Ubiquiti UDM-SE

Ubiquiti Dream Machine Special Edition (UDM-SE) User Manual

Comprehensive Guide for Setup, Operation, and Maintenance

1. Introduction

The Ubiquiti Dream Machine Special Edition (UDM-SE) is an enterprise-grade UniFi OS Console designed for scalable network management. It integrates a security gateway, 10G SFP+ WAN, 2.5Gbe RJ45 WAN, an 8-port PoE/PoE+ switch, and a UniFi Network Controller into a single 1U rack-mountable device. The UDM-SE is ideal for businesses and advanced home users seeking a robust and comprehensive networking solution with advanced security features and integrated storage for UniFi Protect applications.



Figure 1: Ubiquiti Dream Machine Special Edition (UDM-SE)

2. Safety Information

Please read, follow, and keep these instructions. Heed all warnings. Only use attachments/accessories specified by the manufacturer.

- **Ventilation:** Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- **Power Source:** Use only the power supply provided with the device. Ensure the power cord is properly grounded.
- **Environment:** Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Protect the power cord from being walked on or pinched.
- **Servicing:** Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

3. Package Contents

Verify that all items are present in your package:

- Ubiquiti Dream Machine Special Edition (UDM-SE) Unit
- Power Cord
- Rackmount Ears (2)
- Rackmount Screws and Cage Nuts (Set)
- Quick Start Guide/Documentation

4. Product Overview

4.1 Front Panel

The front panel of the UDM-SE features a touchscreen display, an HDD bay for storage expansion, and various network ports.



Figure 2: UDM-SE Front Panel

- **Touchscreen Display:** A 1.3-inch touchscreen provides real-time status information and basic control options.
- **HDD Bay:** Supports a 3.5-inch hard disk drive for UniFi Protect video recordings and other data storage.
- **LAN Ports (1-8):** Eight Gigabit Ethernet RJ45 ports, including two PoE+ and six PoE ports, for connecting network devices and powering PoE-compatible devices.
- **WAN Ports:**
  - **RJ45 WAN (2.5 GbE):** A 2.5 Gigabit Ethernet RJ45 port for high-speed internet connectivity.
  - **SFP+ WAN (10 GbE):** A 10 Gigabit SFP+ port for fiber optic internet connections or high-speed uplink.

4.2 Rear Panel

The rear panel includes the power input and a locking mechanism for the power cord.



Figure 3: UDM-SE Rear Panel

- **Power Input:** Standard AC power input for the device.
- **Power Cord Lock:** A mechanism to secure the power cord, preventing accidental disconnection.

4.3 LED Indicators

The UDM-SE features LED indicators on its ports and touchscreen to provide status feedback:

- **Port LEDs:** Indicate link/activity and PoE status for each Ethernet port.
- **Touchscreen:** Displays various system statuses, network statistics, and application information.

5. Setup

5.1 Physical Installation

The UDM-SE is designed for rack-mounting. Use the included rackmount ears and screws to secure the unit in a standard 1U rack space. Ensure adequate ventilation around the device.

1. Attach the rackmount ears to the sides of the UDM-SE using the provided screws.
2. Mount the UDM-SE into your server rack using the appropriate cage nuts and screws.
3. Connect your internet service provider's (ISP) modem or optical network terminal (ONT) to one of the WAN ports (RJ45 or SFP+).
4. Connect your local network devices (computers, access points, switches) to the LAN ports.
5. Insert a compatible 3.5-inch hard drive into the HDD bay if you plan to use UniFi Protect for video surveillance.
6. Connect the power cord to the UDM-SE and then to a power outlet. Secure the power cord using the locking mechanism.

5.2 Initial Configuration

The UDM-SE can be configured via the UniFi Network mobile app or a web browser.

1. **Power On:** Once connected, power on the UDM-SE. The touchscreen will display the boot process.
2. **Mobile App Setup:** Download the UniFi Network app (available on iOS and Android). Follow the on-screen instructions to discover and set up your UDM-SE. This typically involves creating a UniFi account or logging in, and following a setup wizard.
3. **Web Browser Setup:** Alternatively, connect a computer directly to a LAN port on the UDM-SE. Open a web browser and navigate to the default IP address (usually https://192.168.1.1). Follow the setup wizard to configure your network.
4. **Firmware Update:** During initial setup, the system may prompt you to update the firmware. It is recommended to perform this update to ensure optimal performance and security.

6. Operating

The UniFi OS interface provides comprehensive control over your network.

6.1 Basic Network Configuration

- **Internet Connection:** Configure WAN settings (DHCP, Static IP, PPPoE) through the UniFi Network application.
- **LAN Settings:** Manage IP addressing, DHCP server, and network segments for your local area network.
- **Wi-Fi (with UniFi Access Points):** If you have UniFi Access Points connected, configure SSIDs, security protocols, and guest networks through the UniFi Network application.

6.2 Advanced Features

- **VLANs:** Create and manage Virtual Local Area Networks to segment your network for improved security and organization.
- **Firewall Rules:** Implement custom firewall rules to control traffic flow and enhance network security.
- **VPN:** Set up Virtual Private Networks for secure remote access or site-to-site connectivity.
- **IDS/IPS:** Utilize the Intrusion Detection System/Intrusion Prevention System to detect and block malicious network activity.
- **UniFi Protect:** If an HDD is installed, manage UniFi Protect cameras, view live feeds, and review recordings.

7. Maintenance

7.1 Firmware Updates

Regularly update your UDM-SE firmware to ensure stability, security, and access to new features. Updates can be managed directly from the UniFi Network application or web interface.

- Navigate to the System Settings in your UniFi Network application.
- Check for available firmware updates and follow the prompts to install them.

7.2 Backup and Restore

It is highly recommended to regularly back up your UniFi Network configuration. This allows for quick recovery in case of data loss or system issues.

- Access the Backup/Restore section within the UniFi Network application settings.
- Create a new backup and store it in a secure location external to the UDM-SE.

7.3 Cleaning

Keep the UDM-SE clean to ensure proper airflow and longevity. Use a soft, dry cloth to wipe down the exterior. Do not use liquid cleaners or aerosols.

8. Troubleshooting

This section addresses common issues you might encounter with your UDM-SE.

- **No Internet Connection:**
  - Verify that your ISP modem/ONT is working correctly.
  - Check WAN cable connections to the UDM-SE.
  - Ensure WAN settings in UniFi Network application are correct (DHCP, Static IP, PPPoE).
- **Devices Not Adopting/Connecting:**
  - Ensure UniFi devices are powered on and connected to UDM-SE LAN ports.
  - Check for IP address conflicts.
  - Verify firewall rules are not blocking adoption traffic.
  - Try restarting the UDM-SE and the problematic device.
- **Slow Network Speeds:**
  - Check your ISP's reported speed.
  - Verify cable integrity (use Cat5e/6 for Gigabit, Cat6a/7 for 10 Gigabit).
  - Monitor network utilization in the UniFi Network application to identify bandwidth-intensive devices or applications.
  - Ensure UDM-SE firmware is up to date.
- **Touchscreen Unresponsive:**
  - Perform a soft reboot of the UDM-SE via the UniFi Network application.
  - If unresponsive, disconnect power for 10 seconds and reconnect.

9. Specifications

Feature	Detail
Brand	Ubiquiti
Model Name	Dream Machine Special Edition
Item Model Number	UDM-SE
Product Dimensions	11.2 x 17.4 x 1.7 inches
Item Weight	10.91 pounds
WAN Ports	(1) 10G SFP+, (1) 2.5 GbE RJ45
LAN Ports	(8) GbE RJ45 (2 PoE+, 6 PoE)
Integrated Storage	128 GB SSD & 3.5" HDD bay
Touchscreen	1.3" display
Routing Throughput	3.5+ Gbps
Wireless Type	802.11ac (Note: UDM-SE itself does not provide Wi-Fi; requires external APs)
Special Feature	Rack-mountable

10. Warranty and Support

The Ubiquiti Dream Machine Special Edition (UDM-SE) comes with a standard manufacturer's warranty. For detailed warranty terms and conditions, please refer to the official Ubiquiti website or the documentation included with your product.
For technical support, firmware downloads, and additional resources, visit the Ubiquiti support portal:

- **Ubiquiti Support Website:** https://www.ui.com/support
- **Community Forums:** Engage with other users and experts on the official UniFi community forums for peer-to-peer support and discussions.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question