LANTRONIX®

SISPM1040-xxxx-L3

(SISPM1040-3248-L3 & SISPM1040-3166-L3)

Quick Start Guide

The Lantronix SISPM1040-xxxx-L3 are next generation Industrial L3+ managed GbE switches. These affordable managed switches provide a reliable infrastructure for your business network.

Note: See the full Install Guide for important information: Product Description, Ordering Information, Related Manuals, Features & Specifications, Application Example, Pre-Installation, Safety, Unpacking, Package Contents, Front Panel, LED Descriptions, Reset Button, Back Panel, Installing the Switch, Mounting the Switch, Installing SFP/SFP+ Modules, Installing DAC Cables, Connecting PDs, Connecting Power Cords, Connecting DI/DO Relay Wires, DI/DO Use Case, Power Supply Info, Initial Switch Config, Troubleshooting, Compliance & Safety Information, Cautions, Warnings, & Electrical Safety Warnings.

Ordering Information:

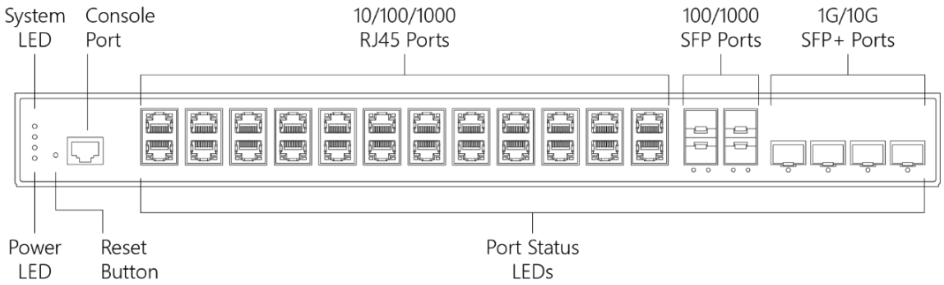
SISPM1040-3248-L3: Rack mountable hardened L3 switch with 136Gbps switching capacity, twenty-four 10/100/1000 PoE+ ports, four 100/1000 dual speeds SFP ports, and four 1G/10G SFP+ slots.

SISPM1040-3166-L3: Rack mountable hardened L3 switch with 80Gbps switching capacity, sixteen 10/100/1000 PoE+ ports, four 100/1000 dual speed SFP ports and two 1G/10G SFP+ slots.

Unpacking: **1**. Carefully unpack all SISPM1040-xxxx-L3 contents. **2**. Verify receipt of all components; listed below. **3**. Place the Switch and related materials in the desired install location. **4**. Save the SISPM1040-xxxx-L3 shipping carton and packing materials for possible future use.

Package Contents: Make sure you received one Switch, AC Power cord (Option), four adhesive rubber feet, a printed Quick Start Guide, Mounting kit (Option), and one RJ45 to DB9 Serial Console Cable (Option).

Front Panel: The switch front panel provides the LEDs, ports, and Reset button:



LED Descriptions: The LEDs on the front panel provide users with switch status checking and monitoring. There are three types of LEDs as follows:

System LED: Indicates if the switch is powered up correctly or not, or, indicates if there is a system alarm triggered for troubleshooting. Green On = the switch is powered ON correctly. Green Off = the switch is not receiving power. Red On = an abnormal state (e.g., over the operating temperature range) was detected.

Power LEDs (P1/P2: DC LED, P3: AC LED): Indicates if the switch is powered up correctly or not.
P1/P2 Green On = The switch is powered ON correctly. Green Off = The switch is not receiving DC power.
Power3 Green On = The switch is powered ON correctly. Green Off = The switch is not receiving AC power.

Port Status LEDs: Show current status of each port:

RJ45 Ports (left): Green On = Port enabled, has link to connected device, and connection speed is 1000Mbps.

RJ45 Ports (left): Green Blinking = Port is transmitting/receiving packets, and connection speed is 1000Mbps.
RJ45 Ports (left): Amber On = Port enabled, has link to connected device, and connection speed is 10/100Mbps.
RJ45 Ports (left): Amber Blinking = Port is transmitting/receiving packets, and connection speed is 10/100Mbps.
RJ45 Ports (left): Off = Port has no active network cable connected, or it has not established link to connected device, or the port may have been disabled via the switch UI.

RJ45 Ports (right): Green On = Port is enabled and supplying power to connected device.
RJ45 Ports (right): Amber On = An abnormal state, such as overload status, was detected in the switch.
RJ45 Ports (right): Off = The port has no active network cable connected, or it is not connected a PoE PD device, or the port may have been disabled through the switch user interface.

SFP Ports Green On = Port is enabled, established link to connected device, and connection speed is 1000Mbps.
SFP Ports Green Blinking = Port is enabled, established link to connected device, connection speed is 1000Mbps.
SFP Ports Amber On = Port is enabled, established link to connected device, and connection speed is 100Mbps.
SFP Ports Amber Blinking = Port is transmitting/receiving packets and connection speed is 100Mbps.
SFP Ports Off = port has no active network cable connected, or it has not established a link to connected device, or the port may have been disabled via the switch UI.

SFP+ Ports Blue On = Port is enabled, established a link to connected device, and connection speed is 10Gbps.
SFP+ Ports Blue Blinking = Port is transmitting/receiving packets and connection speed is 10Gbps.
SFP+ Ports Green On = Port is enabled, established a link to connected device, and connection speed is 1Gbps.
SFP+ Ports Green Blinking = Port is transmitting/receiving packets and connection speed is 1Gbps.
SFP+ Ports Off = Port has no active network cable connected or has not established link to connected device, or the port may have been disabled via the switch UI.

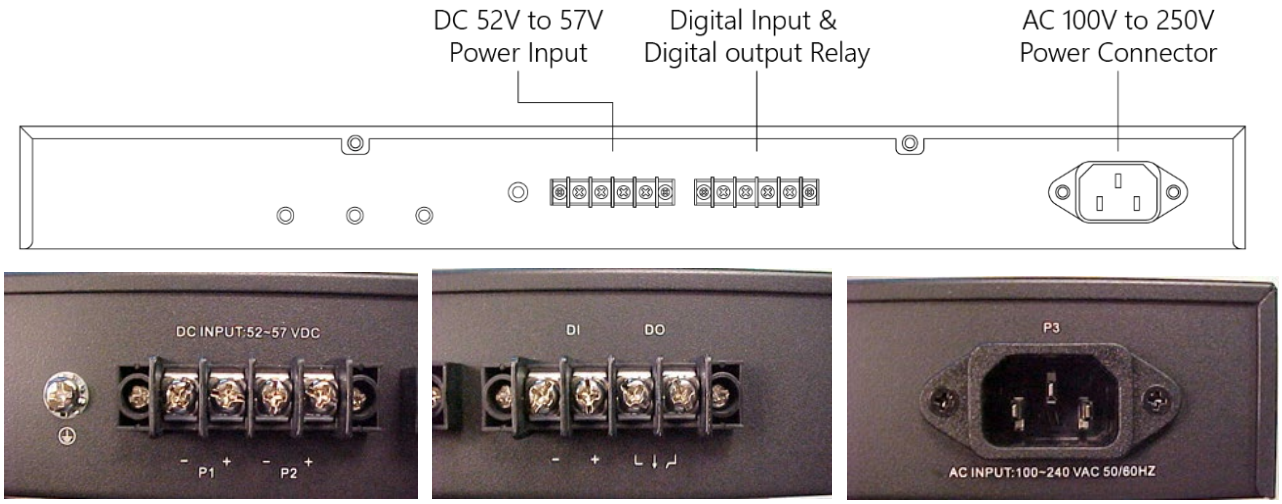
Reset Button: You can press the Reset to perform these tasks:

Reset the switch: To reboot and get the switch back to its previously saved configuration settings press the Reset button for 2~7 seconds. The SYS LED blinks green, and the Port Status LEDs are Off.

Restore the switch to Factory Defaults: To restore the switch back to its original factory default settings, press the Reset button for 7~12 seconds. The SYS LED blinks green, and the Port Status LEDs are On.

When the LED behaviors are correctly displayed, just release the button.

Back Panel



Install the Switch: **Note** that if you must use the switch to connect outdoor devices such as outdoor IP cameras with cable, then you must install an arrester on the cable between outdoor device and the switch.

Grounding: The switch has a grounding screw provided for grounding. Equipment grounding is vital to ensure safe operation. The installer must ensure that the switch is properly grounded during and after installation.

Mount the Switch in a 19-inch Rack: **1.** Attach the mounting brackets to both sides of the chassis. Insert screws and tighten then 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 screws and tighten them.

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/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. **1.** Insert the module into the SFP/SFP+ port. **2.** Press firmly to ensure that the module seats into the connector. **Note**: The SFP/SFP+ ports should use UL Listed Optional Transceiver product, Rated 3.3Vdc, Laser Class 1. See the related SFP manual for details.

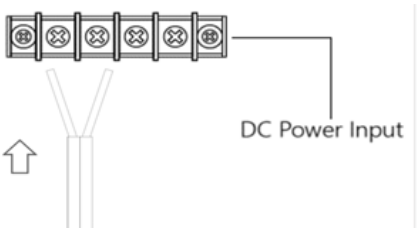
Installing DAC Cables: You can install or remove DAC-1m, DAC-2m, DAC-3m, and DAC-5m cables in ports 29-32. See the Install Guide for more information.

Connecting PDs: Note that this device does not comply with IEEE 802.3at at 48-51.4 VDC. This device drops ~1.3V from Vin to PSEout. IEEE requires these PSEout voltages at the PSE output into the cable: 802.3af: 44VDC, 802.3at: 50VDC. Not meeting this PSEout requirement may cause power up failures or power cycling with devices drawing maximum power with maximum cable loss.

Power can be from either of the two power sources (AC input or DC input) or site source DC. Note that DC power is required for PoE operation.

Connecting to AC Power: **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 ON, the power connection is correct.

Connect the DC Power Wires: **Warning**: Connect the power supply to the switch first, and then connect the power supply to power. Otherwise, catastrophic product failure may occur. **1.** 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. **2.** Insert the negative/positive DC wires into the V-/V+ DC Power Input terminals, respectively. **3.** Use a small flat-blade screwdriver to tighten the wire-clamp screws on the front of the terminal block connector. **4.** Check the SYS LED. If it is ON, the power connection is correct.

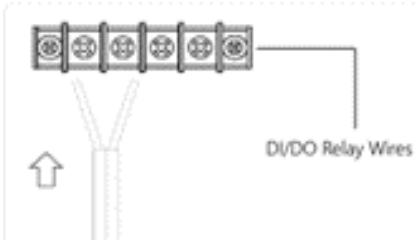


Power Disconnection: To disconnect power from the switch after it is powered on: **1.** Turn off power to the switch. **2.** Disconnect the cables.

Connect the DI/DO Relay Wires: **1.** Insert the negative (ground)/positive DI/DO Relay wires into the V-/V+ DC Power Input terminals , respectively. **2.** Use a small flat-blade screwdriver to tighten the wire-clamp screws on the front of the terminal block connector.

Note: Digital output (relay): 24VDC/1A. Digital input: level 0 (Low) -> 0V to 6V, level 1 (High) -> 10V to 24V.

FAULT: The two contacts of the terminal block connector are used to detect user-configured events. The two wires attached to the fault contacts form an open circuit when a user-configured event is triggered. If a user-configured event does not occur, the fault circuit remains closed.



Power Supply Information: Power supply options include 25160 and 25104. See the Install Guide for more power supply information. Note that a DC power supply is required for PoE operation. AC power can be used to power the switch for data only (no PoE available).

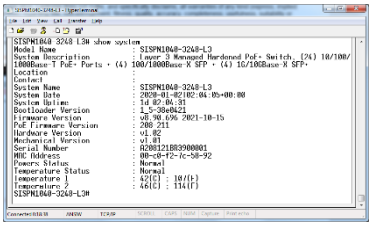
25160 Power Supply

25104 Power Supply

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. To begin with the initial configuration, 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, you can then 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. The factory default Subnet Mask is 255.255.255.0. The factory default Username and Password are both **admin**. See the Web User Guide for details.

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. **4.** After powering up the switch for the first time, you can perform the initial switch configuration using the CLI. See the CLI Reference for details.

Related Manuals: A printed Quick Start Guide is shipped with each SISPM1040-xxxx-L3 switch. For the latest information, see the online manual. Note that this manual may provide links to third party web sites for which Lantronix is not responsible. Related manuals include: **1.** Product support Postcard 33504.
2. SISPM1040-xxxx-L3 Quick Start Guide 33584. **3.** SISPM1040-xxxx-L3 Install Guide 33585.
4. SISPM1040-xxxx-L3 Web User Guide 33586. **5.** SISPM1040-xxxx-L3 CLI Reference 33587.
6. Release Notes (firmware version specific).

Note: Information in this document is subject to change without notice. All information was deemed accurate and complete at the time of publication.

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