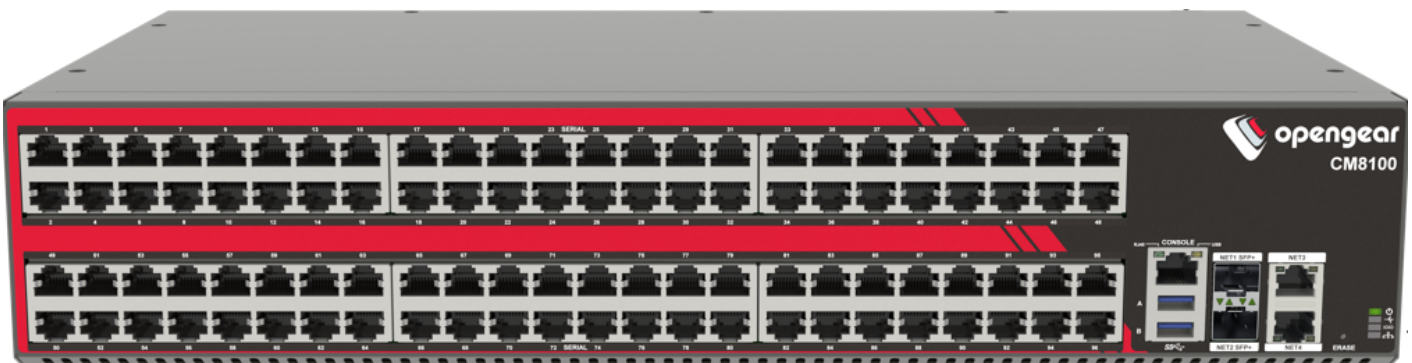




QUICK START GUIDE

CONSOLE MANAGER 8100

Includes Models: CM8116, CM8132, CM8148 CM8148-10G, CM8196-10G,



REGISTER

This Quick Start Guide covers basic installation and configuration of the CM8100.

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

When you register, you:

- Activate your warranty.
- Get notified when firmware updates are released: <https://opengear.com/support/device-updates/>

WHAT'S IN THE BOX

CM8100 (CM8148 shown)

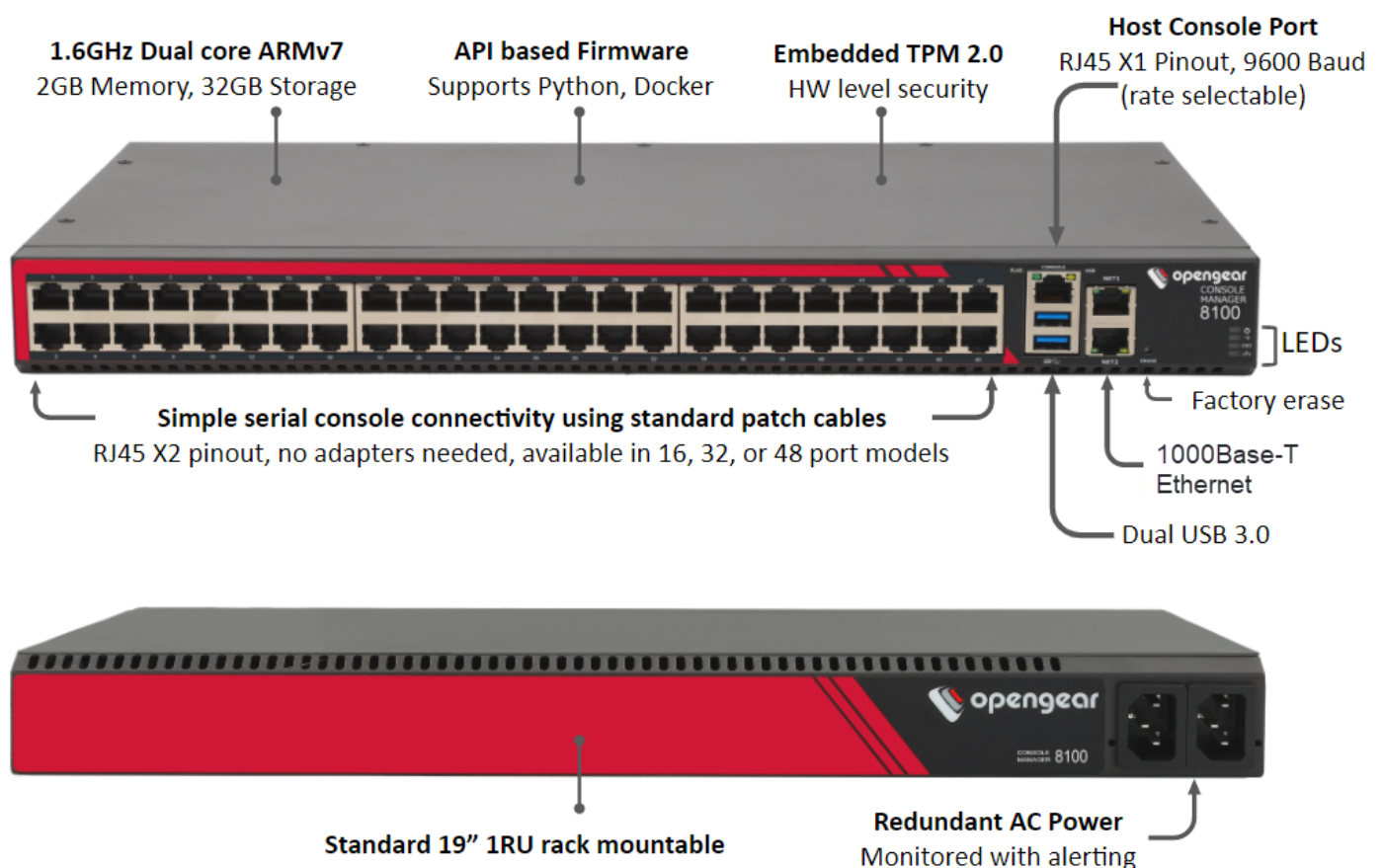


Figure: CM8148 model

CM8100-10G



1.6GHz Dual core ARMv7
2GB Memory, 32GB Storage



API based Firmware
Supports Python, Docker



Embedded TPM 2.0
HW level security

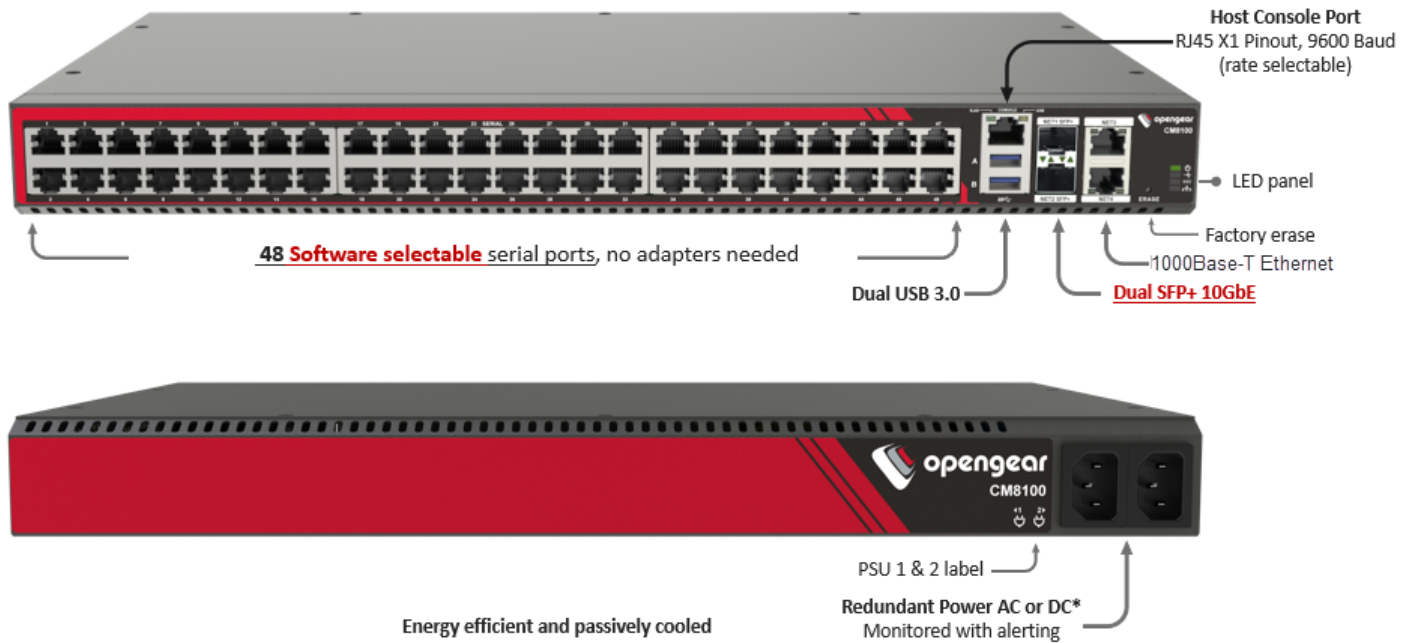


Figure: Example - CM8148-10G

Device Variations

10G Ethernet

10G models have network interfaces NET1 (10G SFP+), NET2 (10G SFP+), NET3 (1000Base-T) and NET4 (1000Base-T)

Dual DC Power Supply (DDC)

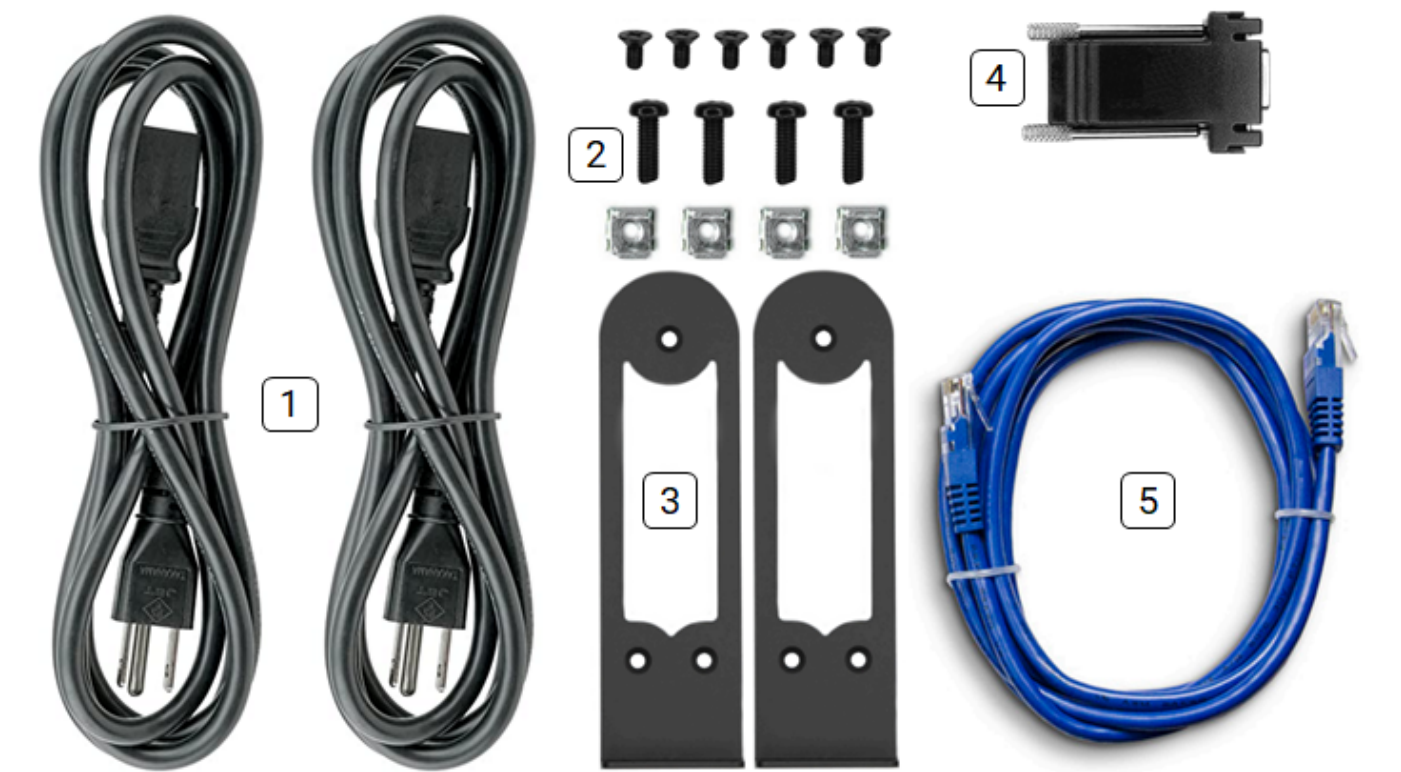
CM8100-10G-DDC

CM8100-10G-DDC devices have a dual DC power supply.





Kit Contents



Note: Contents may be different from those pictured due to region or supplier.

Label	Item	Quantity	Notes
	CM8100 device	1	
1	IEC power cables	2	Region-specific
2	Rack mount screw kit	1	
3	CM8100 rack ears	2	
4	RJ45 to DB9F rollover serial adapter	1	Part number 319018
5	CAT5e RJ45 UTP straight cable - 5ft/1.5m	1	Part number 440016
6	5G/4G Blade Antennas	4/2	Part number 569042, Cellular models only

Table: List of contents

HARDWARE INSTALLATION

Step 1. Connect Network Interfaces

Connect the device to a local network using any of the available physical network interfaces. All interfaces are configured by default to receive IPv4 addresses via DHCP and IPv6 addresses via SLAAC.

Additionally, the device can be accessed from a computer or local network via NET1 (1G) or NET3 (10G) with a static IPv4 address as shown in [Table: Default static interface connection](#).

Model	Interface	Static Address
1Gb Ethernet	NET1	192.168.0.1/24
10Gb Ethernet	NET3	192.168.0.1/24

Table: Default static interface connection

Firewall Zone	Network Interfaces
WAN	NET1
LAN	NET2

Firewall Zone	Network Interfaces
WAN	NET1 (SFP+ 10GbE)
LAN	NET2 (SFP+ 10GbE)
WAN	NET3 (1000Base-T)
LAN	NET4 (1000Base-T)

Table: Default firewall zones for interfaces

Step 2. Connect Serial Devices

Connect managed devices to the serial interfaces on the front of the unit.



Figure: Network interfaces for CM8100

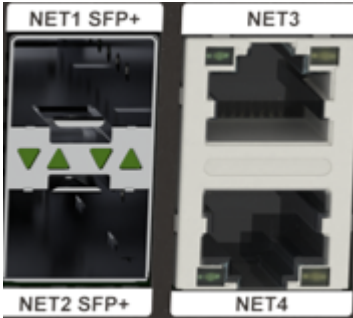


Figure: Network interfaces for CM8100-10G

Step 2a. Connect Internal Modem and Install SIM Card(s)

CM1800-10G devices with internal Modem (POTS) only

CM1800-10G devices with DDC designation are fitted with an internal modem. Connect the RJ11 cable at the RJ11 port at the rear, you will hear or feel a slight click when it is correctly inserted. The modem is configured at the WebUI (see the CM8100 User Guide).

Two SIM card slots are located on the rear face of the device between the antennas, insert each SIM card (s) into its respective slot (marked 1 and 2) until you feel the card click into place.

Note: The SIM card(s) must be installed before power on as they are not "hot-swappable".



See the [Console Manager User Guide](#) for cellular connection status LED states.

Step 3. Connect USB Devices

USB serial devices can be connected to the USB 3 slots of the unit if required.

Step 4. Connect The Power

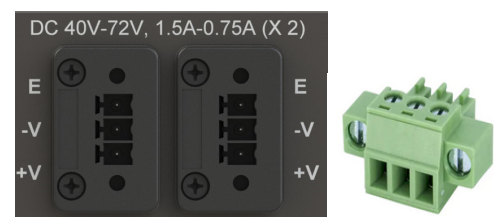
Connect the power cable to the rear of the unit.

A second power cable can be connected if redundancy is required. The power cables can be connected in any order.



Figure: Dual AC power supply connectors.

CM8100-10G-DDC devices with dual DC power have DC terminals:



LED Power Status Indicator

Dual AC power supply connectors.

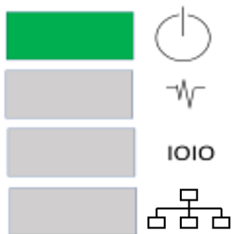


Figure: Power supply has redundancy

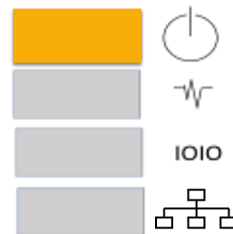


Figure: Power supply does not have redundancy

ACCESS THE DEVICE

Step 1. Log in via the Web UI

Using a computer on the same subnet as the static network interface shown in "Hardware Installation" on page 1, access the web UI with your web browser at <https://192.168.0.1/>.

Note: The device has a self-signed SSL certificate. Your browser will display an "Untrusted connection" warning. Click through the warning to access the login page.

To log in for the first time, enter the username **root** and password **default** and click **Submit**.

Step 2. Change the Root Password

When logging in to the device for the first time you will be prompted to change the root password immediately.


Note: Users are prevented from reusing the word "default" as their password. The factory default password automatically expires after a factory reset and users must choose a new password. This policy is applied through the WebUI, Config Shell and CLI.

Enter the current password followed by the new password and click **Log in**.

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

CONFIGURE SERIAL PORTS

To change settings for individual serial ports:

1. Navigate to **CONFIGURE > Serial Ports**.
2. Click the **Edit** button  next to the port you wish to modify.
3. Change port settings, logging settings or configure IP aliases.
4. Click **Apply** to save changes.

Field	Value
Mode	ConsoleServer
Pinout	X2
Baud Rate	9600
Data Bits	8
Parity	None
Stop Bits	1

Table: Default configuration for serial ports

CONFIGURE LOCAL CONSOLE

[CONFIGURE > Local Management Consoles](#)

Console Manager CM8100, including 10G units, contain one RJ45 serial console.

To configure local console ports:

1. Navigate to **CONFIGURE > Local Management Consoles**.
2. Click the **Edit** button next to the local console you wish to modify.
3. Change port settings.
4. Click **Apply** to save changes.

Field	Value
Baud Rate	9600
Data Bits	8
Parity	None
Stop Bits	1
Emulation	VT102



Table: Default serial port configuration for local console access

CONFIGURE NETWORK





[CONFIGURE](#) > [Network Connections](#) > [Network Interfaces](#)

Click to expand any row to display status information about the interface and its connections.


1G Devices

NETWORK INTERFACES			
<div><div></div><div></div><div></div></div>			
 NET1 - 1G Copper/SFP	2 IPv4 connections 1 Automatic 1 Static	1 IPv6 connections 1 Automatic 0 Static	▼
 NET2 - 1G Copper/SFP	1 IPv4 connections 1 Automatic 0 Static	1 IPv6 connections 1 Automatic 0 Static	▼

10G Devices

NETWORK INTERFACES			
<div><div></div><div></div><div></div></div>			
 NET1 - 10G SFP+	1 IPv4 connections 1 Automatic 0 Static	1 IPv6 connections 1 Automatic 0 Static	▼
 NET2 - 10G SFP+	1 IPv4 connections 1 Automatic 0 Static	1 IPv6 connections 1 Automatic 0 Static	▼
 NET3 - 1G Copper	2 IPv4 connections 1 Automatic 1 Static	1 IPv6 connections 1 Automatic 0 Static	▼
 NET4 - 1G Copper	1 IPv4 connections 1 Automatic 0 Static	1 IPv6 connections 1 Automatic 0 Static	▼

Configure Physical Interfaces

On the Network Interfaces page, click the drop-down arrow on the right side of the target network interface then, click the **Edit** button  to configure media and MTU for any of the physical interfaces.



NET1 - 1G Copper/SFP

Enabled

Disabled



Enabled Automatic



NET1 - 10G SFP+

Enabled

Disabled




Edit

Modify Default IPv4 Static Interface

1. Click the **"IPv4 Static"** label under NET1 (1G) or NET3 (10G) to open the edit connection page.
2. Enter the IPv4 address.
3. Enter the network mask.
4. Click **Apply** to save changes.

CREATE NEW ADMINISTRATIVE USER

Note: You should create a new administrative user rather than continuing as the root user.

1. Navigate to **CONFIGURE > User Management > Local Users**.
2. Click the **Add User** button  at the top-right of the page.
3. Click the **User Enabled** checkbox.
4. Enter **Username** and **Password**.
5. Assign the **admin** group to the user to provide full access privileges.
6. Click **Save User** to create the new user account.
7. Log out and log back in as this user for all administrative functions.

Group Memberships

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

1 / 2 Groups Selected


For more details about Users and Groups configuration, consult the Console Manager User Guide:

<https://opengear.com/support/documentation/>.





ACCESS DEVICE CONSOLES

After you have attached managed devices and configured serial ports by following "[Configure Serial Ports](#)" on page 10, you can now access the console of your managed devices on your network.

Web UI

1. Navigate to **ACCESS > Serial Ports** to view the list of serial ports on the device.
2. Click the **Web Terminal** button  to the right of any serial port in Console Server mode to access it via the web terminal.

 Port-1
Port-1, 9600-8-N-1-X2

 Console Server  No sessions  

Console

For administrator users logged in to the device via console or SSH:

1. Type *pmshell* to view the list of available managed devices.
2. Enter the **port number** to access the desired device and press **Enter**.

SSH

The managed devices connected to the Console Manager can be accessed directly with an SSH command to connect to the device.

- To view the list of managed devices: *ssh <username>+serial@<device address>*
- To connect to a specific device by port: *ssh <username>+port<number>@<device address>*
- To connect to a specific device by name: *ssh <username>+<port label>@<device address>*

Note: The SSH delimiter can be modified via the Web UI at **CONFIGURE > Services > SSH**.


Telnet

Telnet access to managed devices is not supported at this time.

LIGHTHOUSE CENTRALIZED MANAGEMENT

Note: 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. For more information, visit <https://opengear.com/products/lighthouse/>.

To enroll your device:

1. Navigate to **CONFIGURE > Lighthouse Enrollment**.
2. Click the **Add Lighthouse Enrollment** button  at the top-right of the page.
3. Enter the Lighthouse Address, Enrollment Token, optional port and optional Enrollment Bundle.
4. Click Apply to begin the enrollment process.

Note: Enrollment of an Opengear device can also be performed from Lighthouse using **Add Node** functionality.