



MES24xx Series Ethernet Access Switches with PoE Support

- Advanced L2 features
- Support for Multicast (IGMP Snooping, MVR)
- Advanced security functions (L2-L4 ACL,
- IP Source Guard, Dynamic ARP Inspection, etc.)

MES24xx series switches with PoE support provide end users connection to networks of large enterprises, small and mid-sized businesses and service providers via 1G/10G interfaces.

The switches support Virtual Local Area Networks (VLAN), multicast groups, and have advanced security functions.

Technical Features

	MES2408CP	MES2408P	MES2408PL	MES2428P	MES2424P	MES2448P
Interfaces						
10/100/1000BASE-T PoE/PoE+	8	8	8	24	24	48
100BASE-FX/1000BASE-X (SFP)	-	2	2	-	-	-
1000BASE-X (SFP)/10GBASE-R (SFP+)	-	-	-	-	4	4
Combo 10/100/1000BASE-T/100BASE-FX/1000BASE-X	2	-	-	4	-	-
Console port RS-232	1					
Performans						
Bandwidth	20 Gbps	20Gbps	20Gbps	56 Gbps	128 Gbps	176 Gbps
Throughput for 64-byte packets	14.88 MPPS	14.88 MPPS	14.88 MPPS	41.658 MPPS	95.02 MPPS	130.09 MPPS
Buffer memory	512 KB	512 KB	512 KB	512 KB	1.5 MB	2 MB
RAM (DDR3)	256 KB	256 KB	256 KB	256 KB	512 KB	512 KB
ROM (SPI Flash)	32 MB	32 MB	32 MB	32 MB	64 MB	64 MB
MAC table	8192	8192	8192	8192	16384	32768
ARP table	1000					
VLAN table	4094					
L2 Multicast groups	509	509	509	509	1023	4094
L3 Multicast groups	-	-	-	-	512	2048
L3 interfaces	8 VLANs, up to 5 of IPv4 addresses for each VLAN, up to 300 of IPv6 GUA for all VLANs					
Quality of Service (QoS)	8 egress queues per por					
Power supply	110–250 V AC, 50–60 Hz	176–250 V AC, 36–72 V DC	110–250 V AC, 50–60 Hz	176–264 V AC, 36–72 V DC	176–264 V AC, 50–60 Hz	176–264 V AC, 50–60 Hz
Maximum power consumption	150 W	275 W	80 W	450 W	420 W	820W
Dimensions (W × H × D)	310 × 44 × 177	430 × 44 × 178	310 × 44 × 177	430 × 44 × 204	430 × 44 × 225	440 × 44 × 447

Features and Capabilities

Interface Features

- Head-of-line blocking (HOL) protection
- Auto MDI/MDIX
- Jumbo frames
- Flow Control (IEEE 802.3X)
- Port mirroring (SPAN, RSPAN)

MAC Table

- Independent learning mode on each VLAN
- MAC Multicast Support
- Configurable aging time of MAC addresses
- Static MAC Entries
- MAC change events monitoring per ports
- MAC Flapping

VLAN Features

- IEEE 802.1Q
- Q-in-Q
- Selective Q-in-Q
- GVRP
- MAC-based VLAN
- Protocol-based VLAN

L2 Multicast Features

- Multicast profiles
- Static Multicast groups
- IGMP Snooping v1,2,3
- IGMP Snooping fast-leave
- IGMP Proxy reporting
- IGMP authorization via RADIUS
- MLD Snooping v1,2
- MLD Snooping fast-leave
- IGMP Querier
- MVR

L2 Features

- STP (Spanning Tree Protocol, IEEE 802.1d)
- RSTP (Rapid Spanning Tree Protocol, IEEE 802.1w)
- MSTP (Multiple Spanning Tree Protocol, IEEE 802.1s)
- STP Root Guard
- STP Loop Guard
- STP BPDU Guard
- BPDU Filtering
- Spanning Tree Fast Link option
- Layer 2 Protocol Tunneling (L2PT)
- Loopback Detection (LBD)
- Port isolation
- Storm Control for different types of traffic (broadcast, multicast, unknown unicast)
- ERPS (G.8032v2)

L3 Multicast Features

- IGMP proxy (RFC 4605)
- IGMP proxy fast-leave

Service Functions

- Virtual Cable Test (VCT)
- Optical transceiver diagnostics

Link Aggregation Functions

- Static LAG
- Dynamic LAG
- LAG Balancing Algorithm

IPv6 Support

- IPv6 Host
- Dual-stack IPv4, IPv6

Security Functions

- DHCP Snooping
- DHCP Option 82
- IP Source Guard
- Dynamic ARP Inspection (Protection)
- MAC-based authentication, Port Security, static MAC addresses
- IEEE 802.1x based authentication per ports
- DoS attacks prevention
- Traffic segmentation
- DHCP clients filtering
- BPDU attacks prevention
- PPPoE Intermediate Agent
- DHCPv6 Snooping
- IPv6 Source Guard
- IPv6 ND Inspection
- IPv6 RA Guard

Access Control Lists ACL

- L2-L3-L4 ACL (Access Control List)
- IPv6 ACL
- ACL based on:
 - Switch port
 - IEEE 802.1p
 - VLAN ID
 - EtherType
 - DSCP
 - IP protocol type
 - TCP/UDP port number
 - User Defined Bytes

Quality of Service (QoS) and Rate Limiting

- Shaping, policing
- Support for IEEE 802.1p Class of Service
- Queue scheduling algorithms: Strict Priority/Weighted Round Robin (WRR)
- ACL-based traffic classification
- ACL-based CoS/DSCP marking
- DSCP to CoS remarking
- CoS to DSCP remarking
- ACL-based VLAN assignment

OAM

- IEEE 802.3ah, Ethernet OAM
- Dying Gasp
- IEEE 802.3ah Unidirectional Link Detection (UDLD)