Edgecore Networks AS5916-54XKS 54 Port 10G 100G Datacenter Ethernet Switch User Guide

Contents

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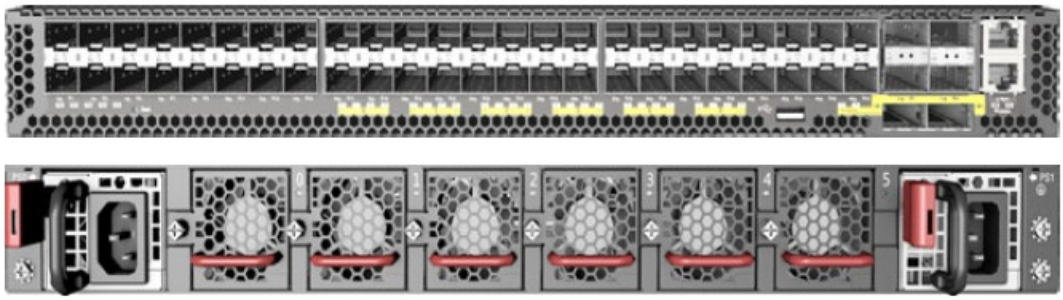
Unpack the Switch and Check the Contents

- AS5916-54XKS AS5916-54XL



- Rack Mounting Kit—2 front-post brackets, 2 rear-post brackets, 20 screws, and 2 ear-locking screws

- Grounding kit—One grounding lug, 2 M5 screws, and 2 washers (for AC model)

- Grounding kit—One grounding lug, 4 ring lugs, 2 M5 screws, and 2 washers (for the DC model)

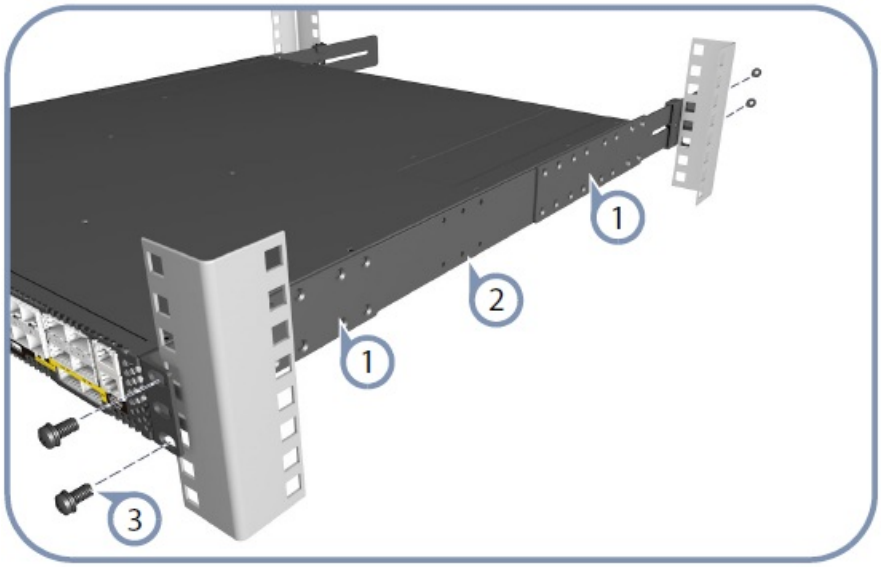
- Power Cord

- Console Cable—RJ-45 to DB-9

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

Note: The switch has the Open Network Install Environment (ONIE) software installer pre-loaded on the switch, but no switch software image. Information about compatible switch software can be found at **www.edge-core.com**.
Caution: The switch includes a plug-in power supply and fan tray modules that are installed into its chassis. All installed modules must have a matching airflow direction. That is, all modules must have a front-to-back (F2B) airflow direction, or all modules must have a back-to-front (B2F) airflow direction.
Note: The switch drawings in this document are for illustration only and may not match your particular switch model.

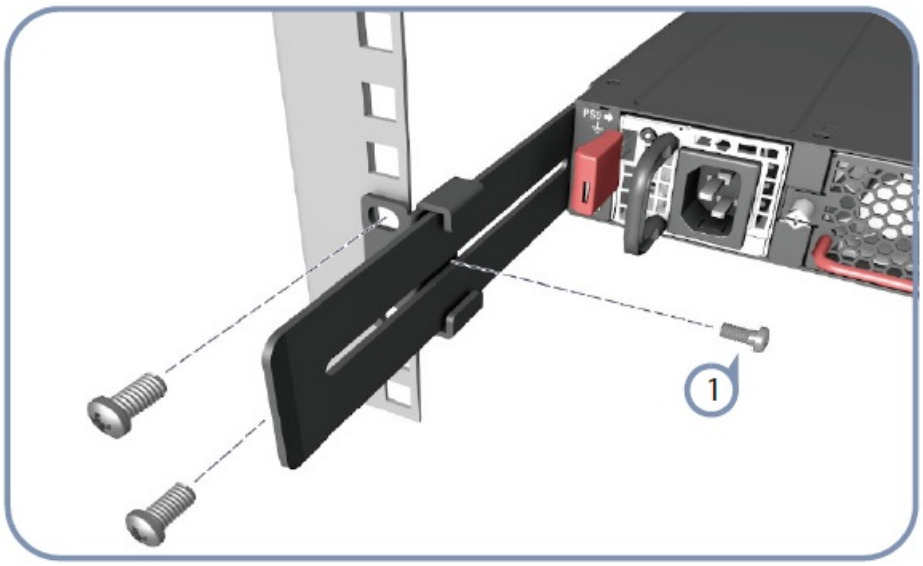
Attach the Brackets



1. Attach each of the front- and rear-post brackets to the switch using four of the included bracket screws.
2. Use an additional two screws to secure each of the rear-post brackets at the mid-point on the sides of the switch.
3. Use the screws and cage nuts supplied with the rack to secure the switch in the rack.

Caution: Installing the switch in a rack requires two people. One person should position the switch in the rack, while the other secures it using the rack screws.

Adjust Rear-Post Bracket Ears



1. Lock the position of the rear-post bracket ears using the included position-locking screws.
   You can also adjust the rear-post bracket ears to fit different rack depths from 56 cm to 75 cm.

Ground the Switch

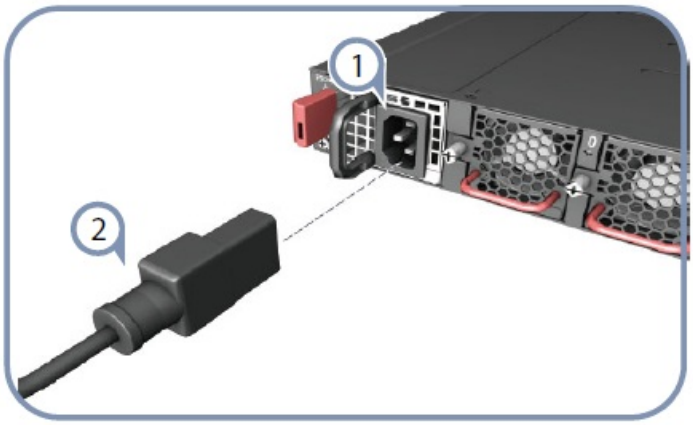
1. Ensure the rack is properly grounded and in compliance with ETSI ETS 300 253. Verify that there is a good

electrical connection to the grounding point on the rack (no paint or isolating surface treatment).

2. Attach the grounding wire (#6 AWG) to the grounding point on the switch rear panel. Then connect the other end of the wire to the rack ground.

Caution: The earth connection must not be removed unless all supply connections have been disconnected.
Caution: The device must be installed in a restricted-access location.

Connect Power



1. Install one or two AC PSUs in the switch.
2. The switch supports up to two PSUs that must have the same matching airflow direction as the installed fan tray.

   Connect an external AC power source to the PSUs.

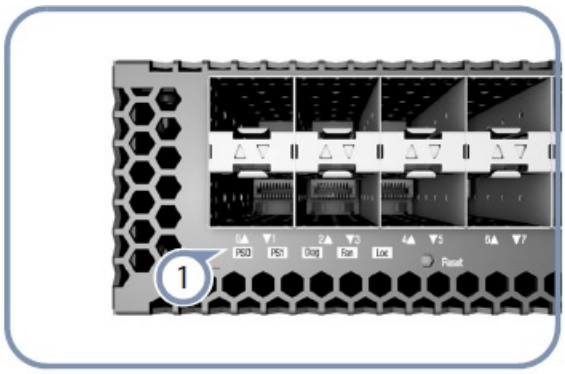
Caution: Use a UL/IEC/EN 60950-1 certified power supply to connect to a DC converter, and a #10 AWG (for -36 VDC to -72 VDC PSU) wire to connect to a DC PSU.

1. Use the DC wire lugs included with the grounding kit.
2. Connect the DC return wire.
3. Connect the -36 – -72 VDC wire.

Note: DC terminal screws should be tightened to a torque of 6.6 in-lbs.

Verify Switch Operation

1. Verify basic switch operation by checking the system LEDs.
   When operating normally, the PSU0/PSU1, Diag, and Fan LEDs should all be green.

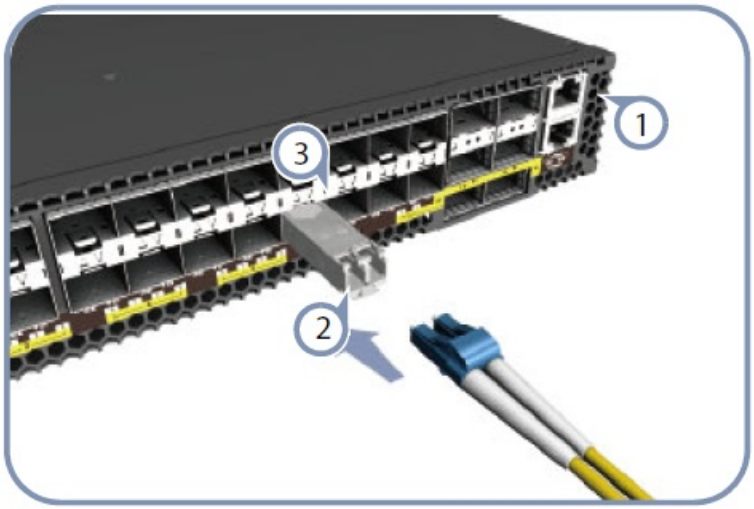


Perform Initial System Boot

1. If the network operating system (NOS) installer is located on a network server, first connect the RJ-45 Management (Mgmt) port to the network using a 100-ohm Category 5, 5e or better twisted-pair cable. (Not required if the NOS installer is located on attached storage.)
2. Boot the switch. Wait for the ONIE software to locate and execute the NOS installer, and then wait for the installer to load the NOS software image. Subsequent switch boots will bypass ONIE and directly run the NOS software.

Note: For switches with ONIE software pre-loaded, refer to the network operating system (NOS) installer and NOS documentation for details on software options and setup for ONIE.

Connect Network Cables



1. For the RJ-45 Management port, connect 100-ohm Category 5, 5e or better twisted-pair cable.
2. Connect DAC cables to the SFP+/QSFP28 slots. Or first install SFP+/QSFP28 transceivers and then connect fiber optic cabling to the transceiver ports.
   The following transceivers are supported:
   - 100GBASE-CR4, AOC, SR4, LR4, and PSM4
   - 40GBASE-CR4, SR4, and LR4
   - 25GBASE-CR4 and AOC

- 10GBASE-CR, SR, and LR

3. As connections are made, check the port status LEDs to be sure the links are valid.

   For the SFP+ ports:

   - Green — 10 Gbps mode
   - Amber — 1 Gbps mode
   - Each QSFP28 port has four LEDs that indicate valid links in the following modes:
   - 1 LED Green — 100 Gbps mode
   - 1 LED Blue — 40 Gbps mode
   - 1-4 LEDs Amber — 25 Gbps breakout mode (four lanes)
   - 1-4 LEDs Purple — 10 Gbps breakout mode (four lanes)

Hardware Specifications

Switch Chassis

- **Size (WxDxH):** 435 x 515 x 43.84 mm (17.12 x 20.27 x 1.72 inch)
- **Weight:** 9.72 kg (21.42 lb), with two installed PSUs
- **Temperature:** Operating: 0° C to 40° C (32° F to 104° F) Storage: -40° C to 70° C (-40° F to 158° F)
- **Humidity:** Operating: 5% to 95% (non-condensing)
- **Power Consumption:** 450 Watts maximum

System Input Power Rating

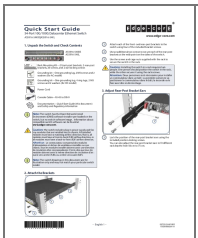
- **AC Input:** 100–240 VAC, 50-60 Hz, 6 A maximum
- **DC Input:** -36–-72 VDC, 28-14 A

Regulatory Compliances

- Emissions EN 55032 Class A
  - EN 61000-3-2 Class A
  - EN 61000-3-3
  - FCC Class A
  - VCCI Class A
  - CE Mark
  - BSMI Class A, CNS 13438
- Immunity EN 55024
  - EN 55035
  - IEC 61000-4-2/3/4/5/6/8/11
- Safety UL (CSA 22.2 No 60950-1 & UL 60950-1, CSA 22.2 No
  - 62368-1 & UL 62368-1)
  - CB (IEC/EN 60950-1, IEC/EN 62368-1)
  - BSMI (CNS 14336-1)
- Taiwan RoHS CNS 15663

www.edge-core.com.

Documents / Resources

	Edgecore Networks AS5916-54XKS 54 Port 10G 100G Datacenter Ethernet Switch [pdf] User Guide AS5916-54XKS 54 Port 10G 100G Datacenter Ethernet Switch, AS5916-54XKS, 54 Port 10G 100G Datacenter Ethernet Switch, 100G Datacenter Ethernet Switch, Datacenter Ethernet Switch, Ethernet 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