SM12XPA

MANAGED LAYER 3 10G ETHERNET FIBER SWITCH

(12) 1G/10G SFP+ Slots + (2) 1G/10G/25G SFP28 Multi-Gig Slots

Easier management and maintenance of end devices and networks

The SM12XPA Fiber Aggregation Switch is a managed Layer 3 (L3) Multi-Gigabit Ethernet fiber switch offering powerful Layer 2 and basic Layer 3 features for improved functionality.

Move More Data: Reduce Backbone Infrastructure

The SM12XPA switch provides 340 Gbps switching capacity with (12) 1G/10G SFP+ and (2) 1G/10G/25G SFP28 slots and (1) RJ-45 console port. It offers high performance and reliability for high bandwidth aggregation and access network applications. The 10G and 25G SFP links provide the necessary backbone capacity to meet the high traffic needs of modern connected access switches.

Rapid Network Conversion

High performance IP unicast routing using OSPF and RIP enables devices to dynamically learn and exchange routing information for rapid network convergence. This improves efficiency and productivity.

Smart Device Management

The embedded Device Managed System (DMS) software is easy to use and simplifies configuration, installation, and troubleshooting of devices in applications with high fiber density. The SM12XPA offers an improved user experience, and lowers operating and maintenance costs.

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.

Applications:
- Network aggregation
- High fiber density networks
- Fiber aggregation
- Network routing

Markets:

Enterprise

Smart Building

Security and Surveillance

Retail

Hospitality

LANTRONIX

Specifications

Standards

• IEEE 802.3	• IEEE 802.3z	• IEEE 802.3ae	• IEEE 802.3ad
• IEEE 802.1d	• IEEE 802.1w	• IEEE 802.1s	• IEEE 802.1Q
• IEEE 802.1X	• IEEE 802.1p	• IEEE 802.1ab	• IEEE 1588 v2
• IEEE 802.1ad	• IEEE 802.3x	• IEEE 802.1D	• IEEE 802.1AB
• ITU-T G.8031	• ITU-T G.8032		

Network Interface

- Protocols: CSMA/CD
- Store-and-forward switching architecture
- Connectors: (12) 1G/10G SFP+ slots, (2) 1G/10G/25G SFP 28 slots, (1) Console RJ-45 port
- MAC Address: 32K MAC address table
- Backplane: 340 Gbps

Dimensions

- Width: 17.4" [442 mm]
- Depth: 11.8" [300 mm]
- Height: 1.7" [44 mm]
- Weight: 8.45 lbs [3.82 kg]

Power

- Input 100 - 240VAC, 50~60 Hz; 4A-2A
- Maximum Power Consumption: See install guide

Environment

- Operating: 0°C to +50°C
- Storage: -20°C to +70°C
- Humidity: up to 95% (non-condensing)
- Altitude: <3,000m

Certifications

- FCC Class A; CE (LVD with EN 62368-1); UKCA

Warranty

- Lifetime

Features

- Supports Jumbo Frame up to 10K bytes

- Secondary hot-swappable AC power supply available (optional)

- Layer 2 Switching
  - Spanning Tree (STP), Rapid Spanning Tree (RSTP), and Multiple Spanning Tree (MSTP)
  - Link Aggregation Control Protocol (LACP)
  - VLANs (supports up to 4K VLANs): Port based VLAN, IEEE 802.1Q tag-based VLAN, MAC-based VLAN, Management VLAN, Private VLAN Edge (PVE), Q-in-Q (double tag) VLAN, Voice VLAN, GARP VLAN Registration Protocol (GVRP)
  - DHCP Relay
  - IGMP v1.v2/v3 Snooping / IGMP Querier / IGMP Proxy
  - MLD v1/v2 Snooping

- Layer 3 Switching
  - IPv4/IPv6 Static Routing, RIP v1/v2, OSPF v2

- Security
  - SSH v1 and v2 / SSL
  - Authentication - RADIUS, TACACS+
  - IP Source Guard, Port Security
  - Storm Control
  - DHCP Snooping
  - L2/L3/L4 ACLs Support MAC, VLAN ID, or IP address, protocol, per port

- Quality of Service
  - Quality of Service: Supports 8 hardware queues. Strict priority and WRR, Ingress policer, Egress shaping and per port rate control
  - Port based, IEEE 802.1p VLAN priority based , IPv4/IPv6/DSCP based and DiffServ classification

- Management
  - DHCP Server
  - RMON groups 1,2,3,9
  - Port Mirroring
  - UPnP
  - s-Flow
  - LLDP (Link Layer Discovery Protocol)
  - Web Management, SNMP V1/V2c/V3, HTTP/HTTPs, SSH, CLI
  - Firmware Update through TFTP and HTTP/HTTPs
  - DHCP Client
  - Cable Diagnostics
  - Syslog

- Synchronization
  - Precision Time Protocol (PTP) / NTP

- Loop Protection
  - ITU-T G.8031 Ethernet Linear Protection
  - ITU-T G.8032 Ethernet Ring Protection Switching
  - Loop Detection and Protection

Device Management System (DMS)

- Graphical Monitoring – Topology view, Floor view, Map view

Ordering Information

Part Number	Description
SM12XPA-xx	(12) 1G/10G SFP+ slots + (2) 1G/10G/25G SFP28 slots + (1) RJ-45 Console port

Optional Accessories	Description
SFP/SFP+/SFP28 Modules	See Lantronix.com for wide variety
PS-AC-250-xx	Optional secondary 250W Power Supply, 100-240VAC input

*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: SM12XPA-NA

-xx = Country Code

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

Contact Information

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