![Eltex logo](Integrated solutions for network construction)

- **L2 switches**
- support for stacking
- support for Multicast (IGMP, IGMP snooping, MVR)
- advanced security features (L2-L4 ACL, IP Source address guard, Dynamic ARP Inspection, etc.)

L2 switches

MES2208P access switches are managed L2 level switches with 2 10/100/1000Base-T ports and 4 dual 1000Base-T/Base-X ports.

Switches provide end users' connection to the network at large enterprises, small and medium-sized businesses and to networks of mobile communication operators with the help of the Fast and Gigabit Ethernet interfaces.

The functionality of the switch include physical stacking, VLAN and multicast distribution groups support, as well as advanced security features.

PoE power supply

MES2208P switches comply with PoE IEEE 802.3af and IEEE 802.3at standards and provide up to 15.4 W and 30 W respectively on any of 4 10/100/1000Base-T ports . PoE/PoE+ technology support allows to supply power from the switch via the UTP cable to IP-phones, wireless access points, IP-cameras and other devices with PoE support.

Technical features

	MES2208P
Interfaces	
1000 Base-X (SFP)	2
10/100/1000 Base-T (RG-45)	2
10/100/1000 Base-T (RG-45) PoE/PoE+	4
10/100/1000 Base-T/1000 Base-X (SFP)	4
Console port	RS-232
Performance	
Performance	24 Gbps
MAC-addresses table	16K
VLAN table	4K
ACL table	512
Jumbo frame	10K
Technical characteristics	
Max. power consumption	Max 150W
Ventilation	●

Functional capabilities

Interface functions
– Head-of-line blocking (HOL) protection
– Back pressure Support
– MDI / MDIX Support
– Jumbo frames Support
– Flow Control (IEEE 802.3X)
– Port mirroring
– Stacking up to 4 devices in stack

MAC addresses functionality
– MAC-address table 16K
– Independent learning mode in every VLAN
– MAC Multicast Support
– MAC-addresses adjustable storage time
– Static MAC Entries

VLAN support
– Up to 4K VLAN
– Voice VLAN support
– VLAN mirroring
– 802.1Q support
– Q-in-Q support
– Selective Q-in-Q support
– GVRP support

L2 Multicast functions
– 1K groups Support
– Multicast-profile support
– Static Mullticast groups support
– IGMP Snooping v1,2,3 support
– IGMP snooping Fast Leave on the basis of the port/host support
– Authorization IGMP via RADIUS support
– MLD Snooping v1,2 support
– IGMP Querier   support
– Multicast TV VLAN
– MVR support

L2 functions
– STP protocol (Spanning Tree Protocol) support
– 32 independent STP activities support
– Spanning Tree Fast Link option support
– STP Mulitprocess (802.1d) support
– RSTP (Rapid spanning tree protocol) support
– Multiple Spanning Tree- MSTP (IEEE802.1s) support
– EAPS support
– STP Root Guard support
– BPDU Filtering support
– STP BPDU Guard support
– Per-device Loopback Detection (LBD) support
– G.8032v2 support

Link Aggregation functions
– LAG groups establishment
– Aggregation using LACP
– LAG Balancing Algorithm support

Support for IPv6
– IPv6 Host Functionality
– Common use of IPv4, IPv6

Service functions
– Virtual Cable Testing (VCT)
– Optical transceiver diagnostics
– Green Ethernet
– Stacking up to 4 devices in stack[1]

Security functions
– DHCP snooping
– 82 of DHCP protocol Option
– IP Source address guard
– Dynamic ARP Inspection (Protection)
– sFlow support
– Authentication checking based on MAC addresses, limiting the
  number of MAC addresses, static MAC address
– Authentication checking by port based on 802.1x
– Guest VLAN
– DoS attack prevention system
– Traffic segmentation
– Protection from unauthorized DHCP servers
– DHCP clients filtering
– BPDU attack prevention
– NetBIOS / NetBEUI filtering
– PPPoE Intermidiate agent

ACL (Access Control Lists)
– L2-L3-L4 ACL (Access Control List)
– Time-Based ACL support
– IPv6 ACL
– up to 512 access rules
    – ACL on the basis of:
    – Switch port
    – 802.1p priority
    – VLAN ID
    – Ether type
    – DSCP
    – Type of protocol
    – Number of TCP / UDP port
    – Package content defined by user
– Functioning mode ACL-ONLY, with extended amount of switch resources
  for ACL

Basic functions of Quality of Service (QoS) and bandwidth limitation
– QoS/COS Support
– Statistics QoS
– Bandwidth limitation on ports (shaping, policing)
– Up to 4 priority queues support
– Support 802.1p Class of Service
– Broadcast "storm" protection
– Bandwidth management
– Processing queues by Strict/Weighted Round Robin algorithms (WRR)
  priority
– Three marking colors
– Traffic classification on ACL basis
– Mark purpose CoS/DSCP on ACL basis

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[1] SW Version 1.1.16 supports 3 devices in stack

Functionality (continuation)

OAM
– 802.3ah Ethernet Link OAM
– Dying Gasp
– 802.1ag Connectivity Fault Management (CFM)
– 802.3ah Unidirectional LinkDetection (протокол однонаправленных связей)

Main management functions
– Downloading and uploading of the configuration file via TFTP
– SNMP protocol
– Command Line Interface (CLI)
– Web-interface
– Syslog
– SNTP (Simple Network Time Protocol)
– Traceroute
– LLDP (802.1ab) + LLDP MED
– Controlled access - levels of authorization and privilege
– Blocking access to the control interface
– Local authentication
– IP-address filtering for SNMP
– RADIUS, TACACS client + (Terminal Access Controller Access Control System)
– SSH server
– SSL support
– Macro commands support
– Input commands logging
– System log
– Automatic DHCP configuration
– DHCP Relay (IPv4 support)
– DHCP Option 12
– DHCP Relay Option 82
– Adding ID tag - PPPoE Circuit
– Flash File System
– Debug commands
– Limiting mechanism of traffic towards CPU
– Password Encryption
– Password Recovery
– Ping (IPv4/IPv6 support)
– Multiple IP Interface
– FTP server

Monitoring functions
– Interface Statistics
– Remote monitoring RMON / SMON
– Mechanism CPU utilization support
– Memory monitoring
– Temperature monitoring
– TCAM monitoring

MIB
– RFC 1065, 1066, 1155, 1156, 2578 MIB Structure
– RFC 1212 Concise MIB Definitions
– RFC 1213 MIB II
– RFC 1215 MIB Traps Convention
– RFC 1493, 4188 Bridge MIB
– RFC 1157, 2571-2576 SNMP MIB
– RFC 1901-1908, 3418, 3636, 1442, 2578 SNMPv2 MIB
– RFC 271,1757, 2819 RMON MIB
– RFC 2465 IPv6 MIB
– RFC 2466 ICMPv6 MIB
– RFC 2737 Entity MIB
– RFC 4293 IPv6 SNMP Mgmt Interface MIB
– Private MIB
– RFC 3289 DIFFSERV MIB
– RFC 2021 RMONv2 MIB
– RFC 1398, 1643, 1650, 2358, 2665, 3635 Ether-like MIB
– RFC 2668 802.3 MAU MIB
– RFC 2674, 4363 802.1p MIB
– RFC 2233, 2863 IF MIB
– RFC 2618 RADIUS Authentication Client MIB
– RFC 4022 MIB для TCP
– RFC 4113 MIB для UDP
– RFC 3298 MIB для Diffserv
– RFC 2620 RADIUS Accounting Client MIB
– RFC 2925 Ping & Traceroute MIB
– RFC 768 UDP
– RFC 791 IP
– RFC 792 ICMPv4
– RFC 2463, 4443 ICMPv6
– RFC 4884 Extended ICMP messages of support for Multi-Part
– RFC 793 TCP
– RFC 2474, 3260 Definition of the DS field in the IPv4 and IPv6 heading
– RFC 1321, 2284, 2865, 3580, 3748 Extensible Authentication Protocol (EAP)
– RFC 2571, RFC2572, RFC2573, RFC2574 SNMP
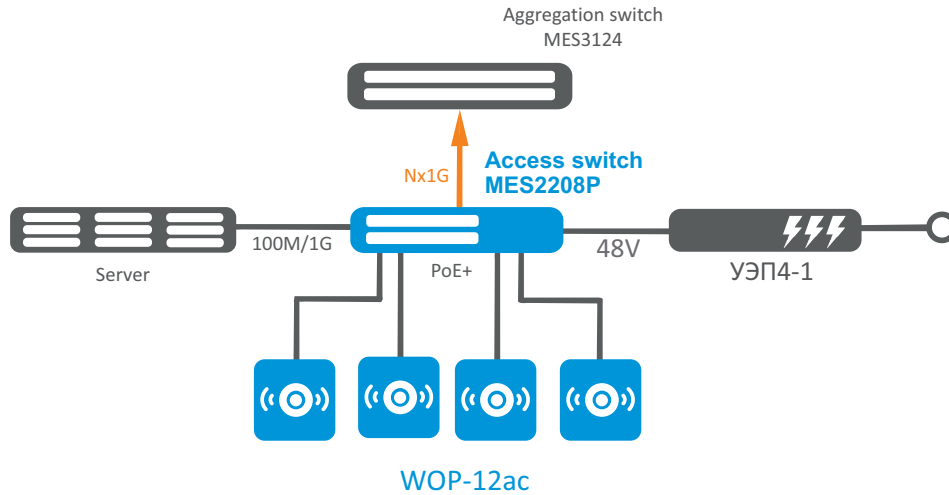– RFC 826 ARP

PoE
– Standards Support 802.3af PoE (up to W/port 802.3at PoE+ (up to 30W/port) for all ports
– Automatic and configurable accounting and disposition of PoE power supply balance to ports
– PoE power supply budget - 120 W

Technical features
– Power supply - 48B DC
– Operating environment temperature – from -100 to +650 C
– Storage temperature - from -40 to +70 C
– Operating humidity - 80% max
– Ventilation - passive cooling
– Dimensions - 430x44x138 mm, execution 19'', form factor 1U

Application diagram

Aggregation switch
MES3124

Nx1G

**Access switch
MES2208P**

100M/1G

Server

PoE+

48V

УЭП4-1

WOP-12ac

Ordering Information

Product Name	Description	Figure
MES2208P	Ethernet switch MES2208P, 4 ports 10/100/1000 Base-T (PoE/PoE+),4 ports 10/100/1000 Base-T/1000Base-X (SFP), 2 ports 10/100/1000 Base-T, 2 ports 1000 Base-XL2, 48V DC	
	Companion software	
EMS-MES-access	EMS-MES-access option of Eltex system. EMS for Eltex network elements control and monitoring. 1 network element MES-1024 / MES-1124 / MES-2124	

Сделать заказ

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