

x530DP Series

Stackable Multi-Gigabit Layer 3 Ethernet Switches
AlliedWare Plus™

x530DP-28GHXm

x530DP-52GHXm



Quick Installation Guide



613-003073 Rev. A

Introduction

This Quick Installation Guide contains a short version of the installation instructions for the x530DP Series of stackable multi-Gigabit Ethernet switches. For more instructions, refer to the *x530DP Series Installation Guide for Standalone Switches* and *x530DP Series Installation Guide for Virtual Chassis Stacking* on the Allied Telesis web site at www.alliedtelesis.com/us/en/services-support. This guide contains the following sections:

- ❑ “Front Panels” next
- ❑ “Power Supplies and Power Budgets for PoE Devices” on page 4
- ❑ “FAN10 Module” on page 5
- ❑ “VCStack™ Feature” on page 5
- ❑ “Beginning the Installation” on page 6
- ❑ “Installing the Switch” on page 10
- ❑ “Ports” on page 17
- ❑ “Powering On the Switch” on page 19
- ❑ “LEDs” on page 21
- ❑ “Starting a Local Management Session” on page 23
- ❑ “Disabling the VCStack Feature” on page 24
- ❑ “Troubleshooting” on page 25

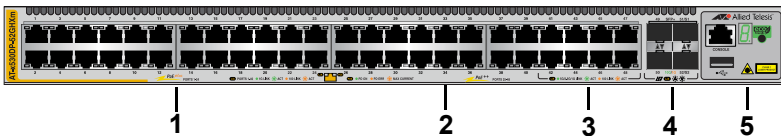
Front Panels

The front panels of the x530DP Switches are shown here.

x530DP-28GHXm



x530DP-52GHXm



1	10/100/1000Mbps Ethernet copper ports with PoE+
2	10/100/1000Mbps Ethernet copper ports with PoE++
3	100M/1/2.5/5Gbps Ethernet copper ports with PoE++
4	1/10Gbps SFP+ transceiver ports
5	Management panel

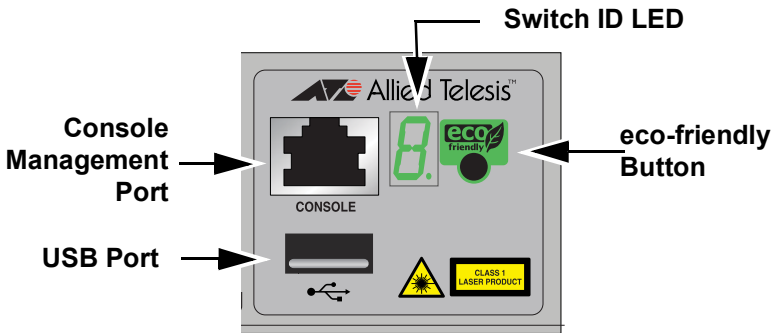
This table lists the Ethernet copper ports on the switches.

Switch	10/100/1000M PoE+ Copper Ports	10/100/1000M PoE++ Copper Ports	100/1G/2.5G/5G PoE++ Copper Ports
x530DP-28GHXm	-	1 to 20	21 to 24
x530DP-52GHXm	1 to 24	25 to 40	41 to 48

The switches also have four 1/10Gbps SFP+ transceiver ports.

Switch	SFP+ Ports
x530DP-28GHXm	25 to 28
x530DP-52GHXm	49 to 52

The management panel is shown here.



Power Supplies and Power Budgets for PoE Devices

The power supplies for the switches are purchased separately. Here are the power supplies:

- ❑ PWR150 (AC)
- ❑ PWR250 (AC)
- ❑ PWR250-80 (DC)
- ❑ PWR800 (AC)
- ❑ PWR1200 (AC)

The power supplies are installed in the two expansion slots in the rear panel. The switches can have one or two power supplies. A single power supply can provide full system power. Two power supplies provide redundant system power.

The PWR800 and PWR1200 Power Supplies provide both system power and power for PoE devices on the Ethernet copper ports, Their PoE budgets are listed here. PoE budgets are the maximum amounts of power that power supplies can provide to devices on the Ethernet copper ports.

PoE Power Supply	Number of Power Supplies in Switch	Switch PoE Budget
PWR800	1	370W
	2	740W
PWR1200	1	740W
	2	1480W

The x530DP Switches with PWR800 or PWR1200 Power Supplies support the following PoE devices:

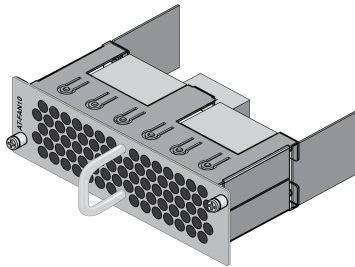
- ❑ All copper ports on the switches support PoE+ IEEE 802.3at Classes 0 to 4 devices (maximum 30.0W at the switch ports).
- ❑ All copper ports on the x530DP-28GHXm Switch and ports 25 to 48 on the x530DP-52GHXm Switch also support PoE++ IEEE 802.3bt Classes 5 and 6 devices (maximum 60.0W at the switch ports).

Note: The PWR150, PWR250, and PWR250-80 Power Supplies do not support PoE.

Note: The maximum number of powered devices that the switches can support simultaneously will depend on the power requirements of the devices.

FAN10 Module

The FAN10 module is the cooling unit of the switch.



Here are the guidelines:

- The module comes pre-installed in the rear panel of the switch.
- The airflow direction in the switch is from front to back.
- The fan module is field-replaceable and hot-swappable. You do not have to power off the switch to replace it.
- The switch automatically adjusts the fan speeds according to the ambient temperature.

VCStack™ Feature

The VCStack feature is used to manage up to eight x530DP Switches as a single virtual unit. The switches synchronize their actions so that switching operations (such as spanning tree protocols, virtual LANs, and static port trunks) span across all the ports and switches. Two advantages of stacks are:

- You can manage multiple units simultaneously, which can simplify network management.

- You can add redundancy to your network topology by distributing functions across multiple switches. For instance, static port trunks on standalone switches have to consist of ports from the same switch. In contrast, static port trunks in a stack can have ports from different switches.

Note: For instructions, refer to the *x530DP Series Installation Guide for Virtual Chassis Stacking*.

Beginning the Installation

Reviewing Safety Precautions

Review the following safety precautions before installing the product.

The ⚡ symbol indicates that a translation of the safety statement is available in the PDF document “**Translated Safety Statements**” on the Allied Telesis website at www.alliedtelesis.com/us/en/documents/translated-safety-statements.



Warning: Class 1 Laser product. ⚡ L1



Warning: Do not stare into the laser beam. ⚡ L2



Warning: Power cord is used as a disconnection device. To de-energize equipment, disconnect the power cord.
⚡ E3



Warning: To prevent electric shock, do not remove the cover. No user-serviceable parts inside. This unit contains hazardous voltages and should only be opened by a trained and qualified technician. To avoid the possibility of electric shock, disconnect electric power to the product before connecting or disconnecting the cables. ⚡ E1



Warning: Class I Equipment. This equipment must be earthed. The power plug must be connected to a properly wired earth ground socket outlet. An improperly wired socket outlet could place hazardous voltages on accessible metal parts. ⚡ E4



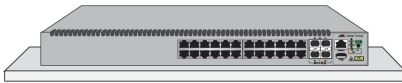
Warning: The device is heavy. Always ask for assistance before moving or lifting it to avoid injuring yourself or damaging the equipment. ⚡ E122



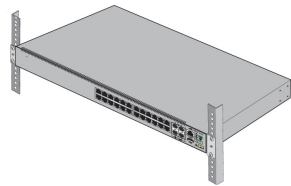
Warning: To reduce the risk of electric shock, the PoE ports on this product must not connect to cabling that is routed outside the building where this device is located. ⚡ E40

Installation Options

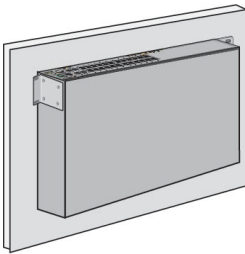
This figure illustrates the installation options.



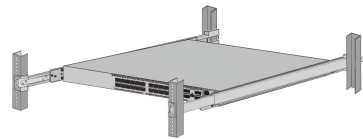
Table



**19-inch equipment
rack**



Wall



**RKMT-SL01 Sliding Rack in
a 19-inch equipment rack**

Unpacking the Switch

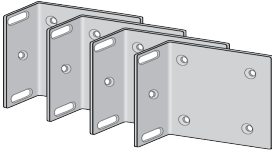
Here are the items that come with the switch.



One 2m (6.6 ft) local management cable with RJ-45 (8P8C) and DB-9 (D-sub 9-pin) connectors



Seven square bumper feet



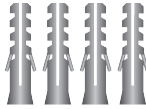
Four wall/equipment rack brackets



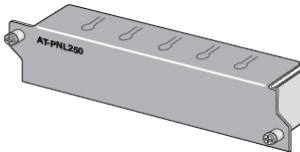
Sixteen 3x6mm screws for attaching the wall/equipment rack brackets to the switch



Four 4x32.3mm screws for wood or concrete walls



Four 6x4x29.6mm wall anchors



One PNL250 Blank Panel

Choosing a Site for the Switch

Review these site recommendations and requirements.

- Before installing the switch in an equipment rack, check that the rack is safely secured so that it will not tip over. Devices in a rack should be installed starting at the bottom of the rack, with the heavier devices near the bottom.

- ❑ Before installing the switch on a table, verify that the table is level and stable.
- ❑ Before installing the switch on a wall, verify that the wall's material is strong enough to hold the switch's weight. You should position the device so that it can be screwed into the wall's framing timber or equivalent structural element.
- ❑ The power outlet should be located near the switch and be easily accessible.
- ❑ The site should allow for easy access to the ports on the front of the switch so that you can easily connect and disconnect cables, and view the port LEDs.
- ❑ The site should allow for adequate air flow around the unit and through the cooling vents on the front and rear panels. (The ventilation direction is from front to back.)
- ❑ Do not place objects on top of the switch.
- ❑ The site should not expose the switch to moisture or water.
- ❑ The site should be a dust-free environment.
- ❑ The site should use dedicated power circuits or power conditioners to supply reliable electrical power to the network devices.
- ❑ Do not install the switch in a wiring or utility box without adequate airflow.



Warning: Switches should not be stacked on a table or desktop. They could present a physical safety hazard if you need to move or replace switches. *ES* E91

Ventilation Direction in the Switches

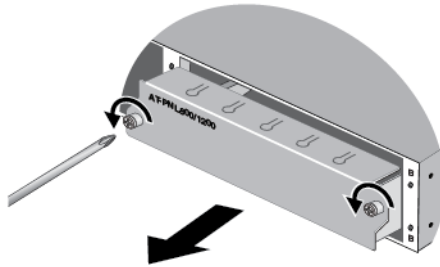
The direction of ventilation in the switches is from front to back.

Installing the Switch

Installing Power Supplies

To install power supplies, perform the following procedure:

1. Place the switch on a level, secure table.
2. If you are installing the PWR150, PWR250, or PWR250-80 Power Supply, remove the PNL800/1200 Blank Panel from slot B by loosening the two captive screws. The panel is not compatible with those power supplies.



3. Unpack the new power supply from its shipping container.



Caution: The device is heavy. Use both hands to lift it. You might injure yourself or damage the device if you drop it. ⚡ E94



Caution: The device can be damaged by electrostatic discharge (ESD). Be sure to follow standard ESD protections procedures, such as wearing a wrist or foot strap, when installing the device. ⚡ E106

4. Check the shipping container for these accessory items.

Power Supply	One Power Cord Retaining Clip	One Power Cord
PWR150	Yes	Yes
PWR250	Yes	Yes
PWR250-80	No	No
PWR800	Yes	Yes
PWR1200	No	Yes

**Power Cord
Retaining Clip**

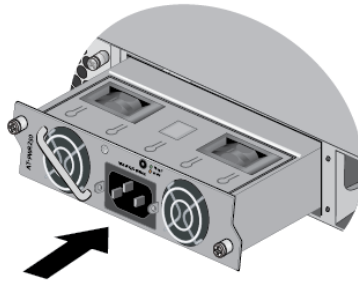


Power Cord



Note: The power cord for the PWR1200 Power Supply for North America has a 20 Amp, 125 V NEMA 5-20P plug. It requires an NEMA 5-20R receptacle.

5. Slide the new power supply into an expansion slot. Allied Telesis recommends installing the first power supply in slot A.



Here are the guidelines:

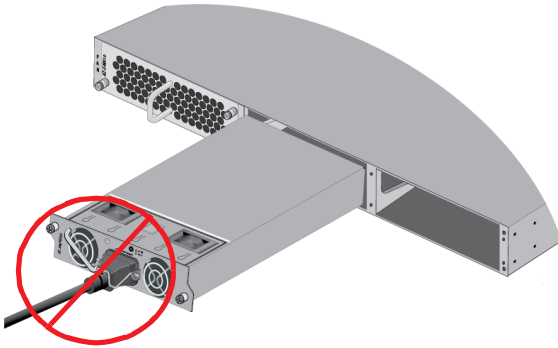
- ❑ The handle on the power supply should be on the left as you install the module in the switch.
- ❑ When installed, the PWR1200 Power Supply extends 5.6 cm (2.2 in.) from the back panel of the chassis.
- ❑ Power supplies are field-replaceable and hot-swappable.



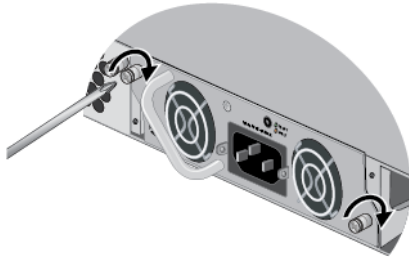
Caution: Do not use excessive force when seating the module. It may damage the system or the module. If the module resists seating, remove it from the system, realign it, and try again. E47



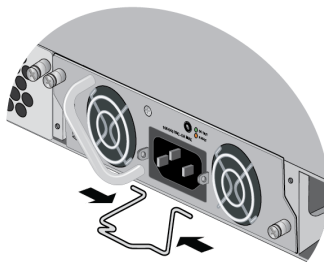
Caution: Do not connect the power cord before installing the power supply. Installing a power supply while it is powered on might damage the switch.



6. Tighten the two captive screws with a cross-head screwdriver to secure the power supply to the switch.



7. If you installed the PWR150, PWR250, PWR250-80, or PWR800 Power Supply, install the power cord retaining clip on the AC plug. Press the sides of the clip inward and insert the two ends into the holes on the AC socket.



8. If you are installing only one power supply and slot B is not covered, install a blank panel over the slot. Use the PNL800/1200 Blank Panel if the switch has one PWR800 or PWR1200 Power Supply. Use the PNL250 Blank Panel if the switch has one PWR150, PWR250, or PWR250-80 Power Supply.

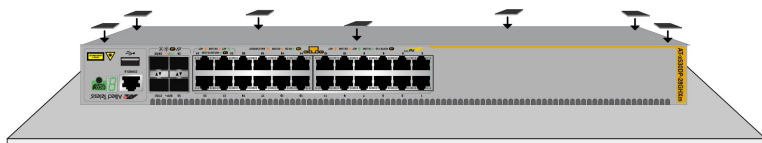


9. To install a second power supply, do the following:
 - If slot B is covered with a blank panel, remove the panel.
 - Repeat this procedure, starting with step 3.

Installing the Switch on a Desk or Table

To install the switch on a desk or table, perform the following procedure:

1. Place the switch upside down on a table.
2. Affix the seven bumper feet to the square indentations on the bottom panel of the switch



3. Turn the switch over.
4. Go to “Ports” on page 17.

Installing the Switch in an Equipment Rack

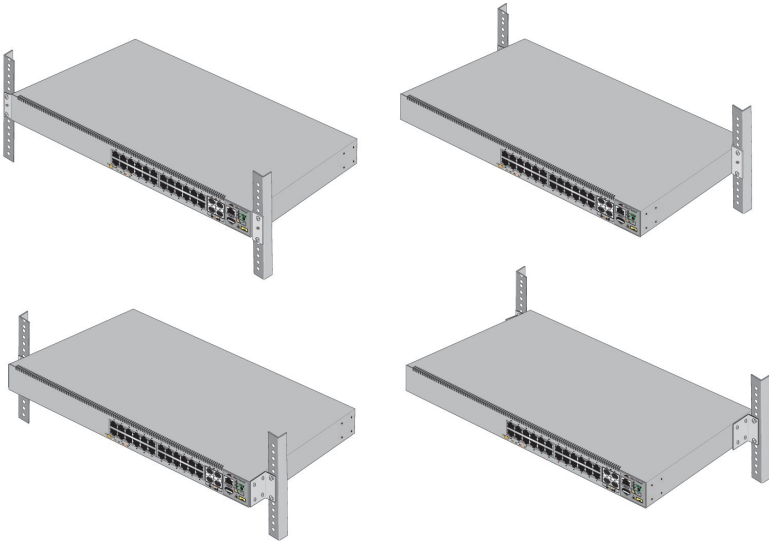
The following items are required to install the switch in an equipment rack:

- Two equipment rack brackets (included with the switch)
- Eight M3x6mm bracket screws (included with the switch)
- Cross-head screwdriver (not provided)
- Four standard equipment rack screws (not provided)

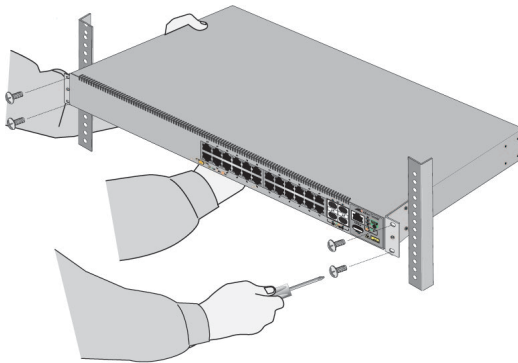
To install the switch, perform the following procedure:

1. Place the switch on a table.

2. If the bumper feet are attached to the bottom of the switch, remove them using a flat-head screwdriver.
3. Attach two brackets to the sides of the switch with eight bracket screws included with the unit. The following figures illustrate the four possible positions of the brackets on the switch for a standard 19-inch equipment rack.



4. Have another person hold the switch in the equipment rack while you secure it using four standard equipment rack screws (not provided).



5. Go to “Ports” on page 17.

Installing the Switch on a Wall

You can install the switch on a wall with the front panel facing up, left, or right. Do not install the switch with the front panel facing down.

Here are the tools and material for installing the switch on a wall:

- ❑ Four wall/equipment rack brackets and sixteen bracket screws (included with the switches)
- ❑ Four wood or concrete wall screws (included with the switch)
- ❑ Four wall anchors (included with the switch)
- ❑ Cross-head screwdriver (not provided)
- ❑ Flat-head screwdriver (not provided)
- ❑ Stud finder for a wooden wall, capable of identifying the middle of wall studs and hot electrical wiring (not provided)
- ❑ Drill and 1/4-inch carbide drill bit for a concrete wall (not provided)



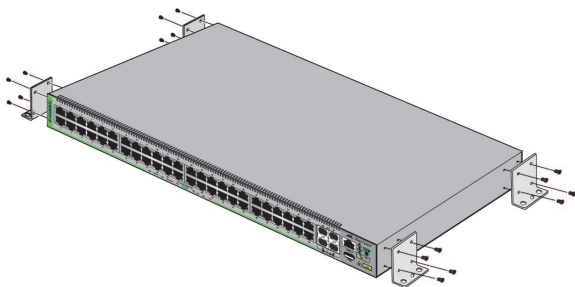
Warning: The device should be installed on the wall by a qualified building contractor. Serious injury to yourself or others or damage to the equipment may result if it is not properly fastened to the wall. ⚡ E105



Caution: The supplied screws and anchors might not be suitable for all walls. A qualified building contractor should determine the hardware requirements of your wall prior to installing the switch. ⚡ E88

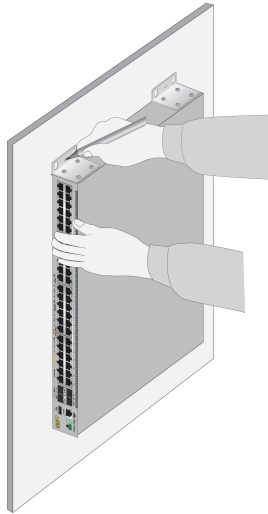
To install the switch on a wall, perform the following procedure:

1. Place the switch on a table.
2. If the bumper feet are attached to the bottom of the switch, remove them using a flat-head screwdriver.
3. Attach the four brackets to the switch with sixteen screws.



Note: If the wall material requires pre-drilled holes, perform steps 4 to 8. Otherwise, go to step 9.

4. Have another person hold the switch on the wall at the selected location for the device while you use a pencil or pen to mark the wall with the locations of the screw holes in the brackets.



5. Place the switch on a table.
6. Use the stud finder to check for hot electrical wires at the locations of the screw holes.



Warning: Do not install the switch on a wall near hot electrical wires.

7. If necessary, use an appropriate drill to drill the holes. Refer to “Unpacking the Switch” on page 8 for the dimensions of the supplied screws and anchors.
8. If the wall material requires anchors, insert them into the screw holes.
9. Have another person hold the switch at the selected wall location while you secure it to the wall with appropriate screws.
10. Go to “Ports” next.

Ports

Ethernet Copper Cable Specifications

Here are the minimum cable requirements for the Ethernet copper ports.

- ❑ 10/100Mbps ports: Standard TIA/EIA 568-B-compliant Category 3 unshielded cabling.
- ❑ 1000Mbps ports: Standard TIA/EIA 568-A-compliant Category 5 or TIA/EIA 568-B-compliant Enhanced Category 5 (Cat 5e) unshielded cabling.
- ❑ 1/2.5/5Gbps ports: Standard TIA/EIA 568-A-compliant Category 5 or TIA/EIA 568-B-compliant Enhanced Category 5 (Cat 5e) unshielded cabling.

Cabling Ethernet Copper Ports

Observe the following guidelines when connecting Ethernet copper cables to the switch ports:

- ❑ The connectors on the cables should fit snugly into the ports, and the tabs should lock the connectors into place.
- ❑ The default speed setting for the ports is Auto-Negotiation. This setting is appropriate for ports connected to network devices that also support Auto-Negotiation.
- ❑ The ports must be set to Auto-Negotiation, the default setting, to operate at 1000Mbps or higher speeds.
- ❑ The ports support half- and full-duplex at 10Mbps and 100Mbps.
- ❑ The ports support only full-duplex at 1000Mbps and higher speeds.
- ❑ Do not attach cables to ports of static or LACP port trunks until after you configure the trunks on the switch. Otherwise, the ports will form network loops that can adversely affect network performance.
- ❑ PoE is enabled by default on the ports on the switches.



Caution: Do not connect or disconnect copper cables from PoE++ devices (Class 5, 40W or higher) when the switch is powered on. It might damage the switch. Before cabling PoE++ devices, do one of the following:

- Power off the switch, or:
- Disable PoE on the ports with the NO POWER-INLINE ENABLE command. After cabling the ports, activate it again with the POWER-INLINE ENABLE command.

Installing SFP+ Transceivers

Here are general installation guidelines:

- You can install SFP+ transceivers while the switch is powered on.
- For a list of supported transceivers, refer to the product's data sheet on the Allied Telesis web site at **www.alliedtelesis.com**.
- The operational specifications and fiber optic cable requirements are included with the transceivers.
- Install the transceivers before connecting their fiber optic cables.
- Fiber optic transceivers are dust sensitive. Always keep the dust cover in the optical ports when a fiber optic cable is not installed.
- Unnecessary removal and insertion of transceivers can lead to premature failures.

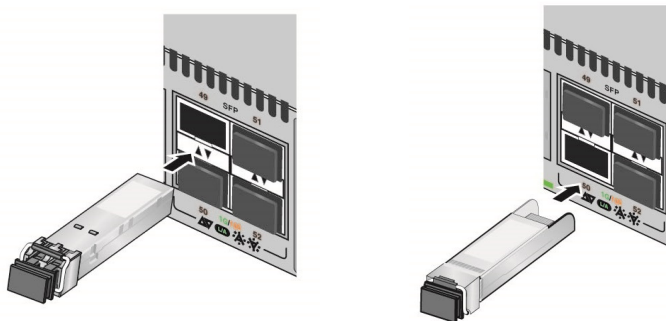


Warning: Transceivers can be damaged by static electricity. Be sure to observe all standard electrostatic discharge (ESD) precautions, such as wearing an antistatic wrist strap, to avoid damaging the devices. *ES*
E86

Note: Do not cable the SFP+ S1 and S2 ports yet. To use the ports as regular Ethernet SFP+ ports, you have to disable the VCStack feature. For instructions, refer to “Disabling the VCStack Feature” on page 24 or the *x530DP Series Installation Guide for Standalone Switches*. To use the ports as stacking ports for VCStack, refer to the *x530DP Series Installation Guide for Virtual Chassis Stacking*.

To install SFP+ transceivers, perform the following procedure:

1. To install a transceiver in a top port, position it with the Allied Telesis label facing up. To install it in a bottom port, position it with the label facing down.



2. Slide the transceiver into the port until it clicks into place.
To attach the fiber optic cable to the transceiver, continue with the next step. Otherwise, repeat steps 1 and 2 to install the remaining transceivers in the switch.
3. Remove the dust cover from the transceiver.
4. Connect the fiber optic cable to the transceiver. The connector should fit snugly into the port, and the tab should lock the connector into place.
5. Repeat this procedure to install additional transceivers.
6. Go to “Powering On the Switch” next.

Powering On the Switch

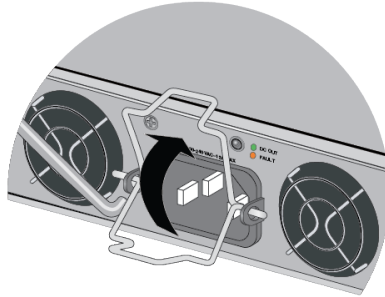


Warning: Power cord is used as a disconnection device.
To de-energize equipment, disconnect the power cord.
⚡ E3

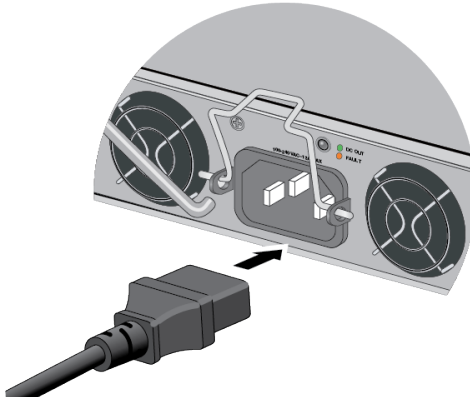
Note: For instructions on how to wire the DC PWR250-80 Power Supply, refer to the *x530DP Series Installation Guide for Standalone Switches* or *x530DP Series Installation Guide for Virtual Chassis Stacking*

To power on a switch, perform the following procedure:

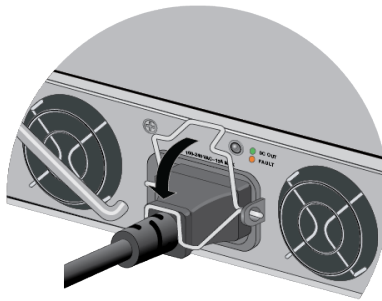
1. Raise the retaining clip. (The PWR1200 Power Supply does not have a retaining clip.)



2. Connect the AC power cord to the connector on the power supply.



3. Lower the power cord retaining clips to secure the cord to the switch.

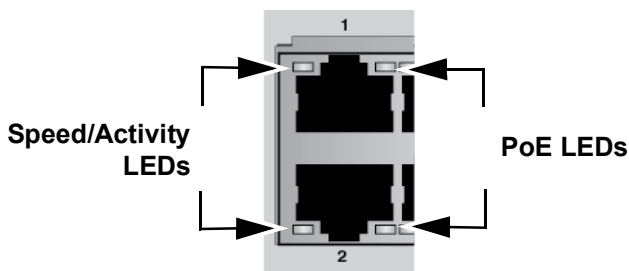


4. Connect the power cord to an AC power source.
5. If the switch has two power supplies, repeat this procedure to power on the second power supply.
6. Wait two minutes for the switch to initialize its management software.
7. Go to “LEDs” next or “Starting a Local Management Session” on page 23.

LEDs

Ethernet Copper Port LEDs

The LEDs for the Ethernet copper ports are described here.

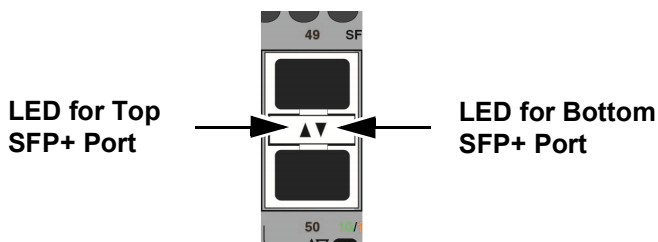


Link/Activity LEDs	
Solid Green	<p>The copper port has established a link to another network device, as follows:</p> <ul style="list-style-type: none"> - Ports 1 to 20 on the x530DP-28GHXm Switch Ports 1 to 40 on the x530DP-52GHXm Switch Link is 1Gbps. - Ports 21 to 24 on the x530DP-28GHXm Switch Ports 41 to 48 on the x530DP-52GHXm Switch Link is 1Gbps, 2.5Gbps, or 5Gbps.
Flashing Green	The port is transmitting or receiving packets.

Solid Amber	<p>The port has established a link to another network device, as follows:</p> <ul style="list-style-type: none"> - Ports 1 to 20 on the x530DP-28GHXm Switch Ports 1 to 40 on the x530DP-52GHXm Switch: Link is 10Mbps or 100Mbps - Ports 21 to 24 on the x530DP-28GHXm Switch Ports 41 to 48 on the x530DP-52GHXm Switch Link is 100Mbps
Flashing Amber	The port is transmitting or receiving packets.
Off	<p>Possible causes of this state are listed here:</p> <ul style="list-style-type: none"> - The port has not established a link with another network device. - The LEDs are turned off. To turn on the LEDs, use the eco-friendly button.
PoE LEDs	
Solid Green	The port is delivering power to a powered device.
Solid Amber	The switch has shut down PoE on the port because of a fault condition.
Flashing Amber	The switch has detected a powered device on the port but cannot supply power to it because it is already providing its maximum power to other devices. Refer to “Power Supplies and Power Budgets for PoE Devices” on page 4.
Off	<p>This LED state can result from the following conditions:</p> <ul style="list-style-type: none"> - The port is not connected to a powered device or the device is powered off. - The port is disabled in the management software. - PoE is disabled on the port. - The LEDs are turned off. To turn on the LEDs, use the eco-friendly button.

SFP+ Port LEDs

The SFP+ port LEDs are described here.



Solid green	The port has established a 10Gbps link to a network device.
Flashing green	The port is transmitting or receiving packets at 10Gbps.
Solid amber	The port has established a 1Gbps link to a network device.
Flashing amber	The port is transmitting or receiving packets at 1Gbps.
Off	Possible causes of this state are listed here: <ul style="list-style-type: none">- The SFP+ transceiver port is empty.- The SFP+ transceiver has not established a link with another network device.- A non-supported module is installed.- The LEDs are turned off. To turn on the LEDs, use the eco-friendly button.

Starting a Local Management Session

This procedure explains how to start a local management session on the switch. You perform local management sessions by connecting your computer to the Console port on the front panel. The switch does not need an IP address for local management sessions.

Local management sessions require a management cable. If your workstation has a DB-9 connector, you can use the cable that comes with the switch. It is two meters long, with an RJ-45 connector that connects to the Console port and a DB-9 connector that connects to your computer. See “Unpacking the Switch” on page 8.

If your computer does not have a DB-9 connector, such as laptop computer, Allied Telesis offers the VT-Kit3 management cable for local management sessions. It has a USB-A male connector that connects to a USB port on your computer. The VT-Kit3 management cable and software are sold separately.

To start a local management session with the management cable that comes with the switch, perform the following procedure:

1. Connect the RJ-45 end of the management card included with the switch to the Console RS-232 port on the management panel.
2. Connect the other end of the cable to an RS-232 port on a terminal or personal computer with a terminal emulation program.
3. Configure the VT-100 terminal or terminal emulation program as follows:
 - Default baud rate: 9600 bps (The baud rates of the Console port are 9600, 19200, 38400, 57600, and 115200 bps.)
 - Data bits: 8
 - Parity: None
 - Stop bits: 1
 - Flow controller: None
4. Press Enter. You are prompted for a user name and password.
5. Enter the default user name and password. They are “manager” and “friend” (without quotes), respectively. The user name and password are case sensitive. The local management session starts when the User Exec mode prompt is displayed: `awp1us>`

For more information, refer to the *Software Reference for x530DP Series Switches, AlliedWare Plus Operating System* from www.alliedtelesis.com/us/en/services-support.

Disabling the VCStack Feature

The SFP+ S1 and S2 ports function either as regular Ethernet SFP+ ports or as stacking ports for the VCStack feature. At their default settings, the SFP+ S1 and S2 ports are VCStack stacking ports. To use them as regular Ethernet SFP+ ports, you have to disable the VCStack feature. For instructions, perform the following procedure:

1. Start a local management session. Refer to “Starting a Local Management Session” on page 23.
2. Enter the commands in bold:

```
awplus> enable
awplus# configure terminal
Enter configuration commands, one per line. End
with CNTL/Z.
awplus(config)# no stack 1 enable
```

3. At the confirmation prompt, type **Y** for yes to disable VCStack,
4. Enter the commands in bold:

```
awplus(config)# exit
awplus# write
Building configuration ...
{OK}
awplus# reboot
```

5. Wait two minutes for the switch to start the management software. The switch is now in standalone mode. The SFP+ S1 and S2 ports are now regular Ethernet ports.
6. You can now cable the SFP+ S1 and S2 transceiver ports.

Troubleshooting

Problem: All port and system LEDs are off, and the fans are stopped.

Solutions: The unit is not receiving power. Try the following:

- Verify that the power cord is securely connected to the power source and the AC connector on the back panel of the switch.
- Verify that the power outlet has power by connecting another device to it.

Problem: All of the port LEDs are off even though the ports are connected to active network devices.

Solution: The switch might be operating in the low power mode. To toggle on the LEDs, press the eco-friendly button on the front panel of the switch. You can also toggle the LEDs off and on with the ECOFRIENDLY LED and NO ECOFRIENDLY LED commands in the command line interface.

Problem: A LINK/ACT LED is off for an Ethernet copper port that is connected to an active network device.

Solutions: The port is unable to establish a link to a network device. Try the following:

- Verify that the network device connected to the Ethernet copper port is powered on and is operating properly.

- ❑ Verify that the port is connected to the correct Ethernet copper cable.

Problem: The LINK/ACT LED is off for an SFP+ transceiver that is connected to an active network device.

Solutions: The fiber optic port on the transceiver is unable to establish a link to a network device. Try the following:

- ❑ Verify that the fiber optic cable is securely connected to the port on the transceiver and to the port on the remote network device.
- ❑ Check that the transceiver is fully inserted in the slot.

Problem: A port on the switch is not providing power to a PoE device.

Solutions: Try the following:

- ❑ Check the port's PoE LED. Refer to "Ethernet Copper Port LEDs" on page 21. If the LED is flashing amber, the switch cannot support additional powered devices because it is already providing its maximum power to other devices. The PoE budgets are listed in "Power Supplies and Power Budgets for PoE Devices" on page 4.
- ❑ For powered devices of Classes 0 to 4 (Types 1 to 3 up to 25.5W), review their documentation to confirm that they support Mode A (MDI-x) of the IEEE 802.3at standard and that they use pins 1, 2, 3, and 6 on the RJ-45 port to receive power.
- ❑ For powered devices of Classes 5 and 6 (Type 3 up to 60W), review their documentation to confirm they support Mode A (MDI-x) and Mode B (MDI-x, MDI).

Copyright © 2022 Allied Telesis, Inc.

All rights reserved. No part of this publication may be reproduced without prior written permission from Allied Telesis, Inc.

Allied Telesis, VCStack, and the Allied Telesis logo are trademarks of Allied Telesis, Incorporated. All other product names, company names, logos or other designations mentioned herein are trademarks or registered trademarks of their respective owners.

Allied Telesis, Inc. reserves the right to make changes in specifications and other information contained in this document without prior written notice. The information provided herein is subject to change without notice. In no event shall Allied Telesis, Inc. be liable for any incidental, special, indirect, or consequential damages whatsoever, including but not limited to lost profits, arising out of or related to this manual or the information contained herein, even if Allied Telesis, Inc. has been advised of, known, or should have known, the possibility of such damages.