



Industrial Switches MES3508, MES3508P and MES3510P

- Bandwidth up to 24 Gbps
- Non-blocking architecture
- L3 switches
- Passive cooling
- Support for Multicast (IGMP Snooping, MVR)
- Advanced security functions (L2-L4 ACL, IP Source Guard, Dynamic ARP Inspection, etc.)

MES3508, MES3508P and MES3510P industrial switches manufactured by ELTEX are designed to organize secure fault-tolerant networks on sites with high requirements to temperature, vibrations and mechanical impact.

The switches have 10/100/1000BASE-T with PoE/PoE+1 technology support and Combo ports of 10/100/1000BASE-T/ 1000BASE-X/100BASE-FX for optional connection of an optic-fiber cable.

Technical Features

	MES3508	MES3508P	MES3510P
Interfaces			
10/100/1000BASE-T (RJ-45)	8	—	—
10/100/1000BASE-T PoE/PoE+ (RJ-45)	—	8	8
100BASE-FX/1000BASE-X (SFP)	—	—	4
10/100/1000BASE-T/100BASE-FX/ 1000BASE-X (RJ-45/SFP) Combo	2	2	—
Console port RS-232 (RJ-45)	—	1	—
Performance			
Bandwidth	20 Gbps	20 Gbps	24 Gbps
Throughput for 64 bytes ²	14 MPPS	14 MPPS	17.8 MPPS
Buffer memory	1.5 MB		
RAM (DDR3)	512 MB		
ROM (RAW NAND)	512 MB		
MAC table	16384		
ARP table	4023		
VLAN table	4094		
L2 Multicast groups	4091		
ACL rules	3006		
L3 IPv4 Multicast routes (IGMP Proxy, PIM)	3876		
L3 IPv6 Multicast routes (IGMP Proxy, PIM)	1006		
Physical specifications and environmental parameters			
Power supply	20–75 V DC	with PoE enabled: 45–57 V DC with PoE disabled: 20–57 V DC	
Maximum power consumption (including PoE)	15 W	260 W	260 W
Operating temperature	from -40 to +70 °C		
Humidity	from 5 to 95 % (non-condensing)		
Dimensions (W × H × D)	85 × 152 × 115 mm	85 × 152 × 115 mm	85 × 175 × 115 mm



Iran
Communications
Industries

Features and Capabilities

Interfaces Functions

- HOL blocking protection
- Back Pressure
- Auto MDI/MDIX
- Jumbo frames
- IEEE 802.3X flow control
- Port mirroring (SPAN, RSPAN)

MAC Table Functions

- Independent mode of learning for each VLAN
- MAC Multicast Support
- Automatic MAC addresses aging
- Static MAC Entries
- MAC Flapping logging

VLAN Functions

- Voice VLAN
- IEEE 802.1Q
- Q-in-Q
- Selective Q-in-Q
- GVRP

L2 Multicast Functions

- Multicast profiles
- Multicast static groups
- IGMP Snooping v1,2,3
- Port/host based IGMP Snooping Fast Leave
- Pim-Snooping
- IGMP proxy-report
- Support for IGMP authorization via RADIUS
- MLD Snooping v1,2
- IGMP Querier
- MVR

L2 Functions

- STP (Spanning Tree Protocol, IEEE 802.1d)
- RSTP (Rapid Spanning Tree Protocol, IEEE 802.1w)
- MSTP (Multiple Spanning Tree Protocol, IEEE 802.1s)
- STP Multiprocess
- PVSTP+
- RPVSTP+
- Spanning Tree Fast Link option
- STP Root Guard
- STP Loop Guard
- BPDU Filtering
- STP BPDU Guard
- Loopback Detection (LBD) based on VLAN
- ERPS (G.8032v2)
- Flex-link
- Private VLAN, Private VLAN Trunk
- Layer 2 Protocol Tunneling (L2PT)

L3 Functions

- Static IP routes
- Dynamic routing protocols: RIPv2, OSPFv2, OSPFv3, IS-IS (IPv4 Unicast), BGP (IPv4 Unicast, IPv4 Multicast, IPv6 Unicast)
- BFD (for BGP)
- Address Resolution Protocol (ARP)
- Proxy ARP
- Policy-Based Routing (IPv4)
- VRRP
- Multicast routing protocols: PIM SM, PIM DM, IGMP Proxy, MSDP
- ECMP load balancing
- IP Unnumbered
- GRE
- VRF

Link Aggregation Functions

- Static LAG
- Dynamic LAG (LACP)
- LAG Balancing Algorithms
- Multi-Switch Link Aggregation Group (MLAG)

IPv6 Functions

- IPv6 Host
- Dual-stack

Service Functions

- Virtual Cable Testing (VCT)
- Optical transceiver diagnostic
- Green Ethernet

Security Functions

- Protection against unauthorized DHCP servers (DHCP Snooping)
- DHCP option 82
- IP Source Guard
- Dynamic ARP Inspection
- First Hop Security
- sFlow
- MAC-based authentication, Port Security, static MAC entries
- Port-based authentication IEEE 802.1x
- Guest VLAN
- DoS attack prevention
- Traffic segmentation
- DHCP client filtering
- BPDU attack prevention
- NetBIOS/NetBEUI filtering
- PPPoE Intermediate Agent

ACL (Access Control List)

- L2-L3-L4 ACL (Access Control List)
- Time-Based ACL
- IPv6 ACL
- ACL based on:
 - Physical port number
 - IEEE 802.1p
 - VLAN ID
 - Ethertype
 - DSCP
 - Protocol type
 - TCP/UDP port number
 - User Defined Bytes

Quality of Service (QoS) and Rate Limiting

- QoS statistics
- Port rate limiting (shaping, policing)
- IEEE 802.1p CoS
- Storm Control for different types of traffic (broadcast, multicast, unknown unicast)
- Bandwidth management
- Scheduling algorithms: Strict Priority/Weighted Round Robin (WRR)
- Three marking colors
- ACL-based CoS/DSCP mark assignment
- ACL-based VLAN mark assignment
- 802.1p priorities adjustment for Management VLAN
- CoS to DSCP, DSCP to CoS remarking
- 802.1p DSCP mark assignment for IGMP

OAM/CFM

- IEEE 802.3ah Ethernet Link OAM
- Dying Gasp
- IEEE 802.1ag Connectivity Fault Management (CFM)
- IEEE 802.3ah Unidirectional Link Detection