AXIS D8208-R Indulstrial PoE++ Switch

User Manual

About this document

Note

The product is intended for use by network administrators who are responsible for operating and maintaining network equipment. Basic working knowledge of general switch functions, security, the Internet Protocol (IP), and Simple Network Management Protocol (SNMP) is assumed.

This User Manual provides information mainly on how to:
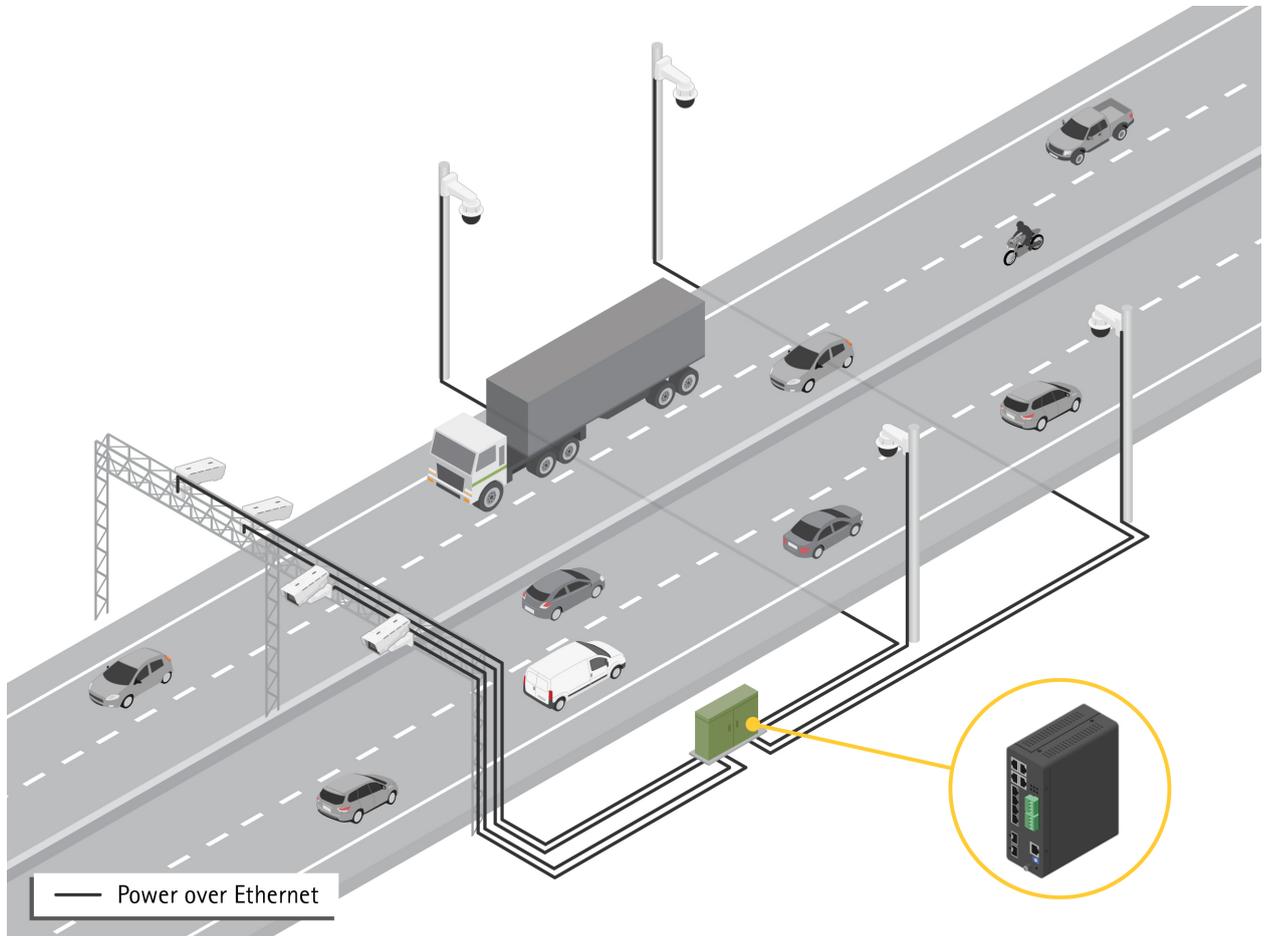
- access the product

- access connected IP devices in the product's topology view

- configure selected setup examples

- perform maintenance on the product

Product features and their settings are covered in more detail in the product's context-sensitive built-in help. For more information, see *Get to know your product's built-in help on page 5* .

Solution overview

Get started

Access the product from a browser

Note

Install, connect and power up the product as specified in its Installation Guide.
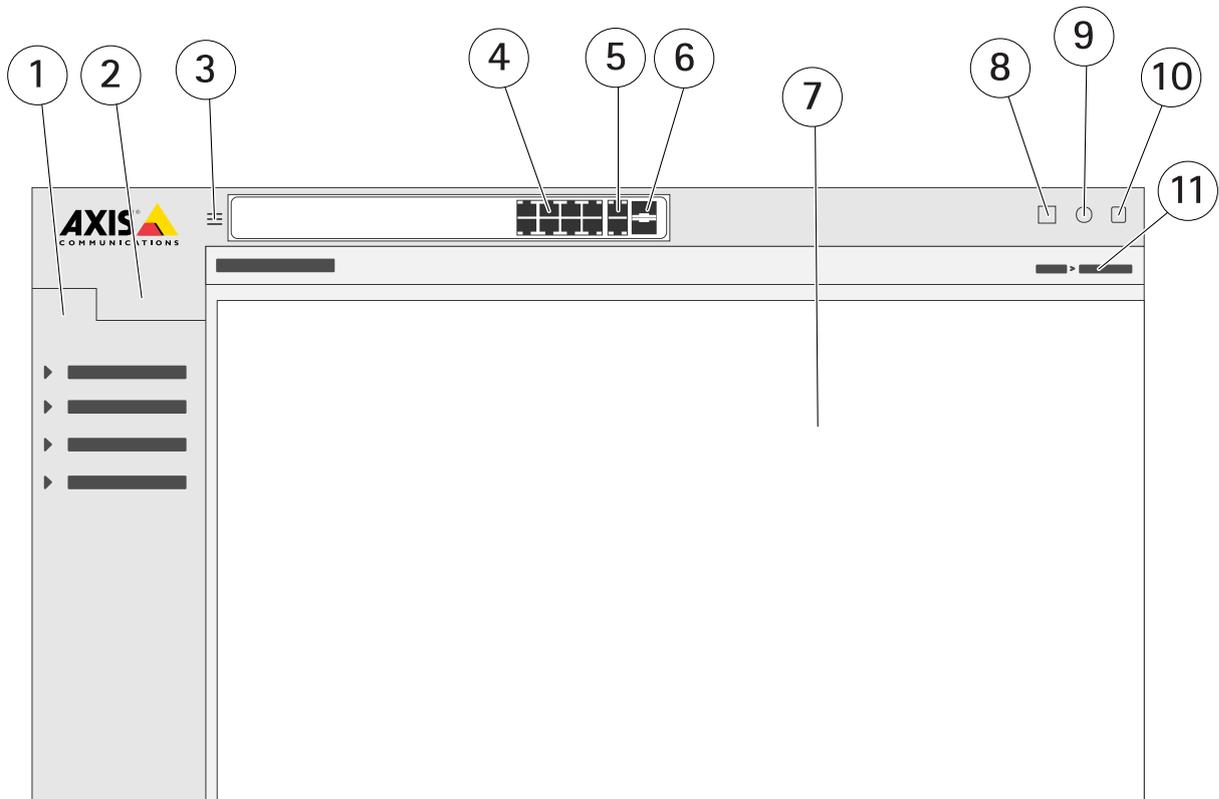
1. Use AXIS IP Utility or AXIS Device Manager to find the product on the network. For information on how to discover and assign an IP address, go to *axis.com/support*

2. Enter the username and password provided on the product label.

3. Follow the steps in the setup wizard to:

    - Change the password (recommended for security reasons)

    - Set the IP address via DHCP or manually

    - Configure the DHCP server

    - Set the date & time information

    - Set the system information

4. Click **Apply**.

5. Relogin using the new password.

You will now enter the product's web page, and will be able to configure and manage the product.

Get to know your product's web page

1   Basic features
2   Advanced features
3   Toggle button - switch between windowed and full screens
4   RJ45 port (PoE+) status indicators
5   RJ45 port (non-PoE) status indicators
6   SFP port status indicators
7   Content area for basic/advanced features
8   Save button - save the start-up configuration
9   Help button - access the context-sensitive built-in help
10 Log out button
11 Menu path

Get to know your product's built-in help

Your product has a context-sensitive built-in help. The help provides more detailed information on the product's basic and advanced features and their settings. To access the help content for any given view, click 📖 . Some help content also includes clickable terms and acronyms that are explained in more detail in the built-in glossary.
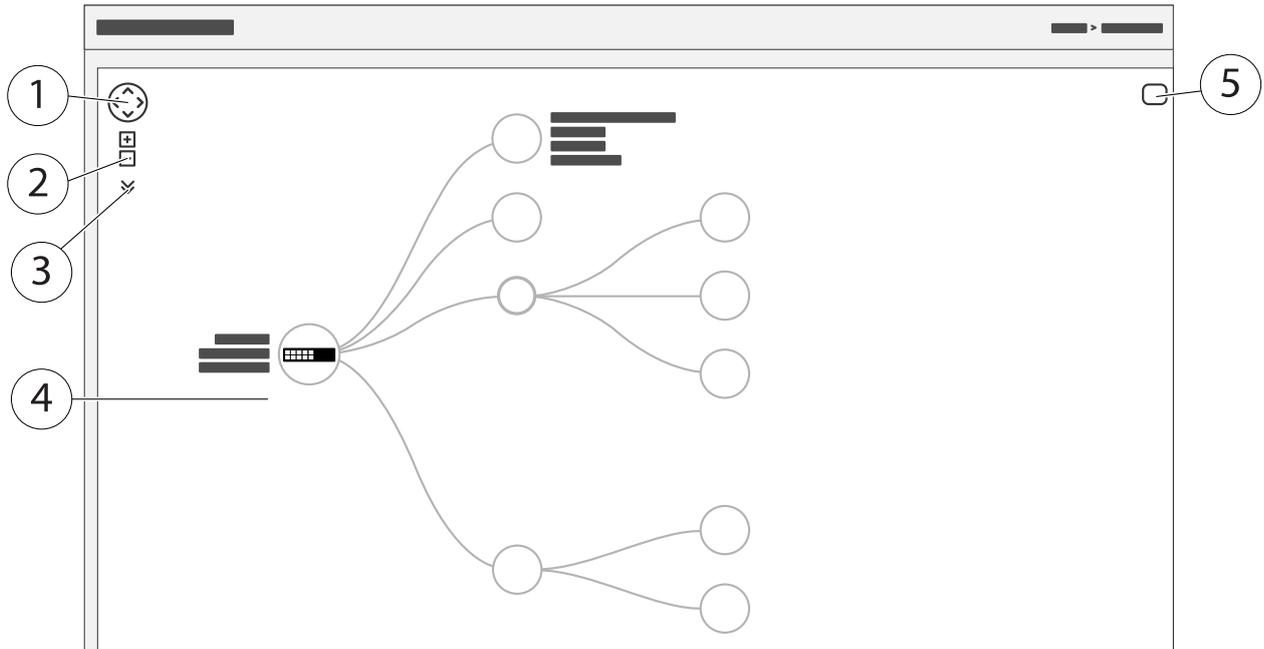
Access devices in your product's network

Topology view

The topology view allows you to remotely access, manage and monitor all discovered IP devices in your product's network, for example via a tablet or a smart phone. To display the discovered IP devices in a graphical network, go to **Basic > Topology View**.

1	Arrow button to move the view in four directions
2	Zoom in and zoom out buttons
3	Drop-down button to access and change device information to be displayed in the view
4	Content area for devices discovered in the network
5	Settings button to access and change device, group and configuration information

When you click a device icon in the topology view, a device console is opened to allow you access to:

- dashboard console with device information and available device-specific actions, such as login, diagnostics, find switch, PoE configuration and reboot

- notification console with information on alarms and logs triggered by events

- monitor console with information on device traffic

Setup examples

Set up access VLANs

VLANS are typically used on large networks to create multiple broadcast domains, but they can also be used to segregate network traffic. For example, video traffic can be part of one VLAN, and other network traffic can be part of another.

1. Go to **Advanced > VLANs > Configuration**.

2. Under **Global VLAN Configuration**, enter the VLANs you want to create to the **Allowed Access VLANs** field. For example, if you enter, 1, 10-13, 200, 300, the following VLAN IDs will be created: 1, 10, 11, 12, 13, 200 and 300.

3. To assign a created VLAN ID to a given port under **Port VLAN Configuration**, enter the ID to the **Port VLAN** field.

4. Click **Apply**.

Reserve an IP address based on MAC address

1. Go to **Advanced > DHCP Server > Configuration > Pool**.

2. Click **Add New Pool**.

3. Enter a name for the pool, for example 00:01:02:03:04:05, and click **Apply**. No spaces are allowed in the name.

4. To access the pool settings, click the added name.

5. In the **Type** drop-down menu, select **Host**.

6. Enter other required settings, such as **IP** address, **Subnet Mask** and **Default Router**.

7. In the **Client Identifier** drop-down menu, select **MAC**.

8. In the **Hardware Address** field, enter F8-16-54-B2-35-63.

9. Click **Apply**.

To save the start-up configuration, click on the product's web page. See *Get to know your product's web page on page 4* .

Set a PoE schedule

If you have a certain time frame where you want the switch to provide PoE, for example, to your cameras, it can be useful to create a PoE schedule and assign it to one or more PoE ports. You can create up to 16 PoE schedule profiles.

To create a PoE schedule:

1. Go to **Advanced > PoE > Configuration > Schedule Profile**.

2. In the **Profile** drop-down menu, select a number for the profile.

3. Change the default profile name as needed.

4. To specify when you want PoE to switch on, select hours (**HH**) and minutes (**MM**) in the **Start Time** drop-down menu.

5. To specify when you want PoE to switch off, select hours (**HH**) and minutes (**MM**) in the **End Time** drop-down menu.

   - If you want to use the same schedule for all days of the week, select the start and end times on the **Week Day** row marked with an asterisk (*****).

   - If you want to use the same schedule for certain days of the week only, select the start and end times for selected days on the respective **Week Day** rows.

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6. Click **Apply**.

To assign the created PoE schedule to one or more PoE ports:

1. Go to **Basic > Basic Settings > PoE > Power Management**.

2. Under **PoE Port Configuration** in the **PoE Schedule** drop-down menu, select the number of the specified PoE schedule profile.

   - If you want to assign the same profile for all ports, select the profile number on the **Port** row marked with an asterisk (*****).

   - If you want to assign the same profile for certain ports only, select the profile numbers for selected ports on the respective **Port** number rows.

3. Click **Apply**.

Check connection status via PoE auto checking

You can use PoE auto checking if you want to periodically check the connection status between your switch and the PoE enabled network device connected to it. If, during auto checking, the network device does not respond to the switch, the switch will automatically restart the PoE port the network device is connected to.

To enable auto checking via the topology view:

1. Go to **Basic > Topology View**.

2. To open the **Dashboard** console of your switch, click the switch icon.

3. Click **PoE Config**.

4. In the **PoE Auto Checking** drop-down menu, select **Enable**.

To configure the auto checking parameters:

1. Go to **Advanced > PoE > Configuration > Auto Checking**.

2. In the **Ping IP Address** field, enter the IP address of the device that is connected to the port you want to assign auto checking for.

3. Enter the other needed parameters, for example:

   - **Port**: 1

   - **Ping IP Address**: 192.168.0.90

   - **Startup Time**: 60

   - **Interval Time (sec)**: 30

   - **Retry Time**: 3

   - **Failure Action**: Reboot Remote PD

   - **Reboot time (sec)**: 15

4. Click **Apply**.

How to connect a mode B camera

For the following camera models, you need to change the PoE settings:

- AXIS Q6010-E Network Camera

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Setup examples

- AXIS Q6000-E PTZ Dome Network Camera

- AXIS Q6100-E Network Camera

1. Go to **Basic > Basic Settings > PoE > Power Management**.

2. For the port that your camera is connected to, set **PoE Mode** to **force90w.**

3. For the port that your camera is connected to, set **LLDP** to **Disabled.**

How to use the console port

The switch has a serial console port that allows you to manage the switch through the command-line interface.

1. Connect the supplied console cable to the console connector on the switch.

2. Connect the console cable to the COM-port on your computer.

3. On your computer, open a teminal emulator to manage the switch.

   Use these COM port settings:

   - Baud rate: 115200

   - Stop bits: 1

   - Data bits: 8

   - Parity: N

   - Flow control: None

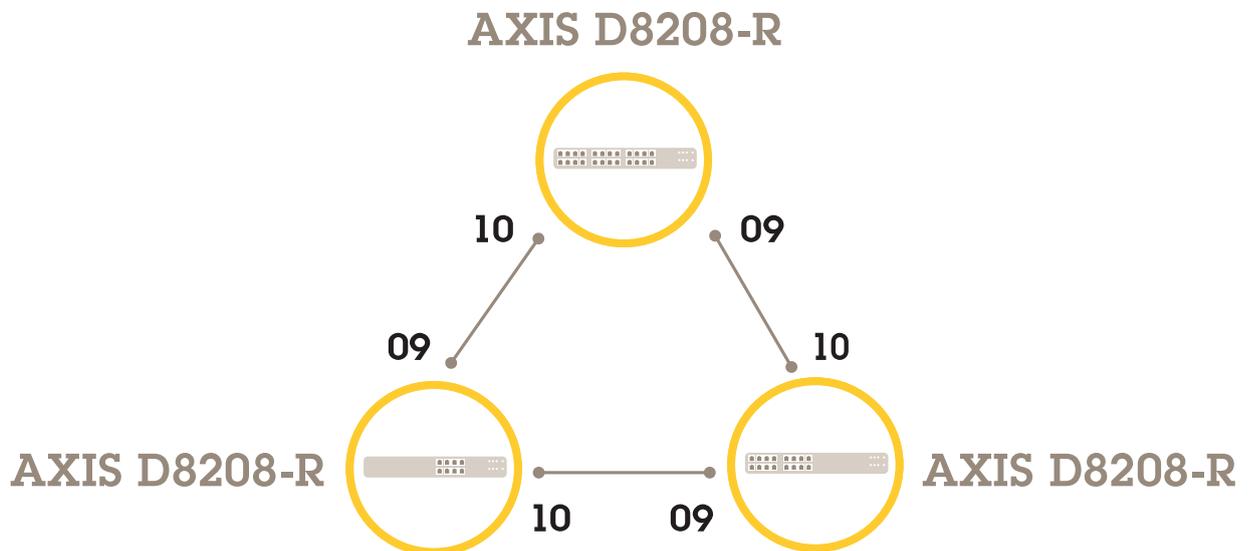## Create Rapid Ring links for network redundancy

If network redundancy is required, you can create redundant links between switches using Rapid Ring.

In this example, there are 3 switches connected by a redundant link and no extra VLANS. If any of the uplinks between the switches should fail, the redundant link is activated and provides network connectivity.

Device Name	Model Name
Switch - 01	AXIS D8208-R
Switch - 02	AXIS D8208-R
Switch - 03	AXIS D8208-R

AXIS D8208-R Indulstrial PoE++ Switch

Setup examples

For the switch you want to use as master:

1. Go to **Advanced** > **Rapid Ring**.

2. Under **Role**, select **Master**.

3. Click **Apply**.

For all the other switches:

1. Go to **Advanced** > **Rapid Ring**.

2. Under **Role**, select **Member**.

3. Click **Apply**.

Setup examples

To save the start-up configuration, click

on the product's web page. See *Get to know your product's web page on page 4*.

Switch ports on/off using VAPIX

Use the following command in VAPIX:

- To switch the port on:

  ```
  http://[IP address of the switch]/axis-cgi/nvr/poe/setportmode.cgi?port=[number
  of the port on the switch]enabled=yes&schemaversion=1
  ```

- To switch the port off:

Setup examples

```
http://[IP address of the switch]/axis-cgi/nvr/poe/setportmode.cgi?port=[number
of the port on the switch]enabled=no&schemaversion=1
```

Connect a 1Gbps SFP module

1. Go to **Advanced > Port Management > Port Configuration**.

2. For the port that you connected the module to (9 or 10), set **Configured** to **1 Gbps FDX**.

Note

If you set the port to **Auto**, both SFP and SFP+ will work.

Maintenance

Restart the product

Note

Any configuration files or scripts you have saved in the product are available after restart.

1. Go to **Advanced > Maintenance > Restart Device**.

2. If you want to simulate a power-on (cold restart), select **Force Cool Restart**. This will impact the traffic routed through the product.

3. Click **Yes**.

After restart, the product will boot normally.

Set a reboot schedule

Note

Any configuration files or scripts you have saved in the product are available after reboot.

1. Go to **Advanced > Maintenance > Reboot Schedule**.

2. Set **Mode** to **Enabled**.

3. Select the weekday and time for reboot.

4. Click **Apply**.

Restore the product to factory default values

Important

Any configuration files or scripts you have saved in the product are restored to factory default values.

1. Go to **Advanced > Maintenance > Factory Defaults**.

2. If you want to keep the current IP settings, select **Keep IP setup**.

3. Click **Yes**.

Note

For more information on how to restore the product to factory default values using the mode/reset button, see *Buttons on page 15*.

Upgrade the product firmware

Important

The firmware upgrade takes up to 10 minutes. Do not restart or power off the device during this time.

1. Go to **Advanced > Maintenance > Firmware > Firmware Upgrade**.

2. To select the firmware file from a specified location, click **Browse**.

3. If you want to simulate a power-on (cold restart) after firmware upgrade, select **Force Cool Restart**. This will impact the traffic routed through the product.

4. Click **Upload**.

After firmware upgrade, the product will restart normally.

Revert to alternate firmware image

You can choose to use the alternate (backup) firmware image instead of the active (primary) firmware image in the product. Information tables on both images are shown under **Advanced > Maintenance > Firmware > Firmware Selection**.

Note

- If the active image is already set as the alternate image, only the **Active Image** table is shown, and the **Activate Alternate Image** button is disabled.
- If the alternate image is already set as the active image (either manually or due to corrupted primary image), and a new firmware image is uploaded to the product, the new image will automatically be set as the active image.
- Firmware version and date information may be empty for older firmware releases. This is normal.

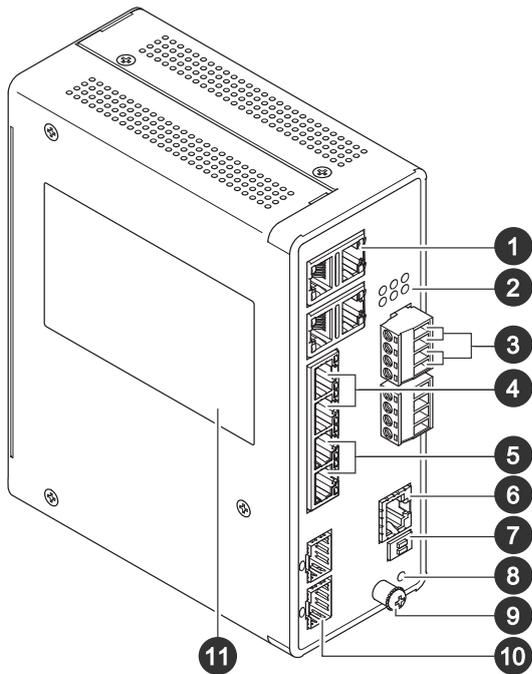To set the alternate image as the active image:

1. Go to **Advanced > Maintenance > Firmware > Firmware Selection**.

2. Click **Activate Alternate Image**.

Specifications

Specifications

Product overview

1   RJ45 ports (PoE++) 10M/100M/1G x4
2   LEDs (front panel)
3   Power connectors x2
4   RJ45 ports (PoE++) 10M/100M/1G x2
5   RJ45 ports (PoE++) 100M/1G/2.5G x2
6   Console connector
7   DIP switch
8   Control button
9   Grounding screw
10 SFP+ ports x2
11 Product label

Buttons

Reset button

To reset the switch to factory default:

1. Start the switch.

2. Press and hold the reset button.

3. When the LEDs light up, release the button.

LED indicators

Power LED

LED	Color	Indication
Power1	Green (lit)	The switch is powered ON.
	N/A	The switch is not receiving power from power1.
Power2	Green (lit)	The switch is powered ON.
	N/A	The switch is not receiving power from power2.

System LED

LED	Color	Indication
System	Green (lit)	The switch is ready.
	N/A	The switch is not ready.

Alarm LED

LED	Color	Indication
Alarm	Red (lit)	The switch has detected an abnormal state, for example temperature or voltage out of range.
	N/A	The system is normal.

Ring master LED

LED	Color	Indication
RM	Green (lit)	Ring Master has been detected in the switch.
	Amber (lit)	Ring Member has been detected in the switch.
	N/A	Ring master disabled.

Rapid chain LED

LED	Color	Indication
RC	Green (lit)	Rapid Chain has been detected in the switch (active path).
	Amber (lit)	Rapid Chain has been detected in the switch (backup path).
	Amber (blink)	Error: There is no corresponding rapid chain switch found.
	N/A	Rapid chain disabled.

Port status LEDs

Specifications

LED	Color	Indication
RJ45 ports (1–6)	Green (lit)	The port is enabled and established a link to connected device, and the connection speed is 1000Mbps.
	Green (blink)	The port is transmitting/receiving packets, and the connection speed is 1000Mbps.
	Amber (lit)	The port is enabled and established a link to connected device, and the connection speed is 10/100Mbps.
	Amber (blink)	The port is transmitting/receiving packets, and the connection speed is 10/100Mbps.
	N/A	The port has no active network cable connected, or it is not established a link to connected device. Otherwise, the port may have been disabled through the product user interface.
RJ45 ports (7–8)	Green (lit)	The port is enabled and established a link to connected device, and the connection speed is 2500Mbps.
	Green (blink)	The port is transmitting/receiving packets, and the connection speed is 2500Mbps.
	Amber (lit)	The port is enabled and established a link to connected device, and the connection speed is 100/1000Mbps.
	Amber (blink)	The port is transmitting/receiving packets, and the connection speed is 100/1000Mbps.
	N/A	The port has no active network cable connected, or it is not established a link to connected device. Otherwise, the port may have been disabled through the product user interface.
PoE ports (1–8)	Green (lit)	PoE is on.
	Amber (lit)	PoE is abnormal.
	N/A	PoE is off.
SFP+ ports (9–10)	Green (lit)	The port is enabled and established a link to connected device, and the connection speed is 1000Mbps.
	Green (blink)	The port is transmitting/receiving packets, and the connection speed is 1000Mbps.
	Blue(lit)	The port is enabled and established a link to connected device, and the connection speed is 10Gbps.
	Blue (blink)	The port is transmitting/receiving packets, and the connection speed is 10Gbps.
	N/A	The port has no active network cable connected, or it is not established a link to connected device. Otherwise, the port

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Specifications

		may have been disabled through the product user interface.