



# Avaya

## Virtual Services Platform 7200 Series

### Quick Install Guide

This poster provides information and instructions to install and commission a factory-supplied Avaya Virtual Services Platform 7200 switch. You can download all documents referenced in this guide at [www.avaya.com/support](http://www.avaya.com/support).

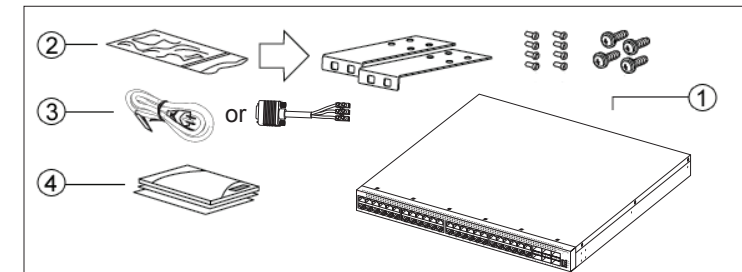
#### 1 Before you start

Confirm that you have the following tools and cables:

- Phillips #2 screwdriver
- RJ-45 console port cable
- ESD cable

#### 2 Unpack the equipment and verify package content

**Note:** Observe ESD precautions when unpacking.



1. Avaya Virtual Services Platform (VSP) 7200 Series switch
2. Rack-mounting hardware that includes:
  - a. Rack-mount brackets
  - b. Screws to attach brackets to the switch
  - c. Screws to attach the switch to the equipment rack
3. AC power cord or DC power supply wiring assembly (**Note:** A power cord is not included with the “A” variants of the switch.)
4. Documentation that includes this poster, regulatory information, how to locate software, and how to locate Release Notes.

#### 3 Verify power supply unit (PSU) specifications

Optionally order a redundant PSU to provide redundancy and load sharing. Make sure you order the correct power supplies and fan trays so the air flow directions match (either **front-to-back** or **back-to-front**).

##### VSP 7200 AC power specifications:

VSP 7200 model	Primary PSU	Redundant PSU (to be ordered if required)
VSP 7254XSQ - fiber switch Model EC7200x1B-E6 ships with one back-to-front AC PSU. Model EC7200x1F-E6 ships with one front-to-back AC PSU.	460W AC power supply Replacement order code: EC7205?1B-E6 (back-to-front), EC7205?1F-E6 (front-to-back)	460W AC power supply Order code: EC7205?1B-E6 (back-to-front), EC7205?1F-E6 (front-to-back) <ul style="list-style-type: none"><li>• “A”: No power cord included.</li><li>• “B”: Includes European “Schuko” power cord common in Austria, Belgium, Finland, France, Germany, The Netherlands, Norway, and Sweden.</li><li>• “C”: Includes power cord commonly used in the United Kingdom and Ireland.</li><li>• “D”: Includes power cord commonly used in Japan.</li><li>• “E”: Includes North American power cord.</li><li>• “F”: Includes Australian power cord.</li></ul>
VSP 7254XTQ - copper switch Model EC7200x2B-E6 ships with one back-to-front AC PSU. Model EC7200x2F-E6 ships with one front-to-back AC PSU.	800W AC power supply Replacement order code: EC7205?0B-E6 (back-to-front), EC7205?0F-E6 (front-to-back)	800W AC power supply Order code: EC7205?0B-E6 (back-to-front), EC7205?0F-E6 (front-to-back) Refer to the note above for country code information.

##### VSP 7200 DC power specifications:

VSP 7200 model	Primary PSU	Redundant PSU (to be ordered if required)
VSP 7254XSQ - fiber switch Model EC720001F-E6 ships with one front-to-back DC PSU.	800W DC power supply Replacement order code: EC8005001-E6 (front-to-back)	800W DC power supply Order code: EC8005001-E6 (front-to-back)
VSP 7254XTQ - copper switch Model EC720002F-E6 ships with one front-to-back DC PSU.	800W DC power supply Replacement order code: EC8005001-E6 (front-to-back)	800W DC power supply Order code: EC8005001-E6 (front-to-back)

#### 4 Install power supply unit

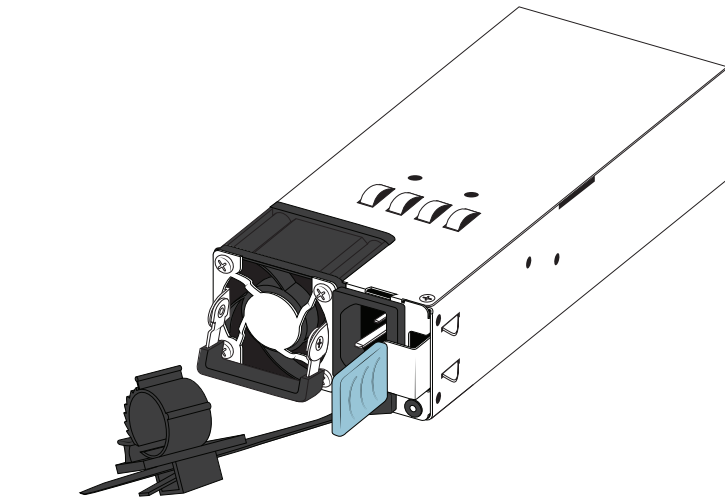
The VSP 7200 supports two field-replaceable power supplies. One power supply ships with the unit and you can optionally install a second power supply for redundancy. If you install a second power supply, the load is shared equally and neither one acts as a primary power supply.

Use this procedure to install either the primary or redundant power supply.

##### Notes:

- Avaya does not support installing a combination of AC-input and DC-input power supplies in the same chassis.
- There are two power supply slots (PSU1 on the left and PSU2 on the right). If you only have one power supply, you can install it in either PSU1 or PSU2.
- The switch ships with filler panels covering the power supply slots. If you’re not installing a second power supply, you must leave one of the filler panels in place for proper cooling.
- You can hot swap power supplies while the switch is operational. One power supply is required for continued switch operation.

1. Remove the power supply cover by pushing the tab on the spring latch to the left and pulling on the extraction handle. (Save the filler panel for possible future use.)
2. Insert the power supply into the slot.
3. Verify that the power supply is fully seated in the slot (AC PSU shown). The spring latch should engage and move back to its original position.



##### Notes:

- The chassis design prevents an incorrect installation of a power supply. If you insert a power supply upside down, it will not fully insert.
- The spring latch design ensures that you remove the power cord before removing a power supply from the chassis. If you don’t remove the cord, you cannot move the latch to the left to release the hooks from the chassis.

4. After you install a power supply, proceed with connecting either the AC power cord or the DC power supply wiring assembly.
5. Check the LED on the power supply. If it is off, the power supply is not operating. If it is green, the power supply is operating normally.

#### 5 Install fan trays

The VSP 7200 comes with three 12-V fan trays for either front-to-back or back-to-front air flow switch cooling. Make sure you order the correct power supplies and fan trays so the air flow directions match (either front-to-back or back-to-front).

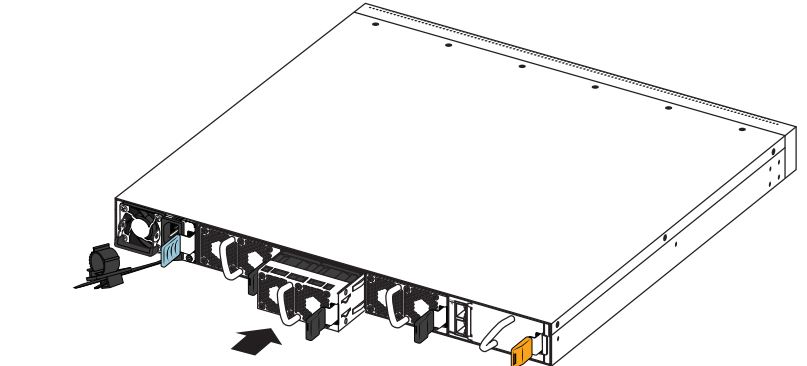
Refer to the following part numbers to ensure that you install the correct fan trays in your switch. Both the VSP 7254XSQ (fiber switch) and the VSP 7254XTQ (copper switch) use the same fan tray models:

- EC7200BTF-E6 — 12 V BACK2FRONT SPARE FAN TRAYS (INC 3 FAN TRAY KITS)
- EC7200FTB-E6 — 12 V FRONT2BACK SPARE FAN TRAYS (INC 3 FAN TRAY KITS)

##### Important:

All three fans must be installed at all times to ensure proper ventilation. If a fan fails, leave it in place until you can replace it. Leaving a fan bay unpopulated impairs the ability of the remaining fans to cool the chassis.

1. Insert the fan trays into the chassis.



2. Verify that each fan tray is fully seated in the chassis. The spring latch should engage and return to its original position.
3. Check the Fan LED on the front of the chassis. Solid green indicates that all fan trays are operating normally. Blinking amber indicates that a fan tray failed.
4. If a fan tray fails, enter the following command to determine which one failed.

```
show sys-info fan
```

This command shows the status of each fan tray: up, down, or Not Present when a fan is removed.

5. Remove the fan tray that failed by pushing the tab on the spring latch to the left and pulling on the fan’s extraction handle. You can hot swap fan trays while the switch is operational.
6. Enter the following command to check the temperature sensors inside the switch.

```
show sys-info temperature
```

#### 6 Mount the VSP 7200 switch

There are two ways to install an Avaya VSP 7200 switch in an equipment rack. Refer to one of the following sections:

- Mount the switch using the supplied bracket.
- Mount the switch using the optional slide rack mount kit.

**Note:** For more information, see Installing the Avaya VSP 7200 Series, NN47228-302.



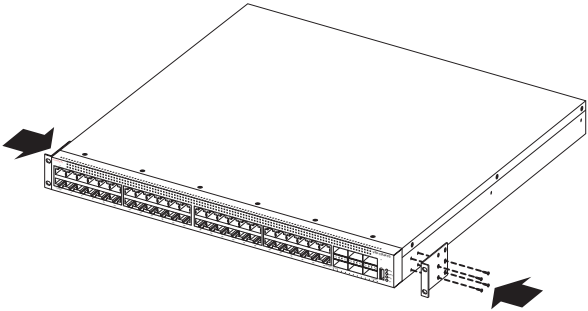
Prepare the rack

- Ensure that there is enough rack space to accommodate a 1RU switch (4.45 cm).
- The rack is bolted to the floor and braced if necessary.
- The rack is grounded to the same grounding electrode used by the power service in the area. The ground path must be permanent and must not exceed 1 Ohm of resistance from the rack to the grounding electrode.

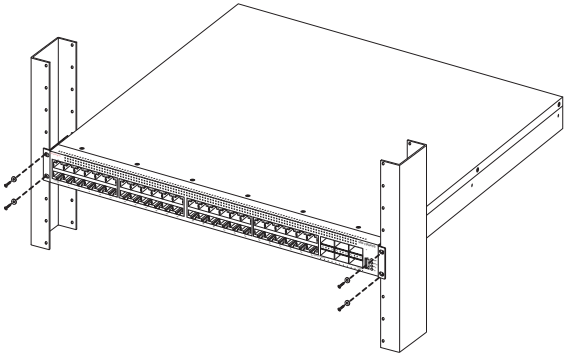
Mount the switch using the supplied bracket

**Caution:** Avaya strongly recommends using the mounting brackets with a shelf. Using the brackets without a shelf under the chassis may cause damage to a rack, especially in an environment with strong vibrations such as in an earthquake prone area. When you mount the device in a rack, do not stack units directly on top of one another.

1. Disconnect the power cord from the switch.
2. Attach a bracket to each side of the switch as illustrated below.



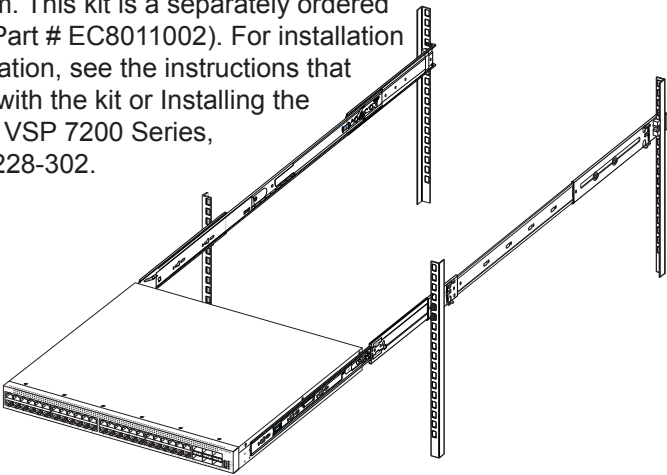
3. Slide the switch onto a shelf in the rack as illustrated.



4. Insert and tighten the rack-mount screws.

Mount the switch using the optional slide rack mount kit

Use the VSP 8000 Universal Slide Rack Mount Kit to install your switch in equipment racks with a depth from 300mm to 900mm. This kit is a separately ordered item (Part # EC8011002). For installation information, see the instructions that come with the kit or Installing the Avaya VSP 7200 Series, NN47228-302.



7 Power Up

Check the front-panel LED as the device powers on to be sure the PWR LED is green. If it's not, make sure the power cord is plugged in correctly. The switch will power on immediately when it is connected to a suitable power source.

8 Install SFP, SFP+, and QSFP+ transceivers

**Note:** Before installing, ensure the switch is up and running, and operating normally. Verify that the transceivers and network cabling support your network configuration. For a complete list of supported transceivers, see Installing Transceivers and Optical Components, NN47227-301.

1. Remove the transceiver from the protective packaging.
2. Verify that the transceiver is the correct model for the network configuration.
3. Grasp the transceiver between your thumb and forefinger.
4. Insert the transceiver into the proper SFP/SFP+ slot on the switch as illustrated. Apply a light pressure to the transceiver until it clicks and locks into position in the slot.

Commissioning the VSP 7200

1 Connect the console cable to the VSP 7200

Console port cabling specifications:

Ensure to use Category 5E or higher specification cabling for 1 Gbps/1000 Mbps operation. RJ-45 console port cables are as follows:

PEC Code	Name	Short Description
AL2011022-E6	Avaya RJ-45/DB-9 CONSOLE CABLE	The switch has an RJ-45 female connector, so a serial cable with RJ-45 connectors, or a serial cable with a DB-9 female connector on one end and an RJ-45 on the other is appropriate. The maximum length for the console port cable is 25 feet (8.3 meters).
AL2011020-E6	AVAYA RED DB-9 FEMALE TO RJ-45 ADAPTOR	Converts DB-9 MALE to RJ-45 serial port. The adaptor can be used for PC or device with DB-9 MALE console port. Also, can be used with Category 5 RJ-45 straight cable to provide console connection.
AL2011021-E6	AVAYA BLUE DB-9 MALE TO RJ-45 ADAPTOR	Converts DB-9 FEMALE to RJ-45 serial port. This adaptor can be used to convert DB-9 of AL2011013-E6 console cable to RJ-45.

On your switch, the console port is the RJ-45 port outlined with a blue border on the front of your switch. Use an RJ-45 to DB-9 cable to connect the switch console port to your management terminal. Use adaptors to provide different connection options. The maximum length of a console cable is 25 feet (8.3 meters). The following tables describe the RJ-45 and DB-9 console port pin-out information. You can use the pin-out information to verify or create a console cable for use with your maintenance terminal.

DB-9 Console port pin assignments

Connector	Pin Number	Signal
	1	Carrier detect (not used)
	2	Transmit Data (TXD)
	3	Receive Data (RXD)
	4	Data terminal ready (not used)
	5	Signal ground (GND)
	6	Not used
	7	Request to send (not used)
	8	Not used
	9	Ring indicator (not used)

RJ-45 Console port pin assignments

Connector	Pin Number	Signal
	1	Ready to send (RTS) — optional
	2	Data terminal ready (DTR) — optional, can swap or link with pin
	3	Transmit data (TXD) — mandatory
	4	Carrier detect (DCD) — optional
	5	Ground (GND) — mandatory
	6	Receive data (RXD) — mandatory
	7	Data set ready (DSR) — optional
	8	Clear to send (CTS) — optional, can swap or link with pin 1.

1. Connect the console cable from the terminal to the console port of the switch to allow initial configuration. Any terminal or PC with the appropriate terminal emulator can be used as the management station.
2. Set the terminal protocol on the terminal or terminal emulation program to VT100 or VT100/ANSI.
3. Connect to the switch using the terminal or terminal emulation application.

Terminal emulation settings

Property	Value
Baud Rate	9600 bps
Data Bits	8
Stop Bits	1
Parity	None
Flow Control	None

2 Configure a management interface

Use one of the following steps to configure either an in-band or an out-of-band management interface.

Step 2a: Configure an in-band management IP interface and VLAN

**Note:** The following procedure uses VLAN 20 and IP address 10.139.43.17 as an example.

1. Create a VLAN:  
VSP-switch:1(config)# vlan create 20 type port-mstprstp 0
2. Add VLAN members:  
VSP-switch:1(config)# vlan members add 20 1/1-1/4

3. Activate ports:  
VSP-switch:1(config)# interface gigabitEthernet1/1-1/4  
VSP-switch:1(config-if)# no shutdown
4. Configure an IP interface for the VLAN:  
VSP-switch:1(config)# interface vlan 20  
VSP-switch:1(config)# ip address 10.139.43.17 255.255.255.0
5. Add a static route:  
VSP-switch:1(config)# ip route 10.0.0.0 255.0.0.0 10.139.43.1 weight 1

Step 2b: Configure an out-of-band management IP interface and VLAN

1. Configure the management interface:  
VSP-switch:1(config)# interface mgmtEthernet mgmt  
VSP-switch:1(config-if)# ip address 10.139.43.17/24
2. Configure static routes:  
VSP-switch:1(config)# router vrf mgmtrouter  
VSP-switch:1(config-vrf)# ip route 10.0.0.0 255.0.0.0 10.139.43.1 weight 1

Shutting down the VSP 7200

**Caution:** Before you unplug the power cord, always perform the following shutdown procedure. This procedure flushes any pending data to ensure data integrity.

1. Enter the Privileged EXEC command mode:  
enable
2. Shutdown the VSP 7200.  
sys shutdown
3. Before you unplug the power cord, wait until you see the following message:  
System Halted, OK to turn off power.

For more information on this and other administration procedures, see *Administering*, NN47227-600.

Recommended reading

For more information, go to <http://support.avaya.com> and download the following documents:

- Locating Software and Release Notes, NN47228-100
- Regulatory Reference for VSP 7200 Series, NN47228-101
- Installing the Avaya Virtual Services Platform 7200 Series, NN47228-302
- Documentation Reference, NN47227-100
- Quick Start Configuration, NN47227-102
- Release Notes, NN47227-401



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