

Opengear CM8148-10G

Opengear CM8148-10G Device Server User Manual

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of the Opengear CM8148-10G Device Server. The CM8148-10G is a robust console manager designed for data centers and enterprise networks, offering secure and reliable out-of-band management for critical infrastructure.

It facilitates remote access and management of serial console ports, ensuring business continuity even when the primary network is unavailable. This device integrates advanced security features and supports automation tools for efficient network management.

2. PRODUCT OVERVIEW

The Opengear CM8148-10G is a high-density console server, providing extensive connectivity options for various network devices. Its design emphasizes reliability, security, and ease of management.



Figure 1: Front panel of the Opengear CM8148-10G Device Server. This image displays the front panel of the Opengear CM8148-10G Device Server. It features 48 serial console ports, two USB ports, a console port, and four network uplink ports (two SFP+ and two RJ45). The device has a dark gray chassis with a red accent stripe.

Key Features:

- 16, 32, or 96-port serial console server with Smart Out-of-Band™ capabilities.
- Designed as a replacement for legacy terminal servers.
- Enables Data Center automation with Python and Docker support.
- Embedded physical security using a TPM 2.0 module.
- Dual power supplies with independent monitoring for enhanced reliability.

3. SETUP

3.1 Unpacking and Inspection

Carefully unpack the device server and its accessories. Inspect all components for any signs of damage. If any damage is found, contact your vendor immediately.

3.2 Physical Installation

The CM8148-10G is designed for rack mounting. Secure the device in a standard 19-inch equipment rack using the provided mounting hardware. Ensure adequate airflow around the unit for proper cooling.

3.3 Power Connection

Connect the two power supply units to independent power sources for redundancy. Use the provided power cords. Verify that the power indicator LEDs illuminate after connection.

3.4 Network Connection

Connect the device server to your network using the appropriate Ethernet or SFP+ uplink ports. It is recommended to connect to at least two network ports for redundancy and out-of-band access.

3.5 Serial Port Connections

Connect your target devices' serial console ports to the corresponding serial ports on the CM8148-10G using straight-through cabling. The device supports auto-discovery of serial settings and port labels to simplify configuration.

4. OPERATING INSTRUCTIONS

4.1 Initial Access

Access the device server's management interface via a web browser or SSH. Refer to the Opendgear documentation for default IP addresses and login credentials. It is crucial to change default passwords immediately after initial access.

4.2 Configuration

Configure serial port settings, network parameters, user accounts, and security policies through the web interface. Utilize features like port auto-discovery to streamline the setup of connected devices.

4.3 Remote Management

Use the CM8148-10G to remotely access and manage the console ports of connected devices. This allows for troubleshooting, configuration, and monitoring of your infrastructure from any location.

4.4 Automation Features

Leverage the device's support for REST API, Docker, and Python scripting to integrate with existing automation tools and workflows. This enables advanced management and orchestration capabilities.

5. MAINTENANCE

5.1 Firmware Updates

Regularly check the Opendgear website for firmware updates. Applying updates ensures optimal performance, security patches, and access to new features. Follow the provided instructions for a safe update process.

5.2 Cleaning

Keep the device server clean and free from dust. Use a soft, dry cloth for external cleaning. Ensure ventilation openings are not obstructed to maintain proper cooling.

5.3 Environmental Considerations

Operate the device within its specified environmental conditions (temperature, humidity) to ensure longevity and reliable performance. Avoid exposing the unit to extreme conditions or direct sunlight.

6. TROUBLESHOOTING

6.1 Common Issues

- **No Power:** Verify power cord connections and check power sources. Ensure both power supplies are connected and their LEDs are active.
- **Network Connectivity Issues:** Check Ethernet cable connections, network configuration, and ensure the correct IP address is assigned. Verify network port status LEDs.
- **Cannot Access Serial Console:** Confirm serial cable type (straight-through), correct port selection, and matching serial settings (baud rate, data bits, parity, stop bits) on both the device server and the connected equipment.
- **Login Problems:** Double-check username and password. If forgotten, refer to the Opendgear documentation for password recovery procedures or factory reset options (use with caution).

For more detailed troubleshooting, consult the comprehensive Opendgear documentation available on their official support website.

7. SPECIFICATIONS

Feature	Detail
Brand	Opendgear
Series	CM8100-10G
Model Number	CM8148-10G
Item Weight	8 pounds
Product Dimensions (LxWxH)	10.5 x 17.3 x 1.8 inches
Manufacturer	OPENGEAR
ASIN	B0CY59R3YY
Date First Available	March 15, 2024

8. WARRANTY AND SUPPORT

For information regarding the product warranty, please refer to the official Opendgear warranty policy available on their website or contact your authorized Opendgear reseller. Technical support and additional resources, including

detailed documentation and software downloads, can be found on the Opendgear support portal.

It is recommended to register your product to receive updates and support notifications.