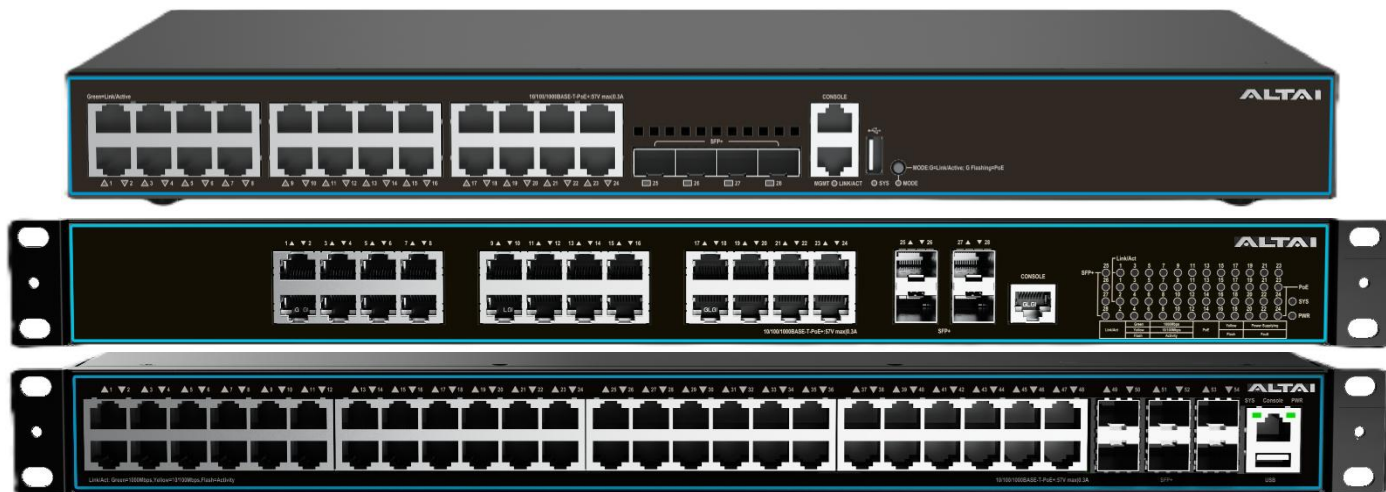


MES3100

High-Performance Multi-Gig Managed Layer 3 PoE Switch



802.3af/at
Compliant



Gigabit
Ethernet Speed



SFP+
Support



* Compatible with
AltaiGate/AltaiCare On-Premises

The MES3100 Series is a high-performance Layer 3 managed switch family engineered for modern campus and enterprise access networks. Combining full-Gigabit downlink interfaces with up to 10G uplinks, it delivers the bandwidth and scalability required for dense deployments such as campuses, hotels, factories, and enterprise offices. With PoE/PoE+ models, the series can power IP cameras, wireless access points, IP phones, and access control devices over a single Ethernet cable, simplifying cabling and lowering overall infrastructure cost.

At the control plane, the MES3100 Series delivers comprehensive Ethernet and IP functionalities, including 802.1Q VLAN, 802.3x flow control, advanced Layer 2 multicast with IGMP/MLD snooping, and a full Layer 3 feature set with static routing, policy-based routing, and OSPF. These capabilities allow the switches to operate both as access gateways and compact aggregation nodes.

Network resiliency is enhanced through support for STP/RSTP/MSTP, ERPS ring protection, and MLAG cross-device link aggregation, enabling fast convergence and flexible active-active architectures for improved reliability and network availability.

For secure management and access control, the platform supports console, HTTPS, SSHv2, and SNMPv3, along with comprehensive security features such as IEEE 802.1X authentication, MAC-based access control, RADIUS integration, role-based user privilege levels, and uRPF to mitigate spoofed traffic.

Together, these capabilities allow IT teams to build campus networks that are easy to deploy, simple to manage, and resilient enough to support bandwidth-intensive and mission-critical applications today and in the future.

* To be available in the future.

Hardware Specifications

Model	MES3100-24G4XS-POE	MES3180-28G8XS-POE-HI	MES3180-48G6XS-POE-HI
Copper Ports	24 x 10/100/1000 Mbps RJ-45 Ports (PoE)	28 x 10/100/1000 Mbps RJ-45 Ports (PoE)	48 x 10/100/1000 Mbps RJ-45 Ports (PoE)
SFP/SFP+ Slots	4 x 1/10 Gbps SFP+ Uplink Ports	8 x 1/10 Gbps SFP+ Uplink Ports	6 x 1 G SFP Uplink Ports
Management Port	–	1 x RJ45	1 x RJ45
Console Port	1 x RJ45	1 x RJ45	1 x RJ45
USB Port	1 x USB 2.0	1 x USB 2.0	1 x USB 2.0
Installation	19" Rack Mount	19" Rack Mount	19" Rack Mount
Dimensions	440 (L) x 260 (W) x 44 (H) mm	440 (L) x 400 (W) x 44 (H) mm	440 (L) x 400 (W) x 44 (H) mm
Input Power	AC100-240 V, 50-60 Hz	100-240VAC 50/60 Hz	100-240VAC 50/60 Hz
1+1 Redundant Power Supply	–	✓	✓
Power Consumption	≤ 25W	≤ 30W	≤ 38W

Performance Specifications

Model	MES3100-24G4XS-POE	MES3180-28G8XS-POE-HI	MES3180-48G6XS-POE-HI
Architecture	Store and Forward	Store and Forward	Store and Forward
Switching Capacity	128 Gbps	216 Gbps	216 Gbps
Packet Forwarding Rate	95.2 Mpps	160.7 Mpps	160.7 Mpps
CPU	Single Core 800MHz	Dual Core, 1.2GHz	Dual Core, 1.2GHz
DRAM	512MB	2GB	2GB
Flash	64MB	1GB	1GB
MAC Address Table	16k	128k	128k
Buffer Memory	12MB	36MB	36MB
Jumbo Frame	12KB	9.6KB	9.6KB

Power Over Ethernet

Model	MES3100-24G4XS-POE	MES3180-28G8XS-POE-HI	MES3180-48G6XS-POE-HI
Standard	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3af/at
PoE Ports	Port 1 to 24	Port 1 to 28	Port 1 to 48
Power Pin Assignment	1/2(-), 3/6(+)	1/2(-), 3/6(+)	1/2(-), 3/6(+)
Max Power Per Port	30 W	30W	30W
Total Power Budget	360 W	720W	1400W

Software Features

Port	• IEEE 802.3x flow control • Storm suppression based on packet type (Broadcast/Multicast/Unicast) • Port auto-negotiation • Port speed and duplex mode configuration • MDI/MDI-X crossover • Link-delay • MTU configuration • Admin-down • Port isolation • Port rate limiting • IEEE 802.3az EEE (Energy Efficient Ethernet)
VLAN (Virtual Local Area Network)	• 4K VLANs • Access, Trunk, Hybrid VLAN • Protocol-based VLAN • IP Subnet-based VLAN • MAC-based VLAN • Guest and Private VLAN • Q-in-Q • VLAN mapping • Generic VLAN Registration Protocol (GVRP) and Multiple VLAN Registration Protocol (MVRP) (feature not available in MES3100)
MAC Address Table	• MAC address learning and aging • Static MAC address • Blackhole MAC address
Link Aggregation	• Static aggregation • IEEE 802.3ad LACP (Link Aggregation Control Protocol) • MLAG (Multi-chassis Link Aggregation)
DHCP (Dynamic Host Configuration Protocol)	• IPv4/IPv6 DHCP Client/Snooping/Relay/Server • Option 82
ARP (Address Resolution Protocol)	• Static/dynamic ARP • Gratuitous ARP • ARP Proxy
IPv6	• ND (Neighbour Discovery) • PMTUD (Path MTU Discovery) • IPv6-Ping, IPv6-Tracer, IPv6-Telnet, IPv6-TFTP
Routing Protocols	• IPv4/IPv6 static routing • ECMP (Equal-Cost Multi-Path) • PBR (Policy-based routing) • OSPFv2/v3 (Open Shortest Path First) • RIP (Routing Information Protocol)/RIPng (RIP Next Generation) • BGP4/BGP4+ (Border Gateway Protocol) • IS-IS/IS-IS for IPv6 (Intermediate System-to-Intermediate System)
Multicast Protocols	• IGMP (Internet Group Management Protocol)/MLD (Multicast Listener Discovery) Snooping (fast-leave/group-policy/drop-unknown) • Multicast VLAN with SVGL (Shared VLAN Group Learning) • IGMP
Loop Protection	• STP (Spanning Tree Protocol)/RSTP (Rapid STP)/MSTP (Multiple STP) • Root Guard • BPDU Guard, TC (Topology Change) protection • Loop detection

	• ERPS (Ethernet Ring Protection Switching)
Redundancy	• SmartLink • MonitorLink • VRRP (Virtual Router Redundancy Protocol)
QoS (Quality of Service)	• Diff-Serv QoS • 802.1p and DSCP priority marking
ACL (Access Control List)	• L2/L3/L4 ACL • IPv4/IPv6 ACL • Ingress ACL • Custom ACL
Port Mirroring	• Port mirroring • Remote mirroring
Security	• User privilege level/password • 802.1X authentication • MAC authentication • RADIUS/local authentication • Serial port login • Whitelist • SSH 2.0 • IP Source Guard • DoS protection • uRPF (Unicast Reverse-Path Forwarding)
Management and Maintenance	• IEEE 802.1AB LLDP • FTP/TFTP upgrades • Command Line Interface (Console/Telnet/SSH) • Web (HTTPS) • SNMP V1/V2/V3 • RMON (Remote Monitoring) Groups 1/2/3/9 • Logs/traps • NTP/SNTP • Ping/Tracert • Power, fan, temp alerts

Environment Specifications

Model	
Operating Temperature	-5 ~ +45 °C
Storage Temperature	-40 ~ +70 °C
Operating & Storage Humidity	5 to 95% (Non-Condensing)

Certifications and Warranty

Model	
Certifications	• *CE • *FCC • RoHS
Warranty	5-Year Limited Hardware Warranty

* To be available in the future.

Product Ordering Information

Standard Package

Part No.: SD.ES3100-24G4XSP-000	• Model: MES3100-24G4XS-POE • 24-Port 1GbE and 4-Port SFP+ managed Layer 3 PoE Switch • AC Power Cord
Part no.: SD.ES3180-28G8XSPH-000	• Model: MES3180-28G8XS-POE-HI • 28-Port 1GbE, and 8-Port managed Layer 3 PoE switch • Dual power supply
Part no.: SD.ES3180-48G6XSPH-000	• Model: MES3180-48G6XS-POE-HI • 48-Port 1GbE, and 6-Port SFP+ managed Layer 3 PoE switch • Dual power supply

Contact Us

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DS-MES3100-260721-V1.3

The information contained herein is subject to change without prior notice.