



Eltex MES and Competitors: Evaluating Access Switch Capabilities

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MES Equipment



Managed Ethernet Switches



ROS6 OS (L3)

- MES2300-xx
- MES3300-xx
- MES35xx-xx
- MES53xx-xx onwards



ISS OS (L2+/L3)

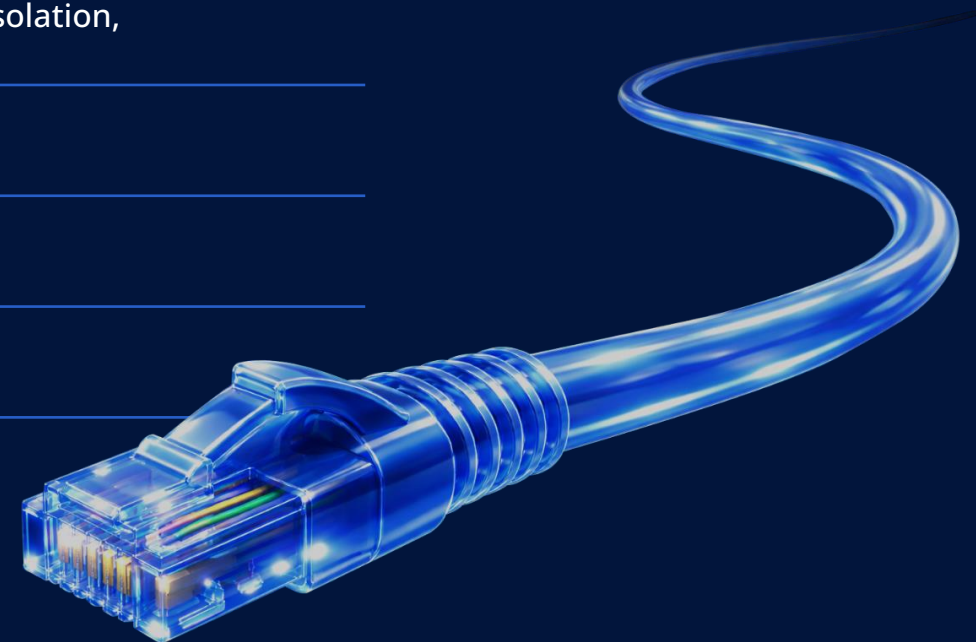
- MES24xx
- MES3400
- MES37xx

Access Switches



Hardware and software differences

	ROS6 OS (L3) Access	ISS OS (L2+/L3) Access
CLI	Cisco-like CLI	Mixed CLI syntax (Cisco / Eltex)
Stacking	Up to 8 units	Up to 8 units
MAC Table, addresses	16 - 32 K	4 - 32 K
L2 features	STP/RSTP/MSTP, Port isolation, L2PT, ERPS, Private VLAN	STP/RSTP/MSTP, Port isolation, L2PT, ERPS
Multicast	IGMP, IGMP snooping, PIM SM, PIM DM, MSDP	IGMP, IGMP snooping
Dynamic routing	RIPv1/2, OSPFv2/3, IS-IS, BGP*	RIPv1/2, OSPFv2/3
Other L3 features	BFD, ECMP, GRE, VRF lite, ARP, VRRP, Policy-Based Routing (IPv4)	ARP, VRRP
Hardware	RAM 2 GB Flash 512 MB Buffer 1.5 - 3 MB	RAM 256 MB - 1 GB Flash 32 - 64 MB Buffer 512 KB - 2 MB

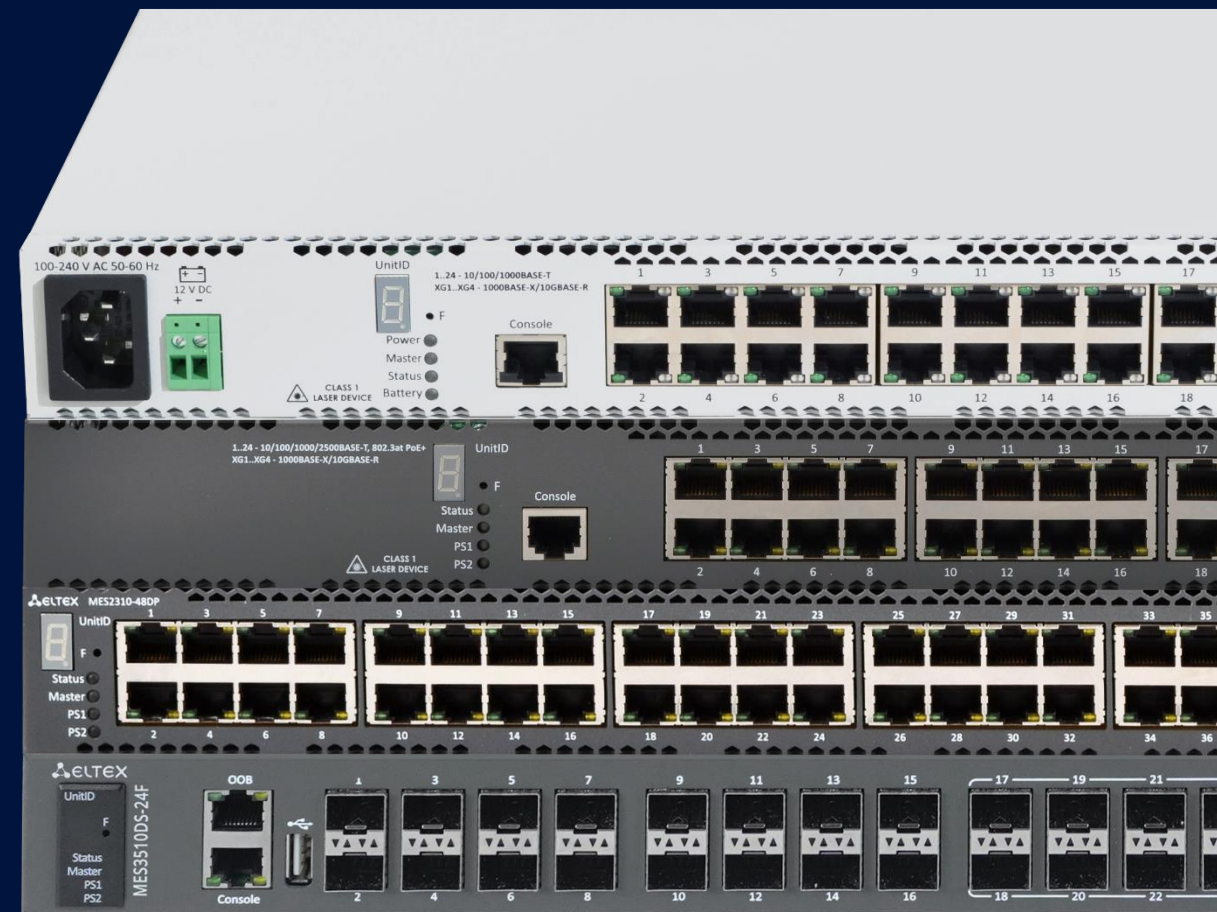


Access Switches



1G, PoE, Multigigabit and Industrial models

	ROS6 OS (L3)	ISS IS (L2+/L3)
1G Access	MES2300-08 MES2300(B)-24 MES2300(B)-48 MES2300(B)-24F	MES2408(B) MES2424(B) MES2428(B) MES2448(B) MES2424FB MES2411X
1G PoE Access	MES2300-08P MES2300-24P MES2300-48P MES2300D-24P	MES2408P MES2424P MES2448P MES2420-48P
Multigigabit	MES2310-12XU* MES2310-48DP*	MES2410-08DP MES2410-08DU MES2420B-24D MES2420D-24DP
Industrial DIN rail	MES3500I-08P MES3510S-08P MES3500I-10P MES3500I-8P8F	MES3710P
Industrial 19-inch	MES2300DI-28 MES3500I-24F MES3510DS-24F	MES3400I-24



* Equipment is in development

MES2300B-24



L3 Access Switch (physical specs)



	Eltex MES2300B-24	Cisco C1300-24T-4X	Huawei Cloud Engine S5735-S24T4X	HPE/Juniper EX2300-24T	TP-Link/Omada SG3428X
Ports	24 x 1GE 4 x 10G SFP+ 1 x Console	24 x 1GE 4 x 10G SFP+ 1 x Console	24 x 1GE 4 x 10G SFP+ 1 x Console	24 x 1GE 4 x 10G SFP+ 1 x Console	24 x 1GE 4 x 10G SFP+ 1 x Console
Dimensions	43 × 4.4 × 20 cm	44.4 x 4.4 x 24 cm	44 x 4.4 x 42 cm	44.6 x 4.4 x 26 cm	44 × 4.4 × 18 cm
Weight	2.94 kg	3.14 kg	7.21 kg	3.29 kg	2.5 kg
Power type, max consumption	AC built-in, 20 W	AC built-in, 22.4 W	AC / DC 1 + 1 , 46 W	AC / DC, 55 W	AC built-in, 23.6 W
Cooling	Passive	Passive	Active, 2 fans	Fan/EX2300-C fanless version	Passive
External battery	Yes	No	No	No	No
Max noise	—	—	75 dB	34 dB	—
Origin	Russia	USA	China	USA	China

MES2300B-24



L3 Access Switch (features)



	Eltex MES2300B-24	Cisco C1300-24T-4X	Huawei Cloud Engine S5735-S24T4X	HPE/Juniper EX2300-24T	TP-Link/Omada SG3428X
Bandwidth (Gbps)	128	128	128	128	128
Throughput for 64 bytes (MPPS)	95.2	95.2	96	95	95.2
MAC table	16 384	16 000	32 896	16 000	16 000
ARP table	2 039	990	8 180	1 500	512
L2 features	Q-in-Q, IGMP snooping, STP/RSTP/MSTP, LAG	Q-in-Q, IGMP snooping, STP/RSTP/MSTP, LAG	Q-in-Q, IGMP snooping, STP/RSTP/MSTP, LAG	Q-in-Q, IGMP snooping, STP/RSTP/MSTP, LAG	Q-in-Q, IGMP snooping, STP/RSTP/MSTP, LAG
L3 features	VRRP, BGP*, PIM, OSPF v2/v3, IS-IS	VRRP, BGP*, PIM, OSPF v2/v3*, IS-IS*	VRRP, BGP, PIM, OSPF v2/v3, IS-IS	OSPF v2/v3, IS-IS, VRRP, PIM	OSPF v2/v3, IS-IS, VRRP, PIM
Quality of Service	8 egress queues per port	8 egress queues per port	8 egress queues per port	8 egress queues per port	8 priority queues per port
Management	SNMP, CLI, Web interface, Telnet, SSH	SNMP, CLI, Web interface, Telnet, SSH	SNMP, CLI, Web interface, Telnet, SSH	SNMP, CLI, Web interface, Telnet, SSH	SNMP, CLI, Web interface, Telnet, SSH
Stacking	Up to 8 units	Up to 8 units	Up to 9 units	Up to 4 units*	—

* Requires a license

MES2300D-24P

L3 PoE Access Switch



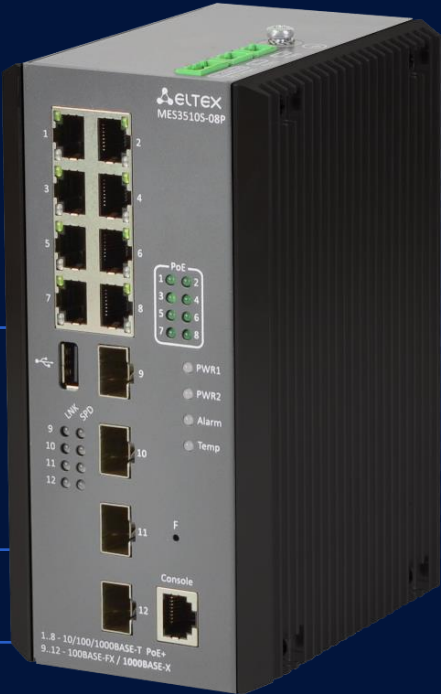
	Eltex MES2300D-24P	Cisco C1300X-24MU-4X	Huawei Cloud Engine S5735-S24P4X	HPE/Juniper EX3400-24P	TP-Link/Omada SG3428XMPP
Ports	24 × 1G PoE+ 4 × 10G SFP+ 1 × RJ-45 Console	16 × 2.5G PoE+ 8 × 2.5G PoE++ 4 × 10G SFP+ 1 × RJ-45 Console 1 × Type-C Console	24 × 1G PoE+ 4 × 10G SFP+ 1 × RJ-45 Console	24 × 1G PoE+ 4 × 10G SFP+ 2 × 40G QSFP+ 1 × Mini USB Console	8 × 1G PoE++ 16 × 1G PoE+ 4 × SFP+ 1 × Console
PoE Budget	720 W	740 W	209-1600 W, depending on power supplies used	720 W	500 W
Dimensions	44 × 4.4 × 42 cm	44.4 × 4.4 × 27cm	44.2 × 4.4 × 42 cm	44 × 4.2 × 38 cm	44 × 4.4 × 33 cm
Weight	6.85 kg	4.28kg	7.39 kg	6.6 kg with 2 power modules and 2 fan modules	5.01 kg
Power type, max consumption	2 × AC power supplies, 130 W	AC built-in, 126.5W	2 × AC/DC power supplies, 127 W	2 × AC power supplies, 110 W	AC built-in, 105.5 W
Cooling	4 fans, max < 33 dB	1 fan	2 fan modules	2 fan modules	3 fans
Max noise	max < 33 dB	47.9 dB	75 dB	37 dB	37 dB
Origin	Russia	USA	China	USA	China

MES3510S-08P



L3 PoE Industrial Switch (physical specs)

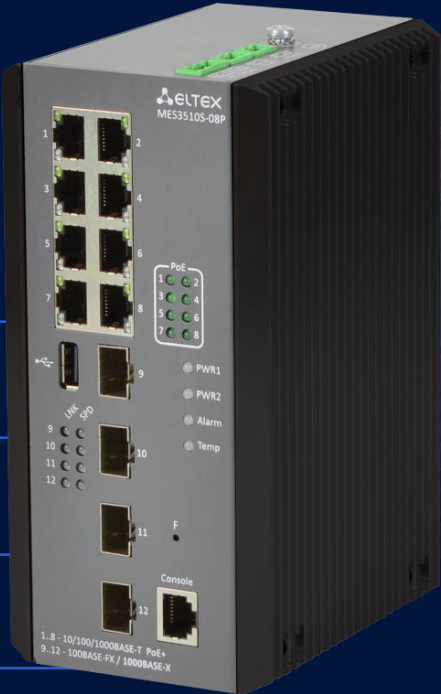
	Eltex MES3510S-08P	Cisco IE-3100-8P2C	MOXA G512E-8PoE-4GSFP-T	FS IES3100-8TF-P
Ports	8 × 1G PoE+ 4 × 1G SFP 1 × RJ-45 Console	8 × 1G PoE+ 4 × 1G Combo 1 × Console RJ-45 1 × USB Console	8 × 1G PoE+ 4 × 1G SFP 1 × USB Console	8 × 1G PoE+ 2 × 2.5G SFP 1 × RJ-45 Console
Dimensions	8.7 x 17.5 x 11.5 cm	7.6 x 12.7 x 12.9 cm	7.9 x 13.5 x 13.7 cm	5.2 x 14 x 11 cm
Weight	1.87 kg	1.04 kg	1.44 kg	0.7 kg
Power type, max consumption	Dual DC/AC (DRS-270-56), 20 W	AC/DC, 26 W	DC, 14.36 W	Dual DC (1+1 external), 10 W
PoE Budget	240 W	240 W	240 W	240 W
Operating temperature	-40 to +70 °C	-40° to 75 °C	-40 to +75 °C	-40 to +75 °C
Ingress protection	IP30	IP30	IP30	IP30
Origin	Russia	USA	Taiwan	China



MES3510S-08P

L3 PoE Industrial Switch (features)

	Eltex MES3510S-08P	Cisco IE-3100-8P2C	MOXA G512E-8PoE-4GSFP-T	FS ES3100-8TF-P
Bandwidth (Gbps)	24	24	24	26
Throughput for 64 bytes (MPPS)	17.8	14.88	17.8	14.88
MAC table	16 384	8 000	8 000	8 000
L2 features	Q-in-Q, IGMP snooping, STP/RSTP/MSTP, LAG	STP/RSTP/MSTP, LAG, IGMP snooping	Q-in-Q, IGMP snooping, STP/RSTP/MSTP, LAG	Q-in-Q, IGMP snooping, STP/RSTP/MSTP, LAG
L3 features	VRRP, PIM, OSPF v2/v3, IS-IS, BGP*	—	—	VRRP, PIM, OSPF v2/v3, IS-IS, BGP
Quality of Service	8 egress queues per port	8 egress queues per port	4 priority queues per port	8 egress queues per port
Management	SNMP, CLI, Web interface, Telnet, SSH	SNMP, CLI, Web interface, Telnet, SSH	SNMP, CLI, Telnet, SSH	SNMP, CLI, Web interface, Telnet, SSH
SCADA features	PTP, PRP	PTP	—	—



* Requires a license

Key Takeaways



- Switches, particularly access switches, are one of the most mature and well-established product lines in Eltex's portfolio
- In terms of pricing, Eltex equipment competes with not only American, but with Asian vendors too
- In a comprehensive comparison, Eltex access switches are on par with, and, in some respects, even outperform the market leaders
- When implementing complex projects, equipment testing helps identify potential risks and verify actual compliance with the requirements



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