

24-port 100BASE-X 802.3ah OAM Switch

SM24-100SFP-AH



24 100BASE-X SFP Ports, 2 10/100/1000 RJ-45 Ports, 2 Gigabit Combo Ports Managed Switch

- ▶ 802.3ah OAM
- ▶ Supports SNMP v1, v2 & v3
- ▶ STP, RSTP and MSTP
- ▶ Advanced Quality of Service (QoS)
- ▶ Enhanced Security Features
- ▶ IGMP v1, v2 and v3

▶ **Flexible Uplink Options:** In addition to the (24) 100BASE-X ports the SM24-100SFP-AH has combo Gigabit uplink ports that allow copper or fiber connections to be used, depending on the network environment. The fiber ports are SFP and can accommodate a wide range of transceivers for your uplink requirements.

▶ **Carrier Ethernet Specific Software:** The SM24-100SFP-AH switch was designed for use with Carrier Ethernet. Feature enhancements such as 802.3ah, Q-in-Q, Carrier Class Rate-Limit, QoS and subscriber isolation were added to help service providers deploy, manage and secure the network services they are delivering.

▶ **Single IP Management for 36 Switches:** The SM24-100SFP-AH is managed as a single switch and has a single IP address. Up to 36 of the SM24-100SFP-AH switches can be virtually stacked and managed as a single switch while using only one IP address.

Features

▶ **Authentication:** Local, RADIUS, TACACS, Port (802.1X, MAC Authentication, Web Authentication), HTTPS, SSH, Port Security

▶ **Access Control Lists:** IP, MAC; 1000 rules per system

▶ **DHCP Client**

▶ **Port Configuration:** 100BASE-FX: 100 Mbps full duplex
1000BASE-T: 10/100 Mbps at half/full duplex,
1000 Mbps at full duplex 1000BASE-SX/LX/LH
- 1000 Mbps at full duplex (SFP)

▶ **Flow Control:** Full Duplex: IEEE 802.3-2005
Half Duplex: Back pressure

▶ **Broadcast Storm Control:** Traffic throttled above a critical threshold

▶ **Port Mirroring:** Multiple source ports,
one destination port

▶ **Rate Limits:** Input limit, Output limit

▶ **Port Trunking:**

Static trunks (Cisco EtherChannel compliant)
Dynamic trunks (Link Aggregation Control Protocol)

▶ **Spanning Tree Algorithm:**

Spanning Tree Protocol (STP, IEEE 802.1D)
Rapid Spanning Tree Protocol (RSTP, IEEE 802.1w)
Multiple Spanning Tree Protocol (MSTP, IEEE 802.1s)

▶ **VLAN Support:** Up to 255 groups; port-based
or tagged (802.1Q), Private VLANs, Protocol-based VLANs

▶ **Class of Service:** Supports 4 levels of priority and
Weighted Round Robin Queueing (which can be configured
by VLAN tag or port), Layer 3/4 priority mapping: IP DSCP

▶ **Multicast Filtering:** IGMP Snooping (Layer 2)
Multicast VLAN Registration

▶ **Quality of Service:** DiffServ supports class maps, policy
maps, and service policies

▶ **BOOTP client**

▶ **SNTP** (Simple Network Time Protocol)

▶ **SNMP** (Simple Network Management Protocol)

▶ **RMON** (Remote Monitoring, groups 1,2,3,9)

▶ **SMTP Email Alerts**

▶ **DHCP Snooping**

▶ **IP Source Guard**

▶ **IP Clustering**

Next Generation Switch

The SM24-100SFP-AH features a 1U form factor consisting of (24) 100Base-X SFP ports, (2) 10/100/1000 RJ-45 ports and (2) Gigabit combo ports. The 24 SFP ports accept industry standard 100BASE-X optical transceivers.

The SM24-100SFP-AH switch also includes Carrier Ethernet specific software, QoS and Management features which enable service providers to deliver secure services while checking end to end connectivity for customers. The SM24-100SFP-AH switch is a next generation switch designed to fulfill the needs of service providers.

Specifications

Standards Compliance

IEEE 802.1D Spanning Tree Protocol and traffic priorities
IEEE 802.1p Priority tags
IEEE 802.1Q VLAN
IEEE 802.1s Multiple Spanning Tree Protocol
IEEE 802.1v Protocol-based VLANs
IEEE 802.1w Rapid Spanning Tree Protocol
IEEE 802.1X Port Authentication
IEEE 802.3-2005
Ethernet, Fast Ethernet, Gigabit Ethernet
Full-duplex flow control
Link Aggregation Control Protocol
IEEE 802.3ac VLAN tagging
DHCP Client (RFC 1541)
HTTPS
IGMP (RFC 1112)
IGMPv2 (RFC 2236)
Management Information Bases
RADIUS+ (RFC 2618)
RMON (RFC 1757 groups 1,2,3,9)
SNMP (RFC 1157)
SNMPv2 (RFC 2571)
SNMPv3 (RFC DRAFT 3414, 3410, 2273, 3411, 3415)
SNTP (RFC 2030)
SSH (Version 2.0)
TFTP (RFC 1350)

Physical Ports	24 100BASE-X SFP ports 2 10/100/1000 BASE-TX ports 2 Combo Gigabit Ethernet (RJ-45/SFP) ports 1 RJ-45 Console port
MAC Address	17K MAC address table
Jumbo packet support	10Kbytes jumbo packet size (on Gigabit ports)
Packet Buffer Size	.75MB
Backplane Bandwidth	12.8 Gbps
LEDs	System: Power Port: Status
Power Consumption	54 W maximum
AC Input	100 to 240 V, 50-60 Hz, 2 A
Temperature	Operating: 0° to 50°C (32° to 122° F) Storage: -40° to 70°C (-40° to 158° F)
Operating Humidity	10% to 90% (non-condensing)
Dimensions	44 x 440 x 230 mm (1.73 x 17.3 x 9 in.)
Weight	3.5 kg (7.7 lbs)
Certifications	FCC Class A, CE Mark, UL, cUL

Management Features

▶ **In-Band Management:** Telnet, Web-based HTTP or
HTTPS, SNMP manager, or Secure Shell

▶ **Out-of-Band Management:** RS-232 DB-9 console port

▶ **Software Loading:** TFTP in-band or XModem out-of-band

▶ **SNMP:** Management access via MIB database,
Trap management to specified hosts

▶ **RMON:** Groups 1, 2, 3, 9
(Statistics, History, Alarm, Event)

Ordering Info

SM24-100SFP-AH

24 100BASE-X SFP Ports, 2
10/100/1000 RJ-45 Ports, 2 Gigabit
Combo Ports Managed Switch
Includes 19" Rackmount Kit



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