Edge-core AS9736-64D 25.6T Data Center Switch User Guide

Contents

Edge-core AS9736-64D 25.6T Data Center Switch

Specifications

- Model: AS9736-64D
- Data Center Switch
- Switching Capacity: 25.6T
- Management Ports: 2 x 10G SFP+

- Ports: 64 x 400G QSFP56-DD
- Additional Ports: RJ-45 console port, 1000BASE-T RJ-45 management port, USB
- Power Supply Units: PSU 1, PSU 2
- Fan Trays: 4 included

Product Usage Instructions

FRU Replacement
PSU Replacement

1. Remove the power cord.
2. Press the release latch and remove the PSU.
3. Install the replacement PSU in a matching orientation. (PSU 1 AC socket faces down, and PSU 2 AC socket faces up.)

Fan Tray Replacement

1. Pull the handle release latch.
2. Remove fan tray from the chassis.
3. Install replacement fan with matching airflow direction.

Installation

Mount the Device
Note: Ensure proper grounding as per ETSI ETS 300 253 standards.

Ground the Device

- Verify Rack Ground – Ensure proper grounding of the rack.
- Attach Grounding Wire – Connect grounding wire to the device rear panel and rack ground.

Connect Power

1. Attach the Brackets to the device using included screws based on input voltage requirements.
2. Install one or two AC PSUs and connect them to the power source based on voltage specifications.

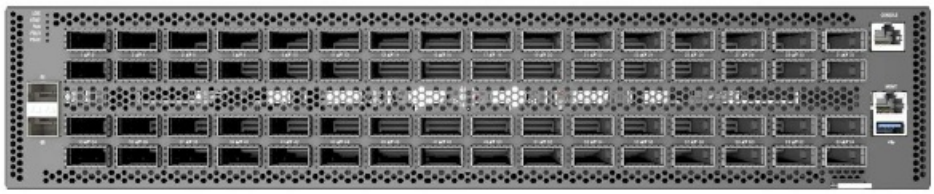
Make Network Connections
Mount the device in the rack, install transceivers on ports and connect fiber optic cabling or cables directly to slots.

FAQ

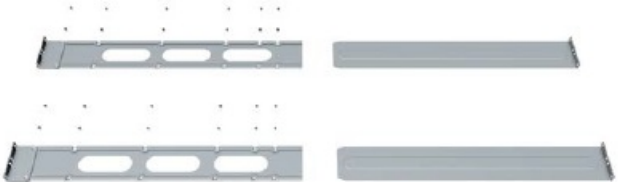
1. **Q: Where can I find compatible software for the device?**
   A: Information about compatible software can be found at **www.edge-core.com**.
2. **Q: What do the different LEDs on the device indicate?**
   A: The LEDs indicate various statuses such as system status, port activity, and faults. Refer to the user manual for detailed LED descriptions.

Package Contents

1. 25.6T Data Center Switch AS9736-64D

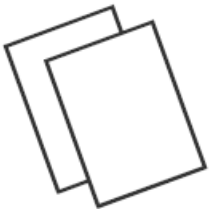


2. Rack mounting kit—2 front-post brackets, 2 rear-post brackets and 24 screws

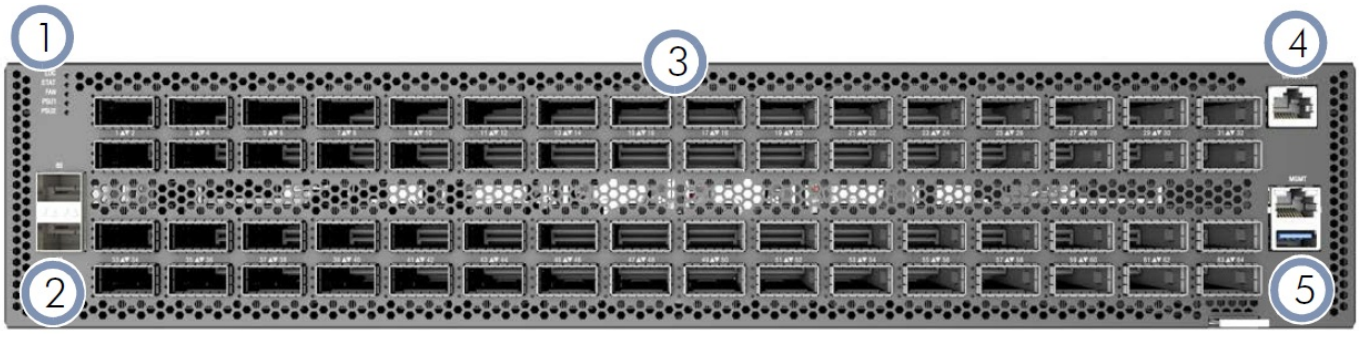


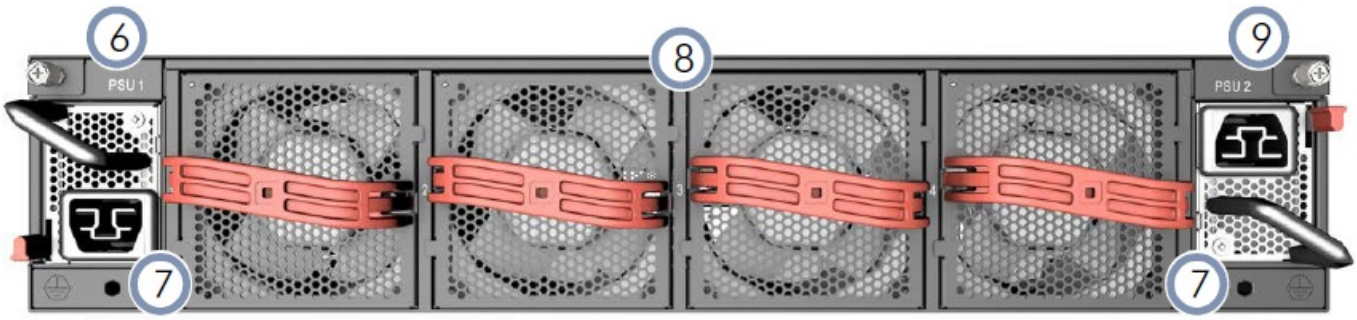
3. HVAC/IEC C20 1m power cord

4. Documentation—Quick Start Guide (this document) and Safety and Regulatory Information



Overview

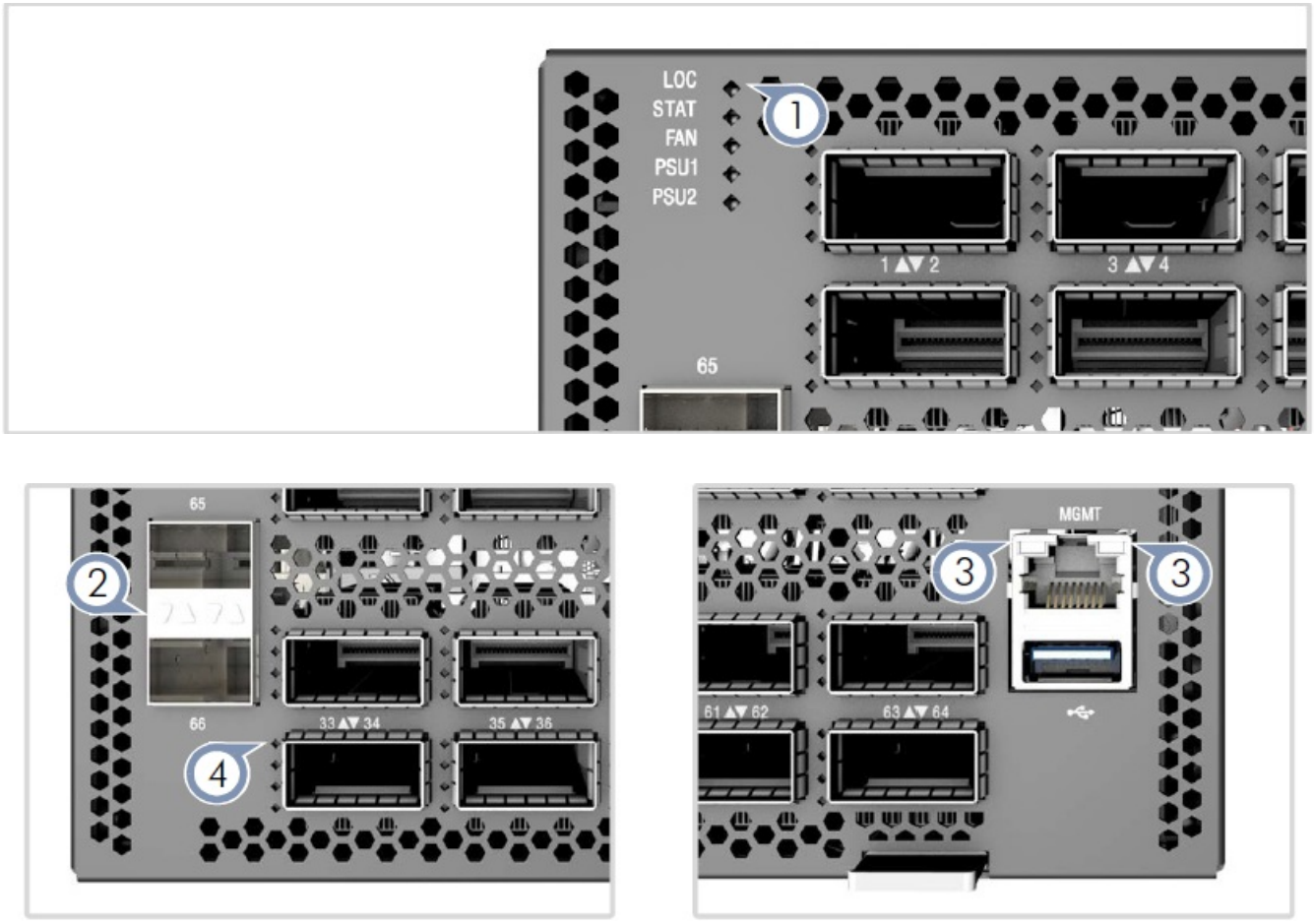




1. System LEDs
2. 2 x 10G SFP+ management ports

3. 64 x 400G QSFP56-DD ports
4. RJ-45 console port
5. 1000BASE-T RJ-45 management port, USB
6. PSU 1
7. 2 x grounding screws (maximum torque 10 kgf-cm (8.7 lb-in)
8. 4 x fan trays
9. PSU 2

System/Port LEDs



1. System LEDs

   LOC: Flashing Blue/Amber (switch locator)

   STAT: Green (OK), Blinking Green (system booting), Amber (fault)

   FAN: Green (OK), Amber (fault), Blinking Amber (too few fans installed)

   PSU1/PSU2: Green (OK), Amber (fault)
2. SFP+ 10G LEDs:

   Left: Green (10G link), Amber (1G link)

   Right: Green (10G activity), Amber (1G activity)
3. RJ-45 MGMT LEDs: Left: Green (1G link), Amber (10/100M link) Right: Green (1G activity), Amber (10/100M activity)
4. QSFP56-DD LEDs

   400G (1 x 8 lanes 50G PAM4): 1 LED Blue

   200G (2 x 4 lanes 50G PAM4): 2 LEDs Cyan

100G (4 x 2 lanes 50G PAM4): 4 LEDs Green

100G (1 x 4 lanes 25G NRZ): 1 LED Green

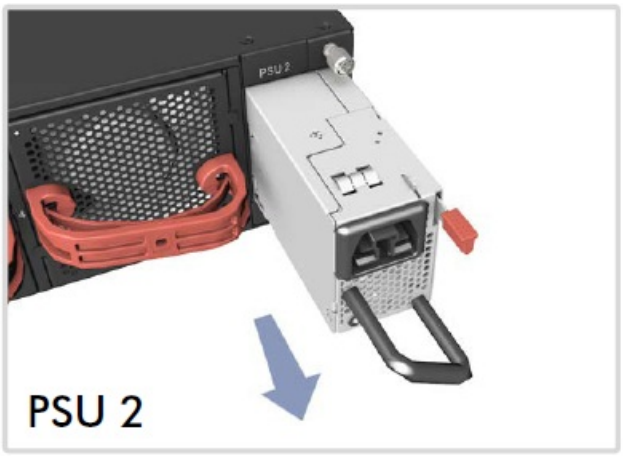
40G (1 x 4 lanes 10G NRZ): 1 LED Dark Green

50G (2 x 2 lanes 25G NRZ): 2 LEDs Red

25G (4 x 1 lane 25G NRZ): 4 LEDs Orange

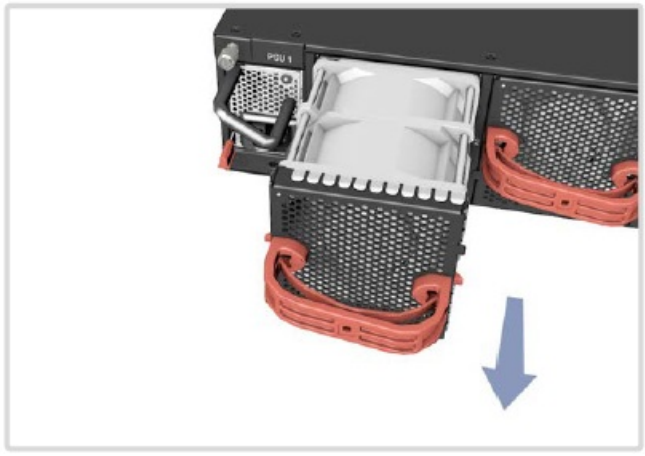
10G (4 x 1 lane 10G NRZ): 4 LEDs Yellow

FRU Replacement



PSU Replacement

1. Remove the power cord.
2. Press the release latch and remove the PSU.
3. Install the replacement PSU in a matching orientation.
   (PSU 1 AC socket faces down, and PSU 2 AC socket faces up.)



Fan Tray Replacement

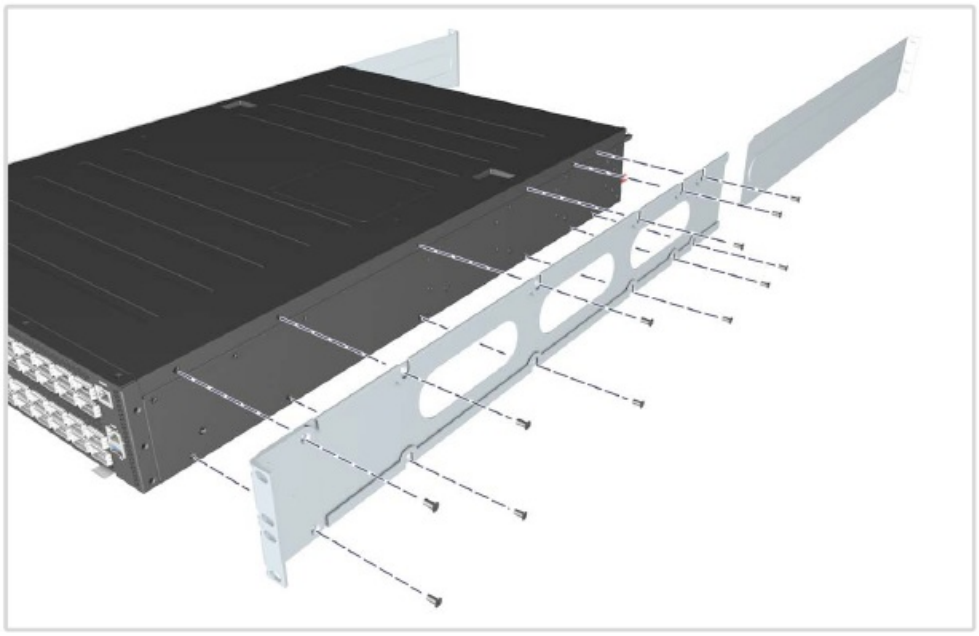
1. Pull the handle release latch.
2. Remove fan tray from the chassis.
3. Install replacement fan with matching airflow direction.

Installation

- **Warning:** For a safe and reliable installation, use only the accessories and screws provided with the device. Use of other accessories and screws could result in damage to the unit. Any damages incurred by using unapproved accessories are not covered by the warranty.
- **Note:** The device has the Open Network Install Environment (ONIE) software installer preloaded, but no software image. Information about compatible software can be found at **www.edge-core.com**.
- The drawings in this document are for illustration only and may not match your particular model.

Mount the Device

Caution: This device must be installed in a telecommunications room or a server room where only qualified personnel have access.



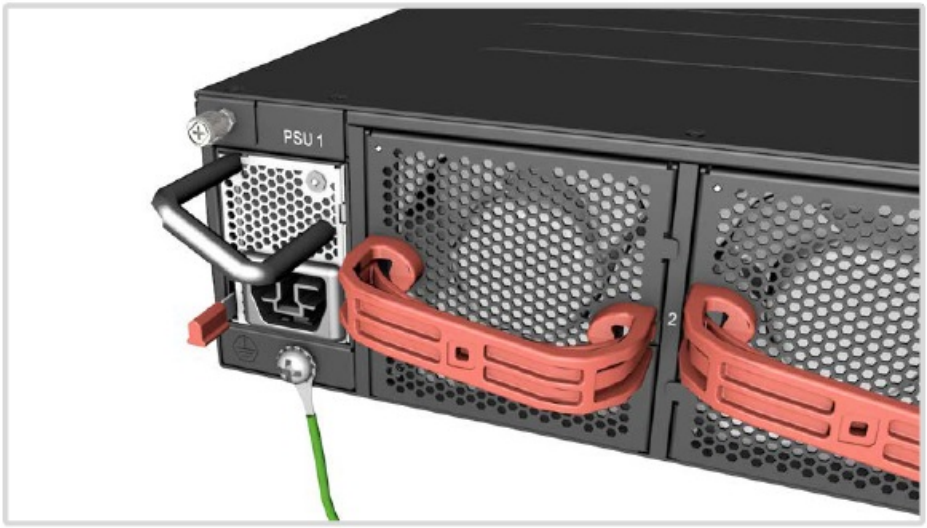
1. Attach the Brackets

   Use the included screws to attach the front- and rear-post brackets.
2.

Mount the Device

Mount the device in the rack and secure it with rack screws.

Ground the Device



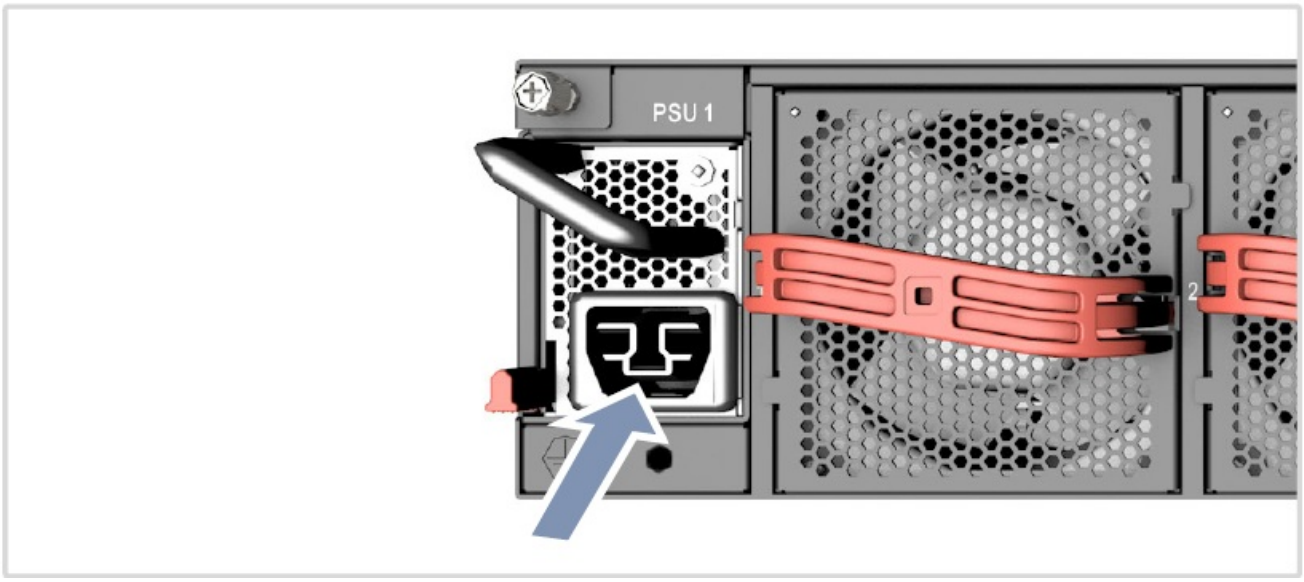
Verify Rack Ground

Ensure the rack on which the device is to be mounted is properly grounded and in compliance with ETSI ETS 300 253. Verify that there is a good electrical connection to the grounding point on the rack (no paint or isolating surface treatment).

Attach Grounding Wire

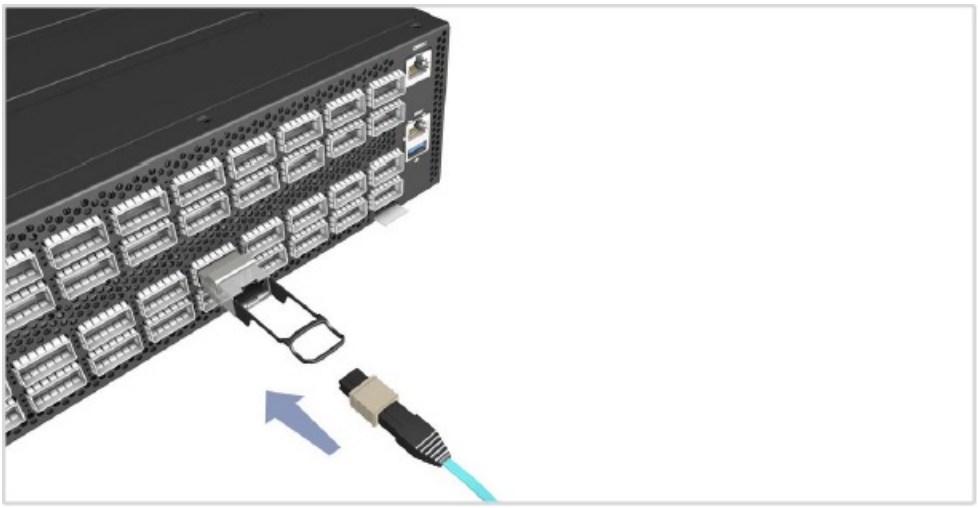
Attach a lug (not provided) to a #6 AWG minimum grounding wire (not provided), and connect it to the grounding point on the device rear panel. Then connect the other end of the wire to rack ground.

Connect Power



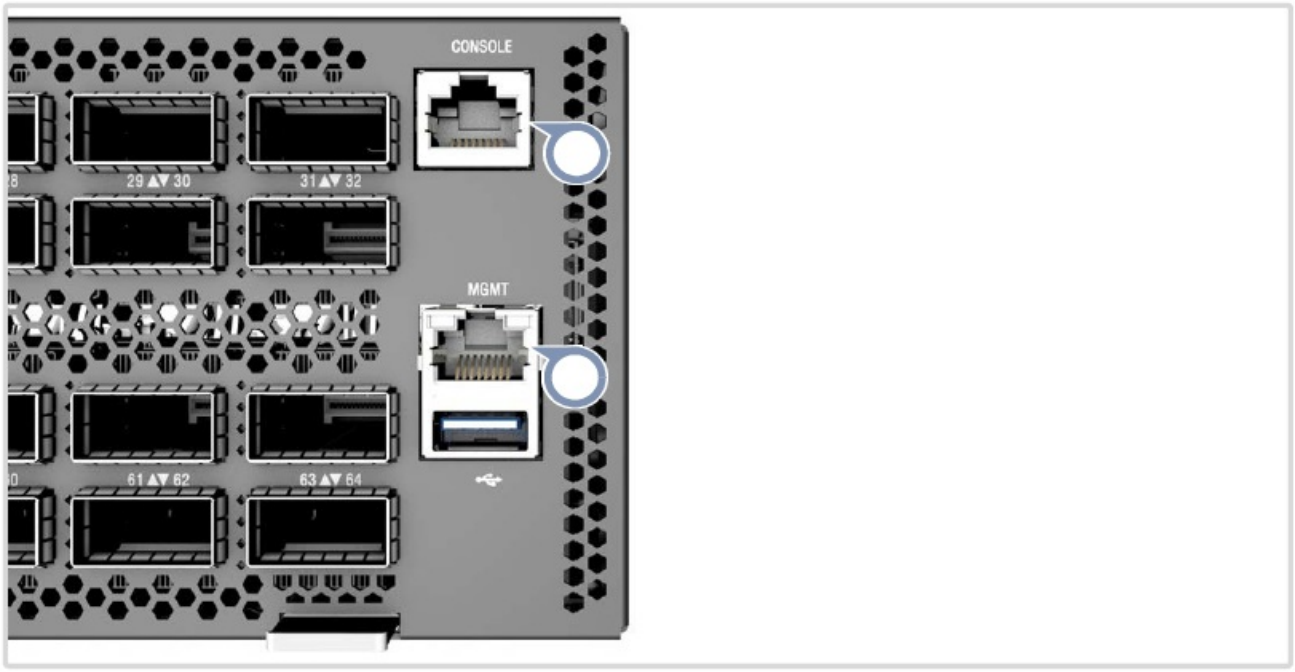
When the input voltage is 200-240 VAC or 240 VDC, install one or two AC PSUs and connect them to the AC power source. When the input voltage is 100-127 VAC, two AC PSUs must be installed and connected to the AC power source.

Make Network Connections



400G QSFP56-DD Ports and 10G SFP+ Ports
Install transceivers and then connect fiber optic cabling to the transceiver ports. Alternatively, connect DAC or AOC cables directly to the slots.

Make Management Connections



10/100/1000M RJ-45 Management Port
Connect Cat. 5e or better twisted-pair cable.

RJ-45 Console Port
Use an RJ-45-to-DB-9 null-modem console cable (not included) to connect to a PC running terminal emulator software. Use a USB-to-male DB-9 adapter cable (not included) for connections to PCs that do not have a DB-9 serial port. Configure the serial connection: 115200 bps, 8 characters, no parity, one stop bit, 8 data bits, and no flow control.

Console cable pinouts and wiring:

Device's RJ-45 Console	Null Modem	PC's 9-Pin DTE Port
6 RXD (receive data)	<----------	3 TXD (transmit data)
3 TXD (transmit data)	---------->	2 RXD (receive data)
4,5 SGND (signal ground)	----------	5 SGND (signal ground)

Hardware Specifications

- Size (WxDxH) 440 x 649.2 x 87 mm (17.32 x 25.56 x 3.43 in.)
- Weight 21.5 kg (47.4 lb), with 2 PSUs and 4 fans installed
- Temperature Operating: 0° C to 45° C (32° F to 113° F)
- Storage: -40° C to 70° C (-40° F to 158° F)
- Humidity Operating: 5% to 95% (non-condensing)
- Power Consumption 2100 Watts maximum

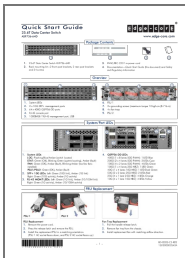
AC PSU
Input Power Rating
100–127 VAC, 50/60 Hz, 12 A maximum 200–240 VAC, 50/60 Hz, 15 A maximum HVDC: 240 VDC, 15 A maximum

Regulatory Compliances
Emissions
EN 55032:2015+A1:2020 Class A EN IEC 61000-3-2:2019+A1:2021 Class A EN 61000-3-3:2013+A1:2019 FCC Class A

Immunity
EN 55035:2017+A11:2020 IEC 61000-4-2/3/4/5/6/8/11

Safety
UL (CSA 22.2 No 62368-1 & UL62368-1) CB (IEC/EN 62368-1)

Documents / Resources

	Edge-core AS9736-64D 25.6T Data Center Switch [pdf] User Guide DCS520, AS9736-64D, AS9736-64D 25.6T Data Center Switch, 25.6T Data Center Switch, Data Center Switch, Center Switch, Switch

References

- Edgecore Networks – Edgecore Networks, a leading provider of traditional and open network solutions, delivers wired and wireless networking products and solutions through channel partners and system integrators worldwide for data center, service provider,
- User Manual