



SISPM1040-3000-L3 Series

Hardened Switch



MANAGED LAYER 3 GIGABIT POE+ HARDENED ETHERNET SWITCHES

(16) 10/100/1000Base-T PoE+ Ports + (4) 100/1000Base-X SFP Slots + (2) 1G/10GBase-X SFP+ Slots
(24) 10/100/1000Base-T PoE+ Ports + (4) 100/1000Base-X SFP Slots + (4) 1G/10GBase-X SFP+ Slots

The SISPM1040-3000-L3 Series managed Layer 3 (L3) hardened Gigabit Ethernet PoE switches offer powerful Layer 2 and Layer 3 features and performance required to meet the demands of Smart City and Utility, Transportation, Security and Surveillance applications where performance and reliability across a wide range of temperatures is required. The SISPM1040-3000-L3 Series are designed to support current and future Internet of Things (IoT) applications with their non-blocking / wirespeed performance, wide operating temperature range of -40°C to 75°C for outdoor and indoor environments.

Device management is made simple with Lantronix ConsoleFlow™. The ConsoleFlow Cloud device manager provides cloud-based control of the Lantronix SISPM1040-3000-L3 Series network switches. ConsoleFlow Cloud provides a single pane of glass to securely deploy, monitor and manage Lantronix network switches and connected IT equipment. ConsoleFlow Cloud features True Zero-Touch automation, simplifying onboarding logistics and provisioning new devices while eliminating remote or on-site visits and reducing operational costs. In addition, the native mobile apps for iOS® or Android™ platforms provide users the freedom to monitor and remotely connect to any device while on the go.

Applications:

- IP surveillance, supplying power and data to IP cameras
- Connecting and remotely powering wireless access points
- Monitoring/managing attached powered devices from various vendors
- Carrier Ethernet applications with Advanced Operations, Administration and Management (OAM)
- Outdoor environments requiring wide temperature support

Features

Benefits

Energy Efficient Ethernet (IEEE 802.3az)	Save power and reduce total cost of ownership while building a green Ethernet networking environment.
IEEE 802.3at/af	Switch provides up to 30 Watts per port and automatically detects PoE devices and their power class to simplify PoE deployments.
Always on PoE	Always on PoE ensures there is always PoE power to the attached PDs so a reboot or firmware upgrade to the switch will not disrupt power to the PDs allowing camera or wireless access points to continue functioning.
Rapid Network Conversion	High performance IP unicast routing using OSPFv2/v3 and RIPv1/v2 enable devices to dynamically learn and exchange routing information for rapid network convergence to improve efficiency and productivity.
IEEE 1588v2 PTP	Hardware based implementation ensures no performance penalty. Ensures low latency, high accuracy for delay sensitive financial and mobile applications.
Advanced Operations, Administration and Management (OAM)	The SISPM1040-3000-L3 Series provides carrier Ethernet features such as OAM, CFM, ERPS, EPS, and PTPv2, making it ideal for carrier Ethernet applications in hardened temperature environments.
Security and Seamless Integration	A RESTful API is available for integrating and managing the switch through third-party tools. It also supports enhanced security features such as IP source guard and Access Control Lists to guard networks against unauthorized access.

Markets:



Traffic Management



Security & Surveillance



Warehouse Management



Smart Buildings



Utilities



Specifications

Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3z
- IEEE 802.3ae
- IEEE 802.3x
- IEEE 802.3ad
- IEEE 802.1D
- IEEE 802.1w
- IEEE 802.1s
- IEEE 802.1Q
- IEEE 802.1p
- IEEE 802.1ad
- IEEE 802.1AB
- IEEE 802.3af
- IEEE 802.3at
- IEEE 802.3az
- IEEE 802.3ah
- IEEE 802.1ag
- IEEE 802.1X
- IEEE 802.1v
- IEEE 1588v2 PTP

Network Interface

- Protocols: CSMA/CD
- Store-and-forward switching architecture
- MAC Address: 32K MAC address table

Dimensions

- Width: 17.4" [442 mm]
- Depth: 11.8" [300 mm]
- Height: 1.7" [44 mm]
- Weight: 11 lbs. [5 kg]

Power

- Input: 52 - 57VDC Dual Input Terminal Block or Single Input 100 - 240VAC

Environment

- Operating: -40°C to +75°C
- Humidity: 10% to 90% (non-condensing)
- Altitude: 0 - 10,000 ft.

Certifications

- FCC Class A; CE; EN 62368-1

Warranty

- 5 Years

Specification	SISPM1040-3166-L3-xx	SISPM1040-3248-L3-xx
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Ports	(16) 10/100/1000Base-T PoE+ ports + (4) 100/1000Base-X SFP slots + (2) 1G/10GBase-X SFP+ slots	(24) 10/100/1000Base-T PoE+ ports + (4) 100/1000Base-X SFP slots + (4) 1G/10GBase-X SFP+ slots
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Backplane	80 Gbps	136 Gbps
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PoE Power Capacity	Max PoE Budget 250 Watts (PoE power not available with use of AC power supply) 15 Watts for (16) ports simultaneously 30 Watts for (8) ports simultaneously	Max PoE Budget 370 Watts (PoE power not available with use of AC power supply) 15 Watts for (24) ports simultaneously 30 Watts for (12) ports simultaneously
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Features

- IPv4/IPv6 Layer 3 Static Routing
- RIP v1/v2, OSPF v2/v3 Dynamic Routing
- Supports Jumbo Frame up to 10K bytes
- Authentication - RADIUS, TACACS+
- SSH v1/v2
- DHCP Relay, DHCP Snooping, DHCP Server, DHCP Client
- L2/L3/L4 ACLs Support MAC, VLAN ID, or IP address, protocol, per port
- LACP (Link Aggregation Control Protocol)
- LLDP (Link Layer Discovery Protocol)/CDP Aware
- ITU-T G.8031 Ethernet Linear Protection Switching (ELPS)
- ITU-T G.8032 Ethernet Ring Protection Switching (ERPS)
- Rapid Ring for fast recovery
- IEEE 802.3az Energy Efficiency
- IP Source Guard, Port Security
- Storm Control
- Port Mirroring
- SNMP Traps/Syslog/SMTP

PoE Features

- Compliant with IEEE 802.3at PoE+
- Compliant with IEEE 802.3af PoE
- IEEE 802.1AB LLDP-MED Configuration
- PoE Configuration
- PoE Scheduling
- Power Delay
- Auto Power Reset
- Always on PoE

Device Management System (DMS)

- Graphical Monitoring – Topology view, Floor view, Map view
- Traffic Monitoring
- Troubleshooting – Network diagnostic, protection mechanism, performance and link management
- Cable Diagnostics

Software Features

- Management: Web Management, SNMP V1/V2c/V3, SSH, CLI
- Port Trunk: Supports IEEE 802.3ad port trunk with link aggregation control protocol (LACP)
- Multicast: Support IGMP Snooping V1/V2/V3, MVR, MLD Snooping V1/V2
- Quality of Service: Supports 8 hardware queues. Strict priority and WRR, Ingress policer, Egress shaping and per port rate control
- Classification: Port based Traffic QoS by port, 802.1p VLAN priority based Layer 2 CoS QoS, DSCP based Differentiated Services (DiffServ) Layer 3 DSCP QoS, QoS by ACL classification and remarking TCP/IP ACLs
- Spanning Tree Protocol: Supports IEEE 802.1s MSTP, IEEE 802.1w RSTP and IEEE 802.1d STP Compliant
- VLAN: Port Based VLAN, IEEE 802.1Q tag-based, up to 4k VLAN entries, Q-in-Q, MAC-based VLAN, Management VLAN, Voice VLAN, Private VLAN, IEEE 802.1X Guest VLAN, IEEE 802.1v Protocol VLAN, IP Subnet-Based VLAN, GARP VLAN Registration Protocol/GVRP
- HTTPs and TLS
- Firmware Update through TFTP and HTTP/HTTPs
- Support IEEE 1588 v2 PTP /NTP
- S-Flow
- RMON groups 1,2,3,9
- UPnP
- Media Redundancy Protocol (MRP)

Ordering Information

Part Number	Description
SISPM1040-3166-L3-xx	(16) 10/100/1000Base-T PoE+ ports + (4) 100/1000Base-X SFP slots + (2) 1G/10GBase-X SFP+ slots 52V - 57 VDC or 100V - 250 VAC
SISPM1040-3248-L3-xx	(24) 10/100/1000Base-T PoE+ ports + (4) 100/1000Base-X SFP slots + (4) 1G/10GBase-X SFP+ slots 52V - 57 VDC or 100V - 250 VAC
25104	Input: 85-264 VAC, 124-370 VDC Output: 48 ~ 55 VDC, 5A, 240 Watts
25160	Input: 90-264 VAC, 127-370 VDC Output: 48 ~ 55 VDC, 10A, 480 Watts

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SISPM1040-3166-L3-NA

-xx = Country Code

-NA = North America -LA = Latin America -EU = Europe -UK = United Kingdom
-SA = South Africa -JP = Japan -OZ = Australia -BR = Brazil