transition networks managed switch

SM24-1000SFP-AH

Layer 2 Gigabit Metro Ethernet Switch

Features:

▶ OAM:

802.1ag Service OAM 802.3ah Link OAM

► Auto-negotiation:

for port speed and duplex mode

▶ Flow Control:

IEEE 802.3x & Back Pressure

▶ Spanning Tree Protocol:

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

VLANs:

255 IEEE 802.1Q VLANs, Port-based VLAN, Protocol VLAN, Private VLAN, GVRP, IEEE 802.1ad Q-in-Q

▶ Link Aggregation:

Static Trunk, IEEE 802.3ad LACP, Load Balancing Trunk groups: 32 Trunk links: 2~8 for Gigabit Ethernet port Trunk links: 2~4 for 10G Ethernet port

▶ IGMP:

IGMP v1, v2, v3, 255 IGMP Groups, MVR

QoS:

8 Priority Queues, Priority Queues Scheduling, Scheme, WRR, Strict Priority, IEEE 802.1p, IP Precedence/DSCP,, TCP/UDP port number

DiffServ:

Rate Limiting, Ingress/Egress, Per Port COS

▶ Switch Management:

CLI via console port or Telnet, Web management SNMP v1, v2c, v3 $\,$

▶ Firmware & Configuration:

Dual firmware configuration files, Firmware Configuration upgrade via TFTP/FTP/X modem server

▶ RMON:

(groups 1,2,3 and 9)

- ▶ SNTP
- ▶ Port Mirroring
- ▶ Event/Error/System Log

▶ Security:

Port Security, IP Source Guard, DHCP Snooping, IEEE 802.1X, Port-based

- ▶ RADIUS authentication
- ▶ Encryption: MD5, TLS, TTLS
- ▶ TACACS+ authentication
- ▶ HTTPS/SSH
- ► Access Control List (ACL): IP-based, MAC-based, IP/MAC-based, VLAN, TCP/UDP port
- ▶ Storm Control:

Broadcast, Multicast, Unknown Unicast



Specifications

Standards Compliance	IEEE 802.1D Spanning Tree Protocol and traffic priorities IEEE 802.1p Priority tags IEEE 802.10 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 802.1a Service 0AM IEEE 802.3ah Link 0AM Ethernet, Fast Ethernet, Gigabit Ethernet, 10 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)
Physical Ports	(24) Gigabit SFP ports (2) 10 G XFP ports (2) expansion slots for modules (1) RJ-45 craft port (1) RS-232 console port (1) dB-15 port for alarm I/P and 0/P
MAC Address	32K MAC address table
Jumbo Packet Support	9K
Switching Capacity	128 Gbps
LEDs	Power & Port Status
Power Consumption	100 Watts maximum
Power Requirement	AC Input: 100~240V, 50~60 Hz, , Output: +12 VDC DC Input: +18 VDC~+36 VDC, -36 VDC~-72 VDC, Output: +12 VDC
Temperature	-20°C to 60°C (Standard Operating) -40°C to 70°C (Non-Operating)
Operating Humidity	10% to 90% (non-condensing)
Dimensions	Height: 2.6" [67 mm] Width: 17.0" [436 mm] Depth: 10.0" [253 mm] (1.5RU)
Shipping Weight	11lb. (5kg)
Certifications	FCC Class A, CE Mark, UL
MTBF	80,000 hrs (min), at 40°C degree 150,000 hrs (min) at 25°C degree

Ordering Information

SM24-1000SFP-AH

(24) 1000BASE-X SFP Ports, (2) 10G XFP ports and 2 expansion slots for modules - Includes 19" Rackmount kit and Fan module. Does not include power supply. Must order Power supply(s) separately.

Optional Accessories (sold separately)

SFP & XFP Modules

SM24-1000SFP-ACPWR AC Power module SM24-1000SFP-DCPWR: DC Power module SM24-1000SFP-FAN: Fan module SM24-1000SFP-10GM: 10G XFP expansion module (Does not include XFP)

The SM24-1000SFP-AH Gigabit Metro Ethernet Switch provides a flexible platform to enable carrier-class access technology through easy-to-maintain hardware architecture and advanced management software features. With all front panel access, field-replaceable fan tray, and redundant power supply design, SM24-1000SFP-AH eases the necessary field installation. Advanced management software enables remote trouble-shooting and management. With advanced security features and flexible, fine-grained QoS capability, SM24-1000SFP-AH allows service providers to deliver secure triple-play services. The dual 10G XFP Ethernet ports provide redundant fiber uplink connections to the edge of the optical core networks. The SM24-1000SFP-AH also includes 2 expansion slots to accommodate extra dual 10G XFP ports.

The SM24-1000SFP-AH Gigabit Metro Ethernet Switch is part of a series of purpose-built next-generation switches, designed by Transition Networks, in order to fulfill the demands of converged metro access networks.

