Hewlett Packard Enterprise

HPE OfficeConnect 1405 v3 Switch Series

Getting Started Guide

Part number: 5200-0804
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Acknowledgments

Contents

Preparing for installation

The HPE OfficeConnect 1405 v3 Switch Series includes models listed in Table 1.

Table 1 HPE OfficeConnect 1405 v3 Switch Series models

Product code	HPE description	Alias	RMN
JH407A	HPE OfficeConnect 1405 5G v3 Switch	HPE 1405 5G v3 Switch	HNGZA-HA0030
JH408A	HPE OfficeConnect 1405 8G v3 Switch	HPE 1405 8G v3 Switch	HNGZA-HA0031

IMPORTANT:

For regulatory identification purposes, the switches are assigned Regulatory Model Numbers (RMNs). The RMNs should not be confused with the marketing name HPE 1405, or the product codes.

Safety recommendations

To avoid any equipment damage or bodily injury, read the following safety recommendations before installation. The recommendations do not cover every possible hazardous condition.

- To avoid damage to the electrolytic capacitor in the switch, do not store the switch without power for more than one year.
- Before cleaning the switch, remove all power adapters from the switch. Do not clean the switch with a wet cloth or liquid.
- Do not place the switch near water or in a damp environment. Prevent water or moisture from entering the switch chassis.
- Do not place the switch on an unstable case or desk. The switch might be severely damaged in case of a fall.
- Ensure good ventilation of the equipment room and keep the air inlet and outlet vents of the switch free of obstruction.
- Make sure the operating voltage is in the required range.
- To avoid electrical shocks, do not open the chassis while the switch is operating or when the switch is just powered off.
- The accessories shipped with the switch, including but not limited to power adapter, are intended only for the switch. Please do not use them for other products.

Examining the installation site

The switches must be used indoors. You can mount your switch on a horizontal surface, on a wall, or under a table. Make sure the following requirements are met:

- A minimum of 5 cm (1.97 in) of clearance is reserved at the air inlet and outlet vents for ventilation.
- The air inlet and outlet vents are not blocked when the switch is mounted under a table or on a horizontal surface.
- The table, or horizontal surface is sturdy enough to support the switch and its accessories.

To ensure correct operation and long service life of your switch, install it in an environment that meets the requirements described in the following subsections.

Temperature/humidity

Maintain temperature and humidity in the equipment room as described in "Environmental specifications."

- Lasting high relative humidity can cause poor insulation, electricity leakage, mechanical property change of materials, and metal corrosion.
- Lasting low relative humidity can cause washer contraction and ESD and cause problems including loose mounting screws and circuit failure.
- High temperature can accelerate the aging of insulation materials and significantly lower the reliability and lifespan of the switch.

Cleanliness

Dust buildup on the chassis might result in electrostatic adsorption, which causes poor contact of metal components and contact points, especially when indoor relative humidity is low. In the worst case, electrostatic adsorption can cause communication failure.

Table 2 Dust concentration limit in the equipment room

Substance	Concentration limit (particles/m³)
Dust	≤ 3 x 10^4 (no visible dust on the tabletop over three days)
NOTE: Dust diameter ≥ 5 μm	

The equipment room must also meet strict limits on salts, acids, and sulfides to eliminate corrosion and premature aging of components, as shown in Table 3.

Table 3 Harmful gas limits in the equipment room

Gas	Maximum concentration (mg/m^3)
SO_2	0.2
H_2S	0.006
NH_3	0.05
Cl_2	0.01

EMI

All electromagnetic interference (EMI) sources, from outside or inside of the switch and application system, adversely affect the switch in the following ways:

- A conduction pattern of capacitance coupling.
- Inductance coupling.
- Electromagnetic wave radiation.
- Common impedance coupling.

To prevent EMI, perform the following tasks:

- Keep the switch far away from radio transmitting stations, radar stations, and high-frequency devices.
- Use electromagnetic shielding, for example, shielded interface cables, when necessary.

Installing the switch

WARNING!

Before installing or moving the switch, remove the power adapter.

You can install the switch on a horizontal surface, on a wall, or under a table. The procedures for installing the HPE 1405 5G v3 Switch and the HPE 1405 8G v3 Switch are the same. This section uses the HPE 1405 5G v3 Switch as an example.

Horizontal surface mounting

IMPORTANT:

- Reserve a clearance of 10 cm (3.9 in) around the chassis for heat dissipation.
- Do not place heavy objects on the switch.

To mount the switch on a horizontal surface:

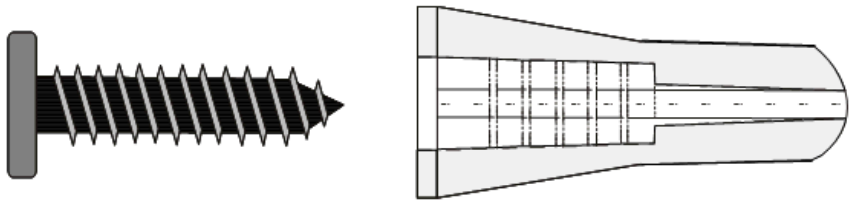
1. Verify that the horizontal surface is sturdy.
2. Place the switch upside up on the horizontal surface.

Wall mounting

The HPE 1405 5G v3 Switch and HPE 1405 8G v3 Switch can be installed on a wall. The type of screws used to mount the switch on the wall depends on the wall type. This section uses a concrete wall as an example.

The screws must be a minimum of 3 mm (0.12 in) and a maximum of 3.8 mm (0.15 in) in diameter. The screw head must be a minimum of 6 mm (0.24 in) and a maximum of 9.8 mm (0.59 in) in diameter.

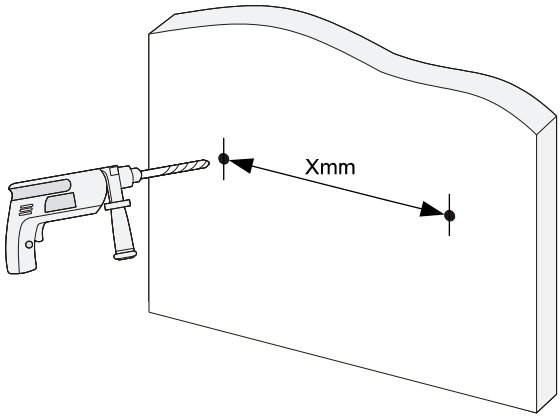
Figure 1 Wall-mounting anchor kit



To install the switch on a concrete wall:

1. Drill two holes at the same height, as shown in Figure 2.

Figure 2 Hole spacing



The hole depth and diameter depend on the wall anchors and screws you use. Make sure you can push the anchors to their full depth in the holes.

Installation hole spacing varies by switch model, as shown in Table 4.

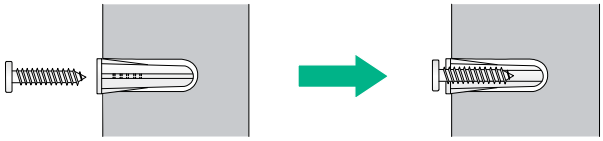
Table 4 Installation hole spacing requirements

Product	Installation hole spacing
HPE 1405 5G	74 mm (2.91 in)
HPE 1405 8G	102 mm (4.02 in)

2. Insert one wall anchor into each hole until the anchors are flush with the wall surface.
3. Drive one screw into each wall anchor, and tighten the screws just enough to keep it secure in the wall anchor.

   Leave a minimum clearance of 1.5 mm (0.06 in) between the base of the screw head and the wall anchor so the switch can hang on the screws securely.

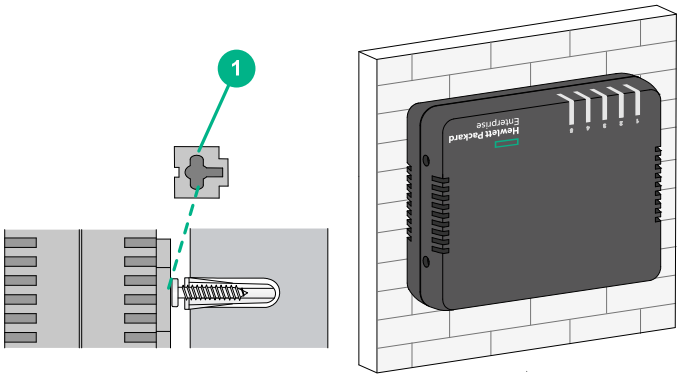
   Figure 3 Driving a screw into a wall anchor



4. Align the two mounting holes in the switch chassis bottom with the two screws on the wall and hang the switch.

   Make sure the Ethernet ports are facing upwards or downwards and the chassis side panels are perpendicular to the ground.

Figure 4 Wall mounting



(1) Mounting hole in the switch chassis bottom

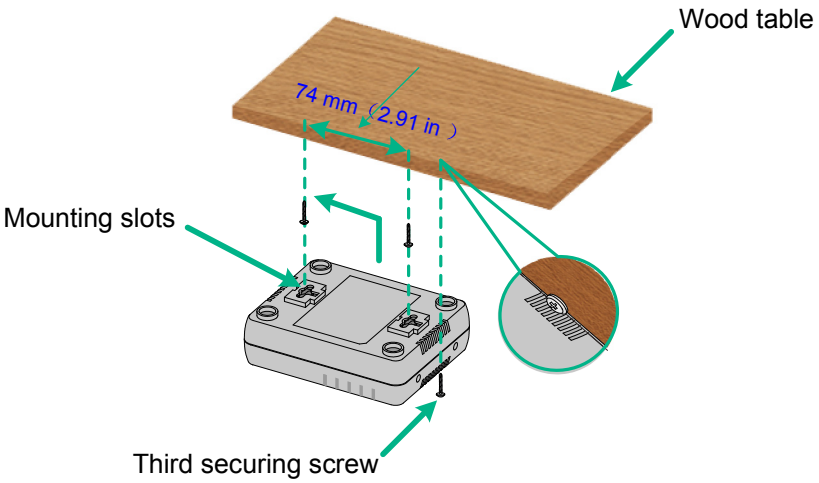
Under-table mounting

CAUTION:

- A network-attached switch with cables mounted upside down can be heavy. Verify that the table is sufficiently strong and of a material that can support the screws that hold the weight of the switch and the attached cables. Make sure the cables are protected and out of the way.
- Regularly inspect the installation of the switch to ensure that the switch remains securely anchored and unobstructed.

The HPE 1405 5G v3 Switch and HPE 1405 8G v3 Switch support under-table mounting. The wall mounting screws (provided) can be used when you mount the switch under a table.

Figure 5 Under-table mounting



To mount the switch under a table:

1. Follow the instructions on wall mounting to determine the location of screw holes to be used for under-table mounting.
2. Align the two mounting holes in the switch chassis bottom with the two screws on the bottom of the table and hang the switch.
3. Use a third screw to prevent switch movement.

NOTE:

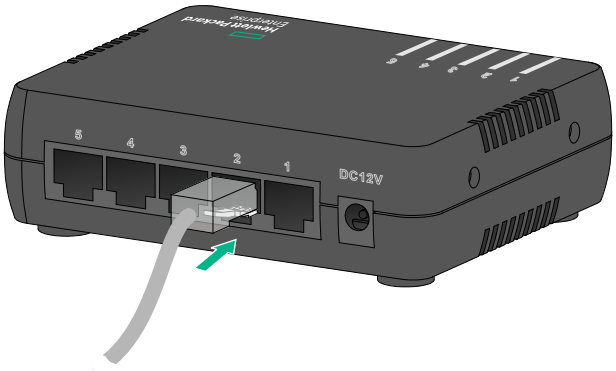
Installation hole spacing varies by switch model. For more information, see Table 4.

Connecting cables

Connecting network cable

Use crossover cable or straight through cable to connect a PC or other network devices to the Ethernet port of the switch.

Figure 6 Connecting network cable



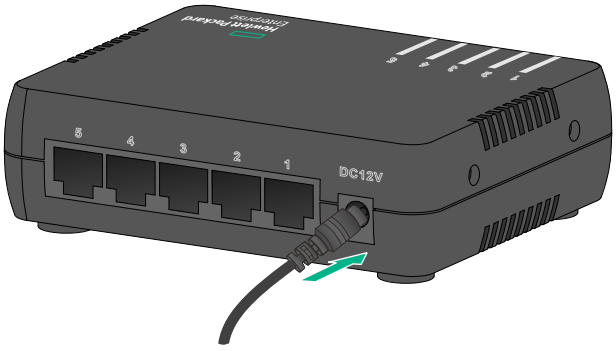
Connecting the power adapter

The HPE 1405 5G v3 Switch and HPE 1405 8G v3 Switch support a power adapter.

To connect the power adapter:

1. Wear an ESD wrist strap and make sure it makes good skin contact and is reliably grounded.
2. Make sure the correct power source is used.
3. Connect one end of the power adapter to the DC power receptacle on the switch.
4. Connect the other end of the power adapter to the AC power supply.
5. Examine the power LED. If it is ON, the power connection is correct.

Figure 7 Connecting the power adapter



Verifying the installation

After you complete the installation, verify the following items:

- There is enough space for heat dissipation around the switch.
- The table, or horizontal surface is stable.
- The correct power source is used.
- The power adapter are correctly connected.
- All the interface cables are cabled indoors. If any cable is routed outdoors, verify that the socket strip with lightning protection and lightning arresters for network ports have been correctly connected.

Document conventions and icons

Conventions

This section describes the conventions used in the documentation.

Port numbering in examples

The port numbers in this document are for illustration only and might be unavailable on your device.

Command conventions

Convention	Description
Boldface	**Bold** text represents commands and keywords that you enter literally as shown.
Italic	*Italic* text represents arguments that you replace with actual values.
[ ]	Square brackets enclose syntax choices (keywords or arguments) that are optional.
{ x | y | ... }	Braces enclose a set of required syntax choices separated by vertical bars, from which you select one.
[x | y | ...]	Square brackets enclose a set of optional syntax choices separated by vertical bars, from which you select one or none.
{ x | y | ... } *	Asterisk marked braces enclose a set of required syntax choices separated by vertical bars, from which you select at least one.
[x | y | ...] *	Asterisk marked square brackets enclose optional syntax choices separated by vertical bars, from which you select one choice, multiple choices, or none.
&<1-n>	The argument or keyword and argument combination before the ampersand (&) sign can be entered 1 to n times.
#	A line that starts with a pound (#) sign is comments.

GUI conventions

Convention	Description
Boldface	Window names, button names, field names, and menu items are in Boldface. For example, the **New User** window appears; click **OK**.
>	Multi-level menus are separated by angle brackets. For example, **File** > **Create** > **Folder**.

Symbols

Convention	Description
⚠ **WARNING!**	An alert that calls attention to important information that if not understood or followed can result in personal injury.
△ **CAUTION:**	An alert that calls attention to important information that if not understood or followed can result in data loss, data corruption, or damage to hardware or software.
ⓘ **IMPORTANT:**	An alert that calls attention to essential information.
NOTE:	An alert that contains additional or supplementary information.
TIP:	An alert that provides helpful information.

Network topology icons

Convention	Description
	Represents a generic network device, such as a router, switch, or firewall.
	Represents a routing-capable device, such as a router or Layer 3 switch.
	Represents a generic switch, such as a Layer 2 or Layer 3 switch, or a router that supports Layer 2 forwarding and other Layer 2 features.
	Represents an access controller, a unified wired-WLAN module, or the access controller engine on a unified wired-WLAN switch.
	Represents an access point.
	Represents a wireless terminator unit.
	Represents a wireless terminator.
	Represents a mesh access point.
	Represents omnidirectional signals.
	Represents directional signals.
	Represents a security product, such as a firewall, UTM, multiservice security gateway, or load balancing device.
	Represents a security card, such as a firewall, load balancing, NetStream, SSL VPN, IPS, or ACG card.

Support and other resources

Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:

  www.hpe.com/assistance
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:

  www.hpe.com/support/hpesc

Information to collect

- Technical support registration number (if applicable)
- Product name, model or version, and serial number
- Operating system name and version
- Firmware version
- Error messages
- Product-specific reports and logs
- Add-on products or components
- Third-party products or components

Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.
- To download product updates, go to either of the following:
  - Hewlett Packard Enterprise Support Center **Get connected with updates** page:

    www.hpe.com/support/e-updates
  - Software Depot website:

    www.hpe.com/support/softwaredepot
- To view and update your entitlements, and to link your contracts, Care Packs, and warranties with your profile, go to the Hewlett Packard Enterprise Support Center **More Information on Access to Support Materials** page:

  www.hpe.com/support/AccessToSupportMaterials

IMPORTANT:

Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HP Passport set up with relevant entitlements.

Websites

Website	Link
Networking websites	
Hewlett Packard Enterprise Information Library for Networking	www.hpe.com/networking/resourcefinder
Hewlett Packard Enterprise Networking website	www.hpe.com/info/networking
Hewlett Packard Enterprise My Networking website	www.hpe.com/networking/support
Hewlett Packard Enterprise My Networking Portal	www.hpe.com/networking/mynetworking
Hewlett Packard Enterprise Networking Warranty	www.hpe.com/networking/warranty
General websites	
Hewlett Packard Enterprise Information Library	www.hpe.com/info/enterprise/docs
Hewlett Packard Enterprise Support Center	www.hpe.com/support/hpesc
Hewlett Packard Enterprise Support Services Central	ssc.hpe.com/portal/site/ssc/
Contact Hewlett Packard Enterprise Worldwide	www.hpe.com/assistance
Subscription Service/Support Alerts	www.hpe.com/support/e-updates
Software Depot	www.hpe.com/support/softwaredepot
Customer Self Repair (not applicable to all devices)	www.hpe.com/support/selfrepair
Insight Remote Support (not applicable to all devices)	www.hpe.com/info/insightremotesupport/docs

Customer self repair

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

www.hpe.com/support/selfrepair

Remote support

Remote support is available with supported devices as part of your warranty, Care Pack Service, or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

For more information and device support details, go to the following website:

www.hpe.com/info/insightremotesupport/docs

Documentation feedback

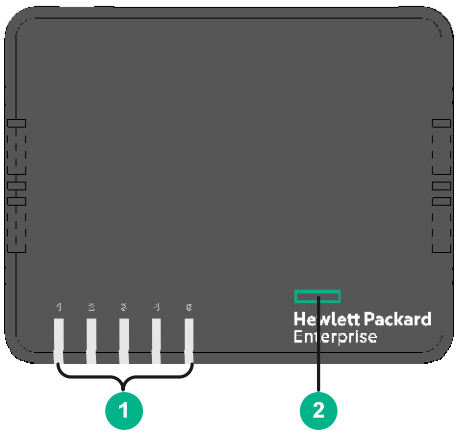
Hewlett Packard Enterprise is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback (docsfeedback@hpe.com). When submitting your feedback, include the document title, part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.

Appendix A Chassis views and technical specifications

Chassis views

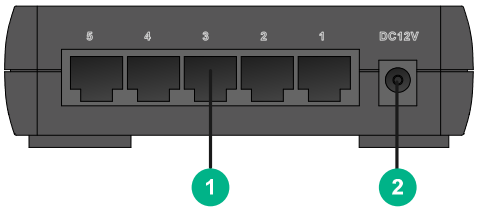
HPE 1405 5G

Figure 8 Top panel



(1) Copper port LEDs	(2) Power LED

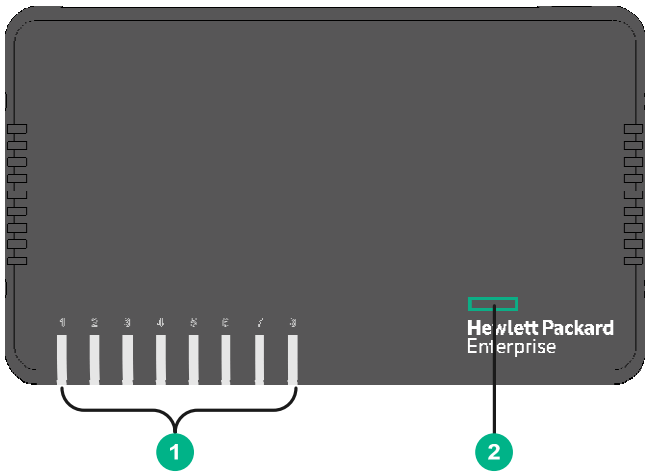
Figure 9 Rear panel



(1) 10/100/1000BASE-T copper ports	(2) DC Power receptacle

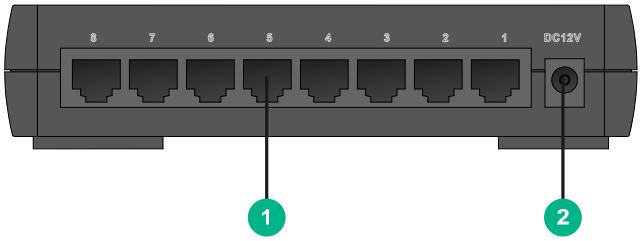
HPE 1405 8G

Figure 10 Top panel



(1) Copper port LEDs	(2) Power LED

Figure 11 Rear panel



(1) 10/100/1000BASE-T copper ports	(2) DC power receptacle

Technical specifications

Chassis dimensions and weights

Chassis	Dimensions (H x W x D)	Maximum weight
HPE 1405 5G	31.7 x 115 x 91.3 mm (1.25 × 4.52 × 3.59 in)	0.16 kg (0.35 lb)
HPE 1405 8G	31.7 x 155 x 91.3 mm (1.25 × 6.10 × 3.59 in)	0.22kg (0.49 lb)

Ports and interface card slots

Chassis	10/100/1000BASE-T auto-sensing Ethernet ports
HPE 1405 5G	5
HPE 1405 8G	8

Environmental specifications

Chassis	Operating temperature	Relative humidity
All chassis	0°C to 40°C (32°F to 104°F)	5% to 95%, noncondensing

Power specifications

DC input voltage specifications

Chassis	Voltage
All chassis	12V DC

Power consumption specifications

Chassis	Min. power consumption	Max. power consumption
HPE 1405 5G	1 W	3 W
HPE 1405 8G	1 W	4.5 W

Appendix B LEDs

Power LED

Table 5 Power LED description

Status	Description
Steady white	The switch is powered on and the power supply is operating correctly.
Flashing white	The switch is faulty if the LED flashes white for five seconds.
Off	The switch is not powered on or the power supply is faulty.

Copper port LEDs

Link/ACT LEDs

Table 6 Link/ACT LED description

Status	Description
Steady white	A 10/100/1000 Mbps link is present.
Flashing white	The port is receiving or sending data at 10/100/1000 Mbps.
Off	No link is present.

Appendix C Troubleshooting

Table 7 describes the troubleshooting methods for common issues that you might encounter while using and managing the switch.

If a problem persists, contact Hewlett Packard Enterprise Support.

Table 7 Troubleshooting methods

Symptom	Troubleshooting method
Power LED off	1. Verify that the correct power source is used and the power adapters are correctly connected. 2. Verify that the power source side provides power supply correctly.
LAN interface LED off	1. Verify that the network cable is correctly connected to the network port of the switch. 2. Insert the two ends of a network cable into two network ports of the switch. If the port LEDs are off, replace the network cable.