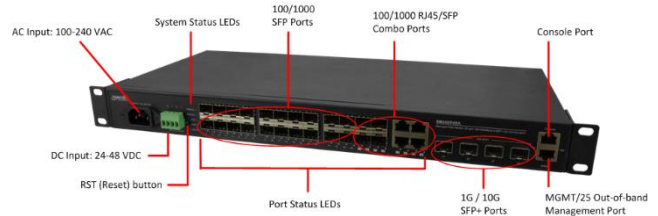


SM24DP4XA

Managed Gigabit Ethernet Fiber Switch

Quick Start Guide



This switch is a next generation Layer 2 managed switch with 128Gbps switching capacity. It provides up to (24) dual speed fiber slots and (4) 10Gig aggregation ports, it’s an ideal switch for fiber aggregation applications.

See the Install Guide for important Safety Warnings and Cautions, Overview, Features/Benefits, Specs, Front & Back Panels, LEDs, RST (Reset) button, Installing & Mounting the Switch, Installing SFPs, Connecting AC Power, Connecting DC Input, Connecting Devices, Cabling & Network Wiring Connection, Power Supply Specs, Initial Switch Config via Web & CLI, Troubleshooting, Regulatory & Compliance, & Service, Warranty & Tech Support.

Front Panel

The SM24DP4XA front panel provides the ports, LEDs, buttons, and power inputs as shown and described below.

Connectors: Provides one Console Port, one Management port, twenty 100/1000 SFP slots, four 100/1000 SFP/RJ-45 Combo ports, and four 1G/10G SFP+ slots.

Console port: one RJ-45 Console port to connect to a PC or terminal for Command Line Interface (CLI) command entry (e.g., a PC running Hyper Terminal, Tera Term, etc.).

MGMT port: Dedicated out-of-band Management Port. Provides one RJ-45 Console port to connect to a PC Ethernet port to run the Web UI.

AC Input: 100-240 VAC: Connects the Power Cord.

DC Input: Dual +24/+48 VDC or -24V/-48V VDC.

LEDs

The front panel LEDs provide status as shown and described below.

AC/DC Power LED: Indicates if the switch is powered up correctly.

SYS (System) Status LED : Indicates if the system is ready.

Port Status LEDs : Indicate the current status of each port.

ALM LED : Indicates if the system is operating normally.

LINK/ACT LEDs : Port Status LEDs indicate if copper port is enabled, linked, and connection speed.

RST (Reset) button

By pressing the front panel RST (Reset) button for certain period of time, you can:

Reset the Switch : To reboot and get the switch back to the previous configuration settings saved. Press the RST button for 2 ~ 7 seconds; the SYS LED will blink Green and the Port Status LED is Off.

Restore the Switch to Factory Defaults : To restore the original factory default settings back to the switch. Press the RST button for 7 ~ 12 seconds; the SYS LED will blink Green and the Port Status LED is On.

Note: You can determine which task is being performed by reading the LED behaviors while pressing the Reset button. Once the LED behaviors are correctly displayed, just release the button.

Grounding

The SM24DP4XA back panel provides the Ground Screw. **ATTENTION:** This case must be earth grounded. No DC input may be earth grounded. Use Isolated Power Supply.



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Mounting the Switch in a 19-inch Rack

1. Attach the mounting brackets to both sides of the chassis. Insert screws and tighten with a screwdriver to secure the brackets. **2.** Place the switch on a rack shelf in the rack. Push it in until the oval holes in the brackets align with the mounting holes in the rack posts. **3.** Attach the brackets to the posts. Insert and tighten screws.

Mounting the Switch on Desk or Shelf

1. Verify that the workbench is sturdy and reliably grounded. **2.** Attach the four adhesive rubber feet to the bottom of the switch.

Installing SFP Modules

You can install or remove a mini-GBIC SFP/SFP+ module from an SFP/SFP+ port without having to power off the switch. **Note:** The SFP ports should use UL Listed Optional Transceiver product, Rated 3.3Vdc, Laser Class 1. See the SFP manual for specific cautions, warnings, and instructions. See the Transition Networks [SFP page](#) for our full range of Optical Devices. **1.** Verify SFP orientation and insert the module into the SFP port. **2.** Press firmly to ensure that the module seats into the connector.

Connecting Network Devices

The switch is designed to be connected to 10, 100 or 1000Mbps network cards in PCs and servers, as well as to other switches and hubs. It may also be connected to remote devices using optional SFP transceivers.

Installing Twisted-Pair Devices

Each device requires an unshielded twisted-pair (UTP) cable with RJ-45 connectors at both ends. Use Category 5, 5e, or 6 cable for 1000BASE-T connections, Category 5 or better for 100BASE-TX connections.

Cabling Guidelines

The RJ-45 ports on the switch support automatic MDI/MDI-X, so you can use standard straight-thru twisted-pair cables to connect to any other network device (PCs, servers, switches, routers, or hubs).

Caution: Do not plug a phone jack connector into an RJ-45 port. This will damage the switch. Use only twisted-pair cables with RJ-45 connectors that conform to FCC standards.

Connecting to PCs, Servers, Hubs, and Switches

1. Attach one end of a twisted-pair cable segment to the device's RJ-45 connector. **2.** If the device is a network card and the switch is in the wiring closet, attach the other end of the cable segment to a modular wall outlet that is connected to the wiring closet. Otherwise, attach the other end to an available port on the switch. Make sure each twisted pair cable does not exceed 100 meters (328 ft.) in length. **Note:** Avoid using flow control on a port connected to a hub unless it is required to solve a problem. **3.** As each connection is made, the Link LED corresponding to each port lights green (1000 Mbps) or amber (100 Mbps) to indicate a valid connection.

Network Wiring Connections

The punch-down block is an integral part of many equipment racks. It is part of the patch panel. Instructions for making connections in the wiring closet with this type of equipment follows. **1.** Attach one end of a patch cable to an available port on the switch, and the other end to the patch panel. **2.** If not already in place, attach one end of a cable segment to the back of the patch panel where the punch-down block is located, and the other end to a modular wall outlet. **3.** Label the cables to simplify future troubleshooting.

AC/DC/DC Redundant Power

The three power inputs (AC/DC/DC) are redundant but in active/standby mode. There is failover between the three inputs but selecting primary and secondary is not supported. To select the primary and secondary inputs:

1. Between AC and DC : Both AC and DC will convert the input power to 12VDC output to the PCB; the design will compare the voltage of 12VDC output and select the higher voltage as the primary power. If the primary power fails, the secondary will take over.
2. Between two DC inputs: The DC input with higher voltage is the primary input, the other is the secondary input.

Selecting the priority between AC and DC is not supported, but you can select between two DC inputs by adjusting the DC output. See the Install Guide.

Power Connection: Warning: Connect the power supply to the switch first, and then connect the power supply to power. Otherwise catastrophic product failure may occur.

1. Verify that power is off to the DC circuit that you are going to attach to the switch PoE DC-input connector. This can be either of the two power supplies (AC-input or DC-input) or site source DC.
2. As an added precaution, place an appropriate safety flag and lockout device at the source power circuit breaker, or place a piece of adhesive tape over the circuit breaker handle to prevent accidental power restoration while you are working on the circuit.

Power Disconnection: To disconnect power from the switch after a successfully boot: **1.** Turn off power to the switch. **2.** Disconnect the cables.

Connecting the AC Power Cord

You can order one AC Power cord as a separate option. **1.** Connect the AC power cord to the AC power receptacle of switch. **2.** Connect the other end of the AC power cord to the AC power outlet. **3.** Check the **SYS** LED. If it is lit, the power connection is correct.

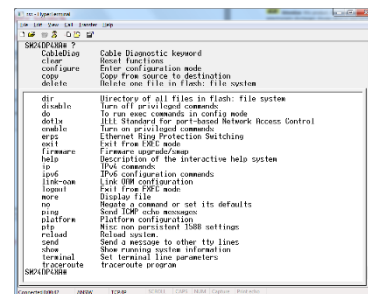
Connecting the DC Input(s)

Two DC Power Supply options are available (ordered separately): 25131 for 48VDC and 25079 for 24VDC, 76.8Watts. See the **Install Guide** for details. The SM24DP4XA DC input is dual +24/+48 VDC or -24V/-48V VDC. **1.** Insert the negative/positive DC wires into the + and - terminals, respectively. **2.** To keep the DC wires from pulling loose, use a small flat-blade screwdriver to tighten the wire-clamp screws on the front of the terminal block connector. **3.** Check the SYS LED. If it is ON, the power connection is correct.



Initial Switch Configuration via CLI

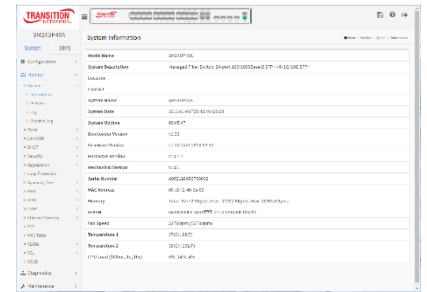
1. Use an RJ-45 cable to connect a terminal or PC/terminal emulator to the switch port to access the CLI. **2.** Attach the RJ-45 serial port on the switch front panel to the cable for Telnet/CLI configuration. **3.** Attach the other end of the DB-9 cable to a PC running Telnet or a terminal emulation program such as HyperTerminal or TeraTerm. **4.** After powering up the switch for the first time, you can perform the initial switch configuration using the CLI (Command Line Interface). For managing other switch features, see the *CLI Reference* for details.



Initial Switch Configuration via Web Browser

After powering up the switch for the first time, you can perform the initial switch configuration using a web browser. For managing other switch features, see the *Web User Guide*. To begin the initial configuration stage, reconfigure your PC's IP address and subnet mask to make sure the PC can communicate with the switch. After changing PC's IP address (for example, 192.168.1.250), you can access the Web UI of the switch using the switch's default IP address.

Note: The switch factory default IP address is 192.168.1.77 and the default Subnet Mask is 255.255.255.0.



1. Power up the PC that you will use for the initial configuration. Make sure the PC has the Ethernet RJ45 connector to be connected to the switch via standard Ethernet LAN cable.
2. Reconfigure the PC's IP address and Subnet Mask so that it can communicate with the switch.
3. Power up the switch to be initially configured and wait until it has finished its start-up processes.
4. Connect the PC to any port on the switch using a standard Ethernet cable, and check the port LED on the switch to make sure the link status of the PC is OK.
5. Run your Web browser on the PC; enter the factory default IP address to access the switch's Web interface. If your PC is configured correctly, the Login page displays.

Class I, Division 2 / classe I, division 2

Warning and Caution - Proper Installation and Operation (English)

These devices are open-type devices that are to be installed in an enclosure only accessible with the use of a tool, suitable for the environment. This equipment is suitable for use in Class I, Division 2, Groups A, B, C, and D or non-hazardous locations only. WARNING – EXPLOSION HAZARD. DO NOT DISCONNECT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS FREE OF IGNITIBLE CONCENTRATIONS.

Avertissement et mise en garde - Installation et fonctionnement corrects (français)

Ces périphériques sont des périphériques de type ouvert qui doivent être installés dans un enceinte uniquement accessible à l'aide d'un outil, adapté à l'environnement. Cet équipement peut être utilisé dans la classe I, division 2, groupes A, B, C, et D ou des emplacements non dangereux seulement. AVERTISSEMENT - RISQUE D'EXPLOSION. NE PAS SE DÉCONNECTER LORSQUE LE CIRCUIT EST VIVANT OU À MOINS QUE LA ZONE NE SOIT LIBRE DE CONCENTRATIONS IGNIFIABLES.

For More Information

Related manuals are: SM24DP4XA Install Guide 33769, Web User Guide 33770, and CLI Reference 33771.

For Transition Networks Drivers, Firmware, etc. go to the [Product Support](#) webpage (login required).

For Transition Networks Manuals, Brochures, Data Sheets, etc. go to the [Support Library](#) (no login required).

For SFP manuals see Transition Networks [SFP webpage](#).

Contact Us

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