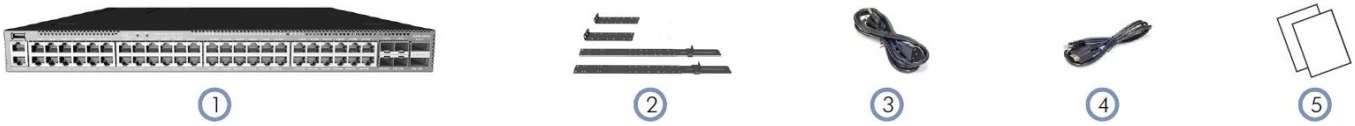
Edge-core AS4630-54NPE Ethernet Switch User Guide

Contents

Edge

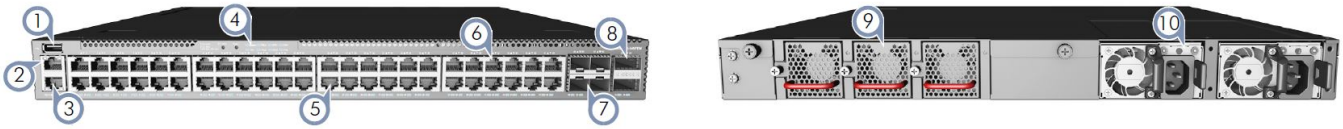
Edge-core AS4630-54NPE Ethernet Switch

Package Contents



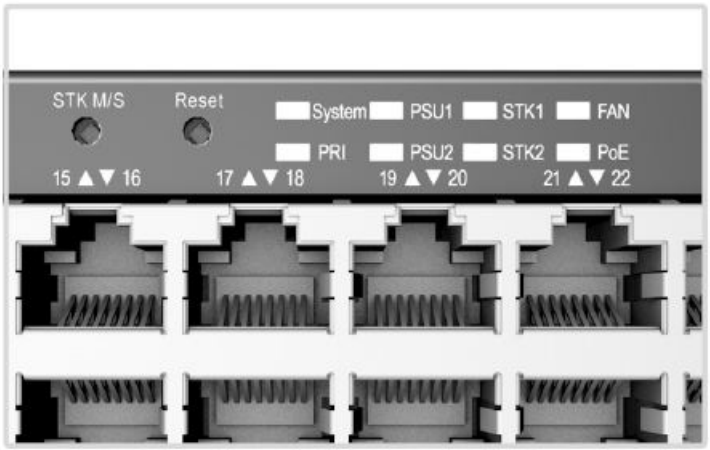
1. AS4630-54NPE or AS4630-54NPEM Ethernet Switch
2. Rack mounting kit—2 brackets and 8 screws
3. 2 x Power cord
4. Console cable—RJ-45 to D-Sub
5. Documentation—Quick Start Guide (this document) and Safety and Regulatory Information

Overview



1. 1x USB port
2. 1 x Management port
3. 1 x Serial console port
4. System buttons/LEDs
5. 36 x RJ45 2.5G PoE ports
6. 12 x RJ45 10G PoE Ports
7. 4 x SFP28 25G ports
8. 2 x QSFP28 40G/100G uplink or stacking ports
9. 3 x Fan trays
10. 2 x AC PSUs

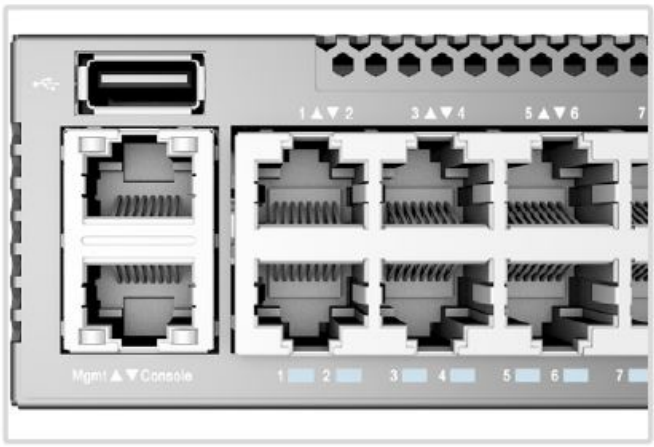
System Buttons/LEDs

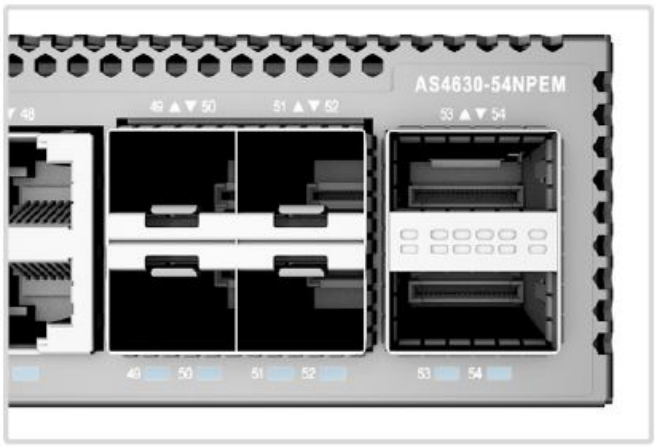


- STK M/S button
- Reset button
- System LED: Green (OK), Amber (fault)
- PRI LED: Green (primary unit), Amber (secondary unit) PSU LEDs: Green (OK), Amber (fault)
- STK LEDs: Green (stacking ports active)

- FAN LED: Green (OK), Amber (fault)
- PoE LED: Green (OK), Amber (High PoE load)

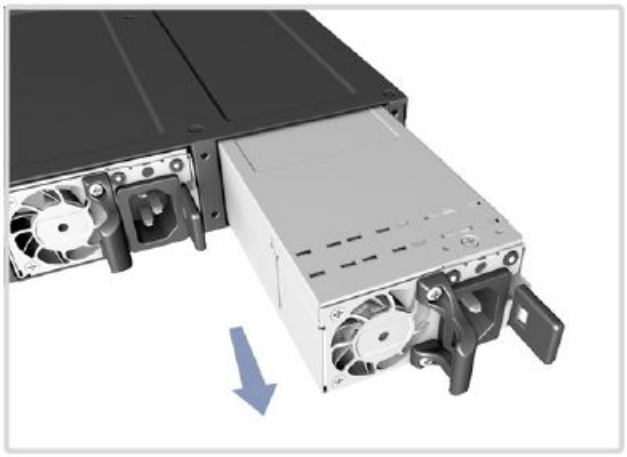
Port/FRU LEDs

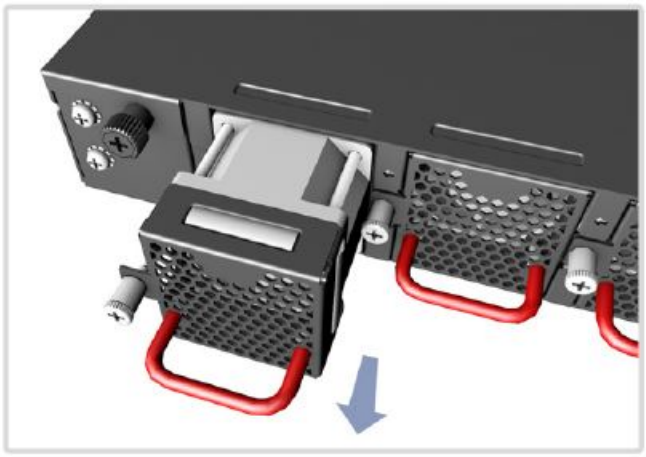




- RJ-45 Port LEDs: Green (link), Amber (link with PoE), Blinking (activity)
- SFP28 Port LEDs: White (25G), Green (10G), Blinking (activity)
- QSFP28 Port LEDs: White (100G), Green (40G link), Blinking (activity)
- PSU Status LED: Green (OK), Red (fault or fan failure)
- Fan Tray Status LED: Green (OK), Red (fault)

FRU Replacement





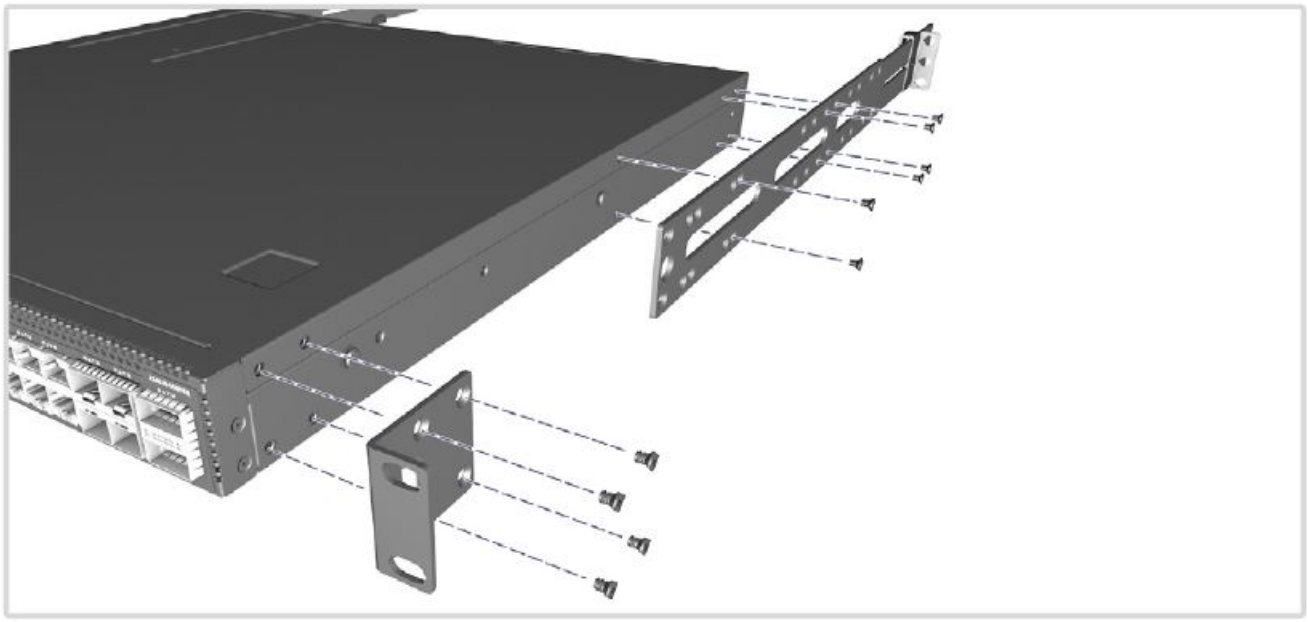
PSU Replacement

1. Remove the power cord.
2. Press the release latch and remove the PSU.
3. Install replacement PSU with matching airflow direction.

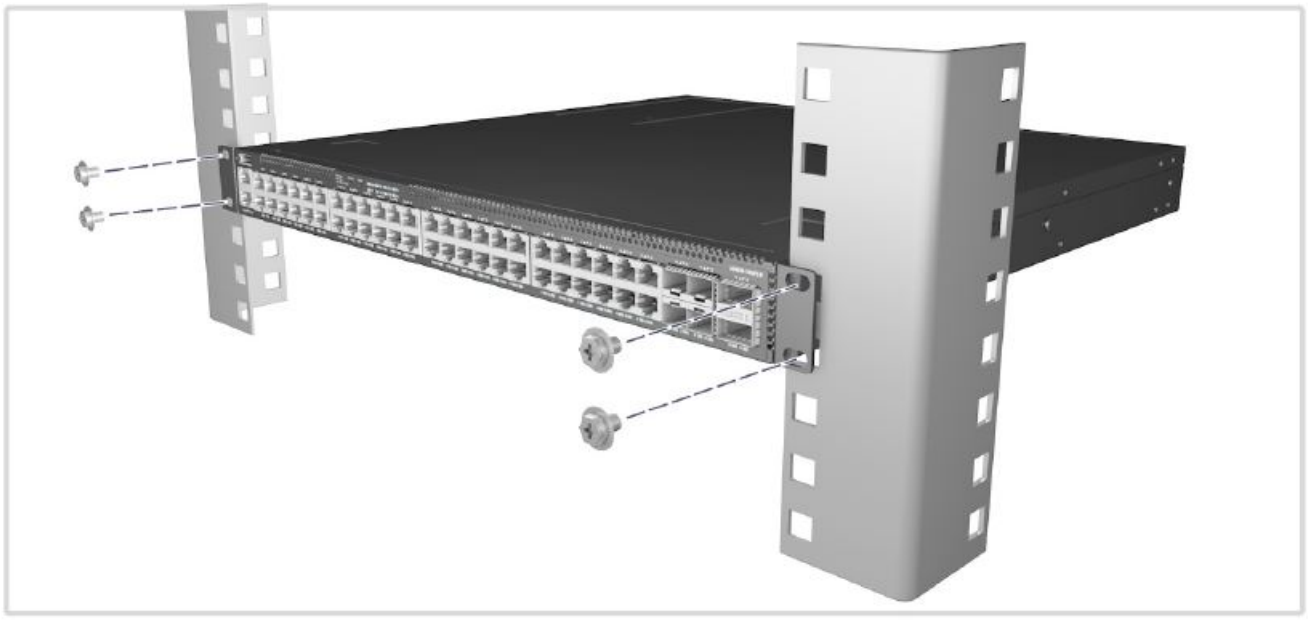
Fan Tray Replacement

1. Loosen the fan tray screw.
2. Remove fan tray from the chassis.
3. Install replacement fan with matching airflow direction.

Mount the Switch

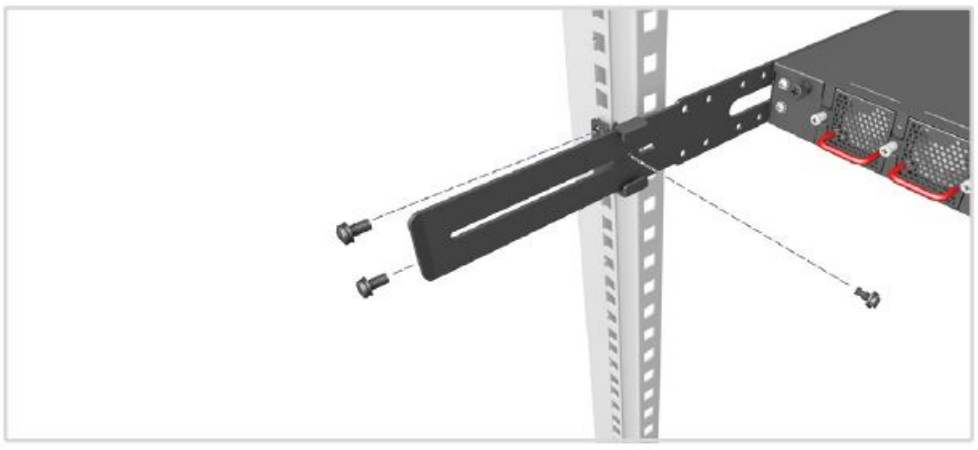


Attach the Brackets



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

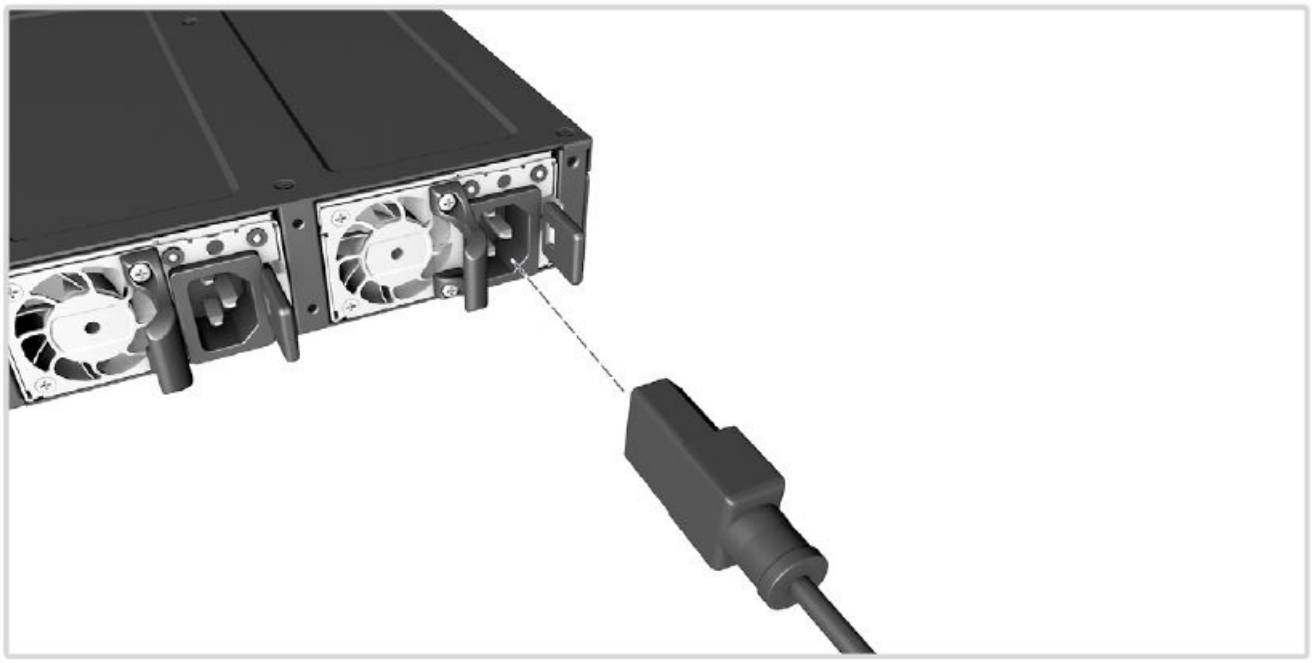
Mount the Switch



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

Lock the Rear-Post Brackets
Use the included screws to lock the position of the rear-post brackets.
Optional Slide-Rail Installation
An optional slide-rail kit is available for rack installation. Follow the installation procedure provided with the kit.

Connect Power



AC Power
Install two AC PSUs and connect them to an AC power source.

Verify Switch Power

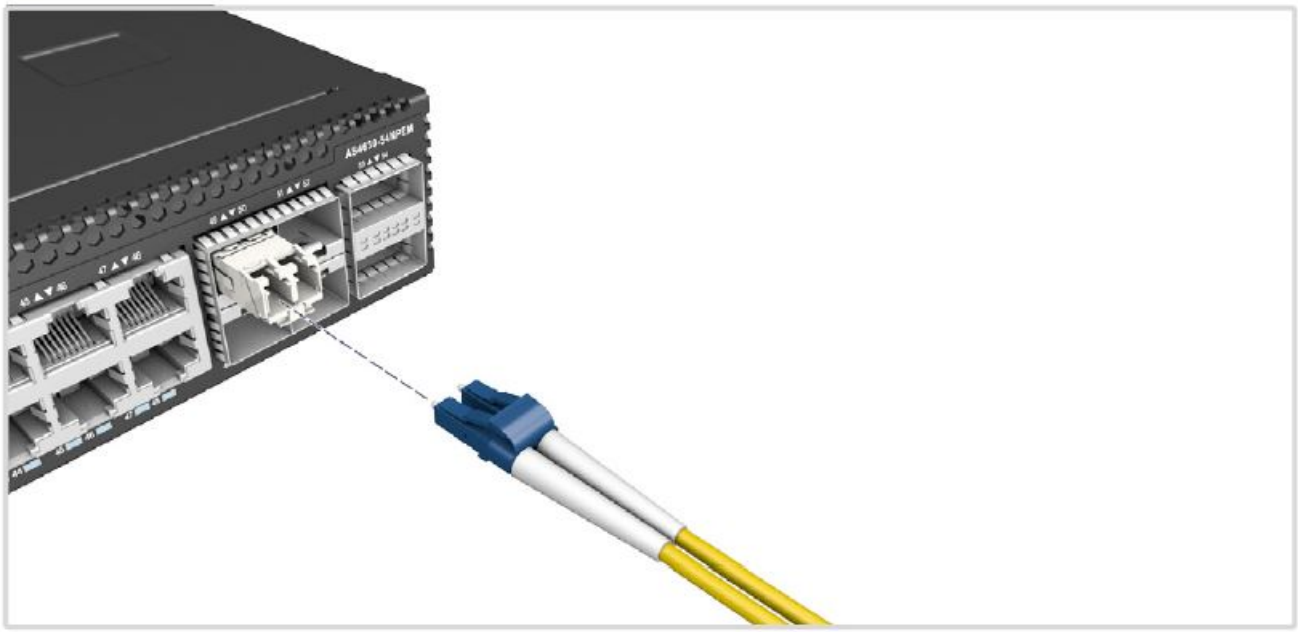
Check the PSU LEDs
The PSU1/PSU2 LEDs should be on green when operating normally.

Perform Initial System Boot

ONIE Installer Software
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 100-ohm Category 5, 5e or better twisted-pair cable. (Not required if the NOS installer is located on attached storage.)
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 set up for ONIE.

Make Network Connections



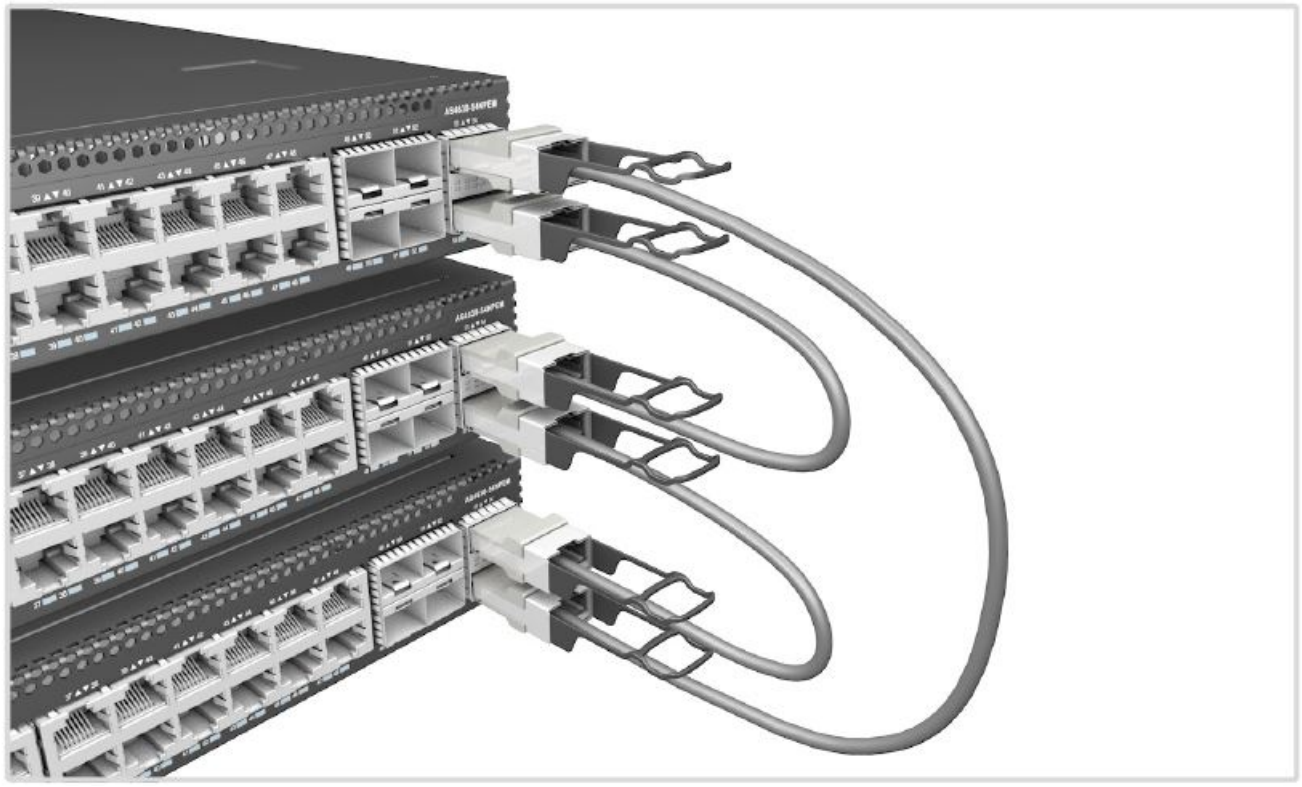
1. **RJ-45 2.5G ports**

   Connect 100-ohm Category 5e, 6a or 7 twisted-pair cable. Ports can support PoE connections up to 90 W.
2. **RJ-45 10G ports**

   Connect 100-ohm Category 6, 6a or 7 twisted-pair cable. Ports can support PoE connections up to 90 W.
3. **SFP+/SFP28 slots**

   First install SFP+/SFP28 transceivers and then connect fiber optic cabling to the transceiver ports.

(Optional) Make Stack Connections



1. **Connect the top device**

   Plug one end of a DAC cable in the bottom QSFP28 port of the top unit.
2. **Connect the next device**

Plug the other end of the DAC cable into the top QSFP28 port of the next unit.

3. **Repeat**

   Repeat for each unit in the stack.

4. **(Optional) Connect the top and bottom devices**

   Plug one end of a DAC cable into the bottom QSFP28 port on the bottom unit and the other end into the top QSFP28 port on the top unit.

5. **Reboot**

   Reboot each switch in the stack to start the stack operations.

Note: Stacking support is dependent on the switch software. For stacking support information, refer to the NOS software documentation.

Hardware Specifications

Switch Chassis

- Size (WxDxH) 438 x 474 x 44 mm
- Weight 8.5 kg (18.74 lb), with two installed PSUs
- 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 90% (non-condensing)

1 x 920 W Power Supply

- AC Input 100–120 Vac, 50-60 Hz, 12 A (Not for China) 200–240 Vac, 50-60 Hz, 6 A
- Power Consumption 920 W max.
- PoE Power Budget 620 W

2 x 920 W Power Supplies

- AC Input 100–120 Vac, 50-60 Hz, 12 A (Not for China) 200–240 Vac, 50-60 Hz, 6 A
- Power Consumption 1840 W max.
- PoE Power Budget 1540 W

1 x 1200 W Power Supply

- AC Input 100–120 Vac, 50-60 Hz, 15 A (Not for China) 200–240 Vac, 50-60 Hz, 8 A
- Power Consumption 1000 W max. (100–120 Vac PSU) 1200 W max. (200–240 Vac PSU)
- PoE Power Budget 700 W (100–120 Vac PSU) 900 W (200–240 Vac PSU)

2 x 1200 W Power Supplies

- AC Input 100–120 Vac, 50-60 Hz, 15 A (Not for China) 200–240 Vac, 50-60 Hz, 8 A
- Power Consumption 2000 W max. (100–120 Vac PSUs) 2400 W max. (200–240 Vac PSUs)
- PoE Power Budget 1700 W (100–120 Vac PSUs) 2100 W (200–240 Vac PSUs)

Regulatory Compliances

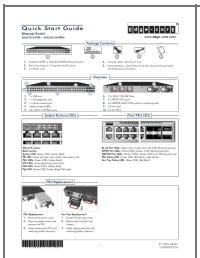
- Emissions EN 55032:2015+AC:2016, Class A EN 61000-3-2:2014, Class A EN 61000-3-3:2013 FCC Class A VCCI Class A CCC GB 9254-2008, Class A BSMI Class A, CNS 13438
- Immunity IEC 61000-4-2/3/4/5/6/8/11
- Safety UL (UL 62368-1 & CSA C22.2 No. 62368-1) CB (IEC/EN 60950-1, IEC/EN 62368-1) CCC GB4943.1-2011 BSMI, CNS 14336-1
- Taiwan RoHS CNS 15663

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.

Caution: The device includes plug-in power supply (PSU) and fan tray modules that are installed into its chassis. Make sure all installed modules have a matching airflow direction (front-to-back).

Note: The device has the Open Network Install Environment (ONIE) software installer preloaded on the switch, but no switch software image. Information about compatible switch software can be found at **www.edge-core.com**.

Documents / Resources

	**Edge-core AS4630-54NPE Ethernet Switch** [pdf] User Guide AS4630-54NPE, AS4630-54NPEM, Ethernet Switch

References

- **Edgecore Networks**