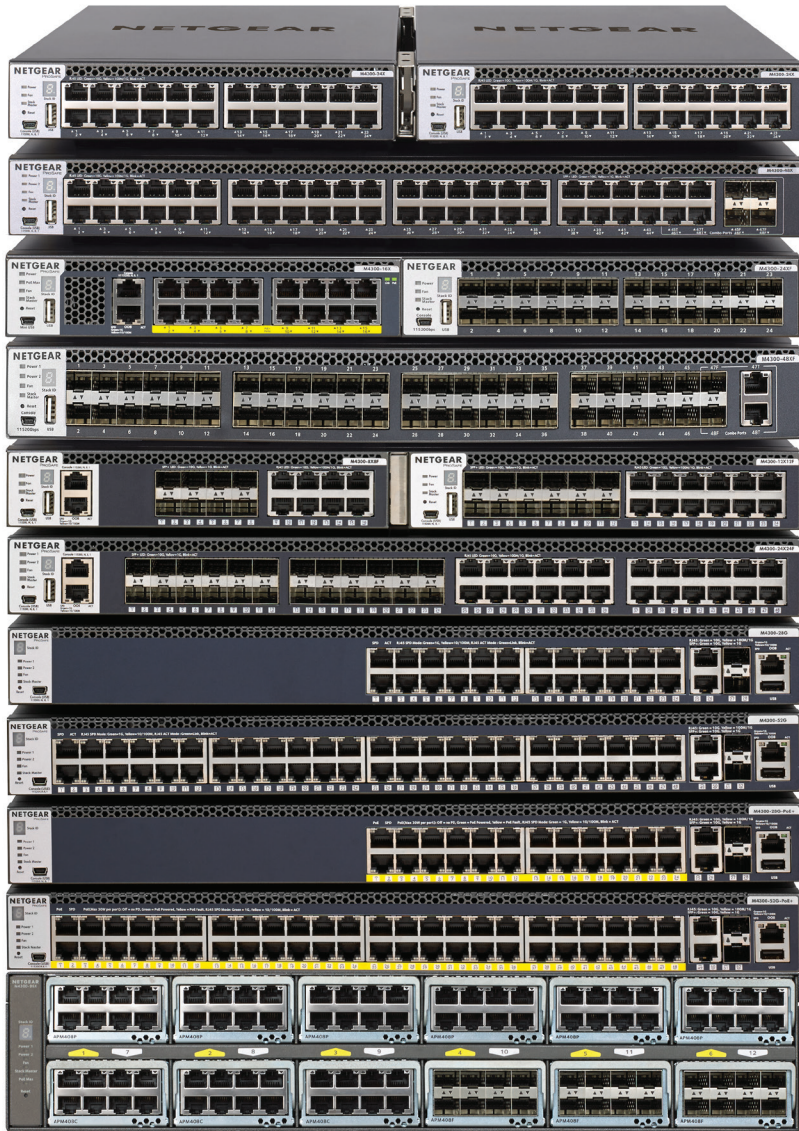


M4300 Intelligent Edge Series



M4300 series

The M4300 family provides world-class Layer 3 services for server and storage interconnect, mid-enterprise edge and SMB core. SDVoE-Ready, M4300 switches streamline AV-over-IP deployments with Zero Touch multicast.



Building 1

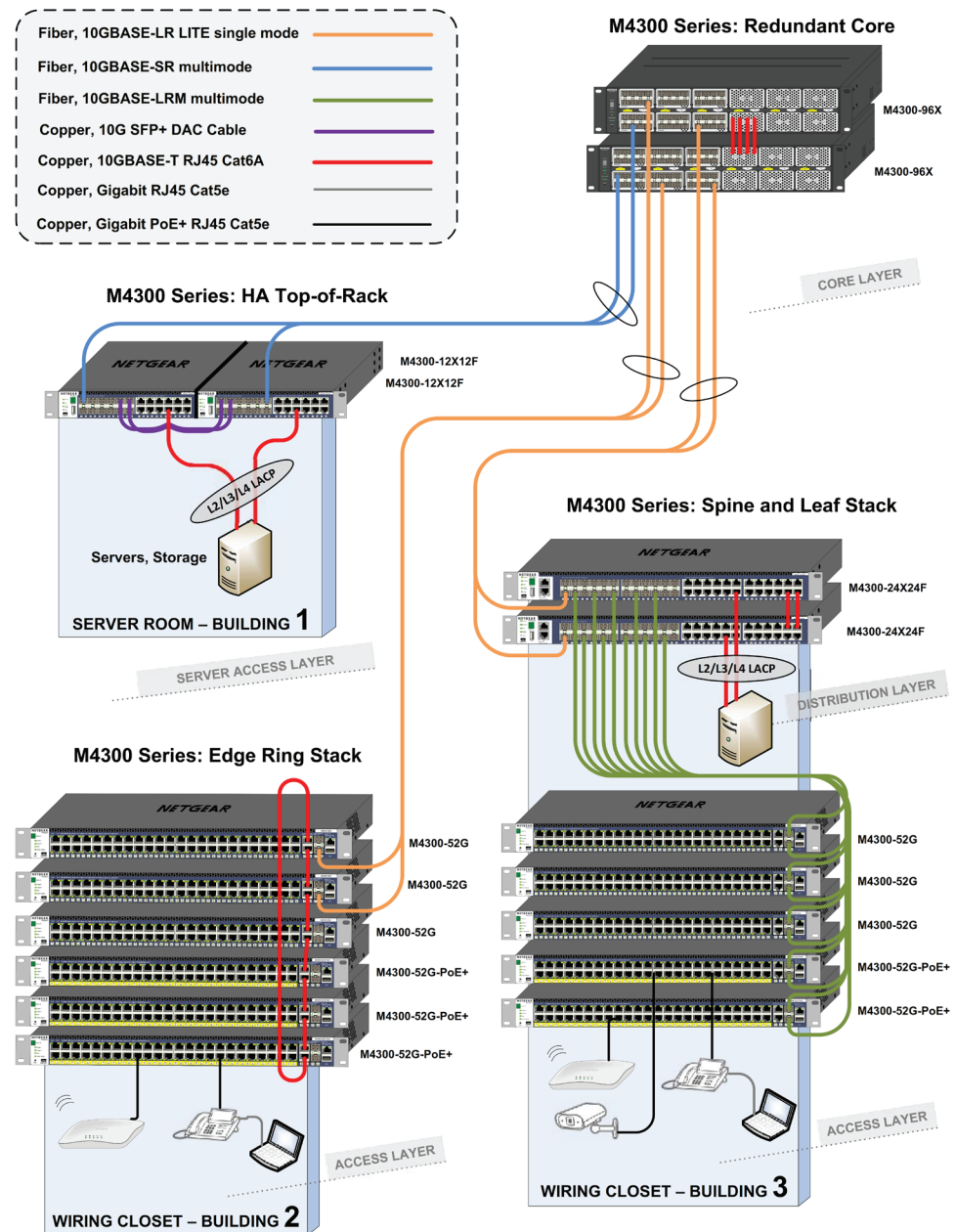
- For midsize server installations, two half-width M4300 10GbE models can be paired in a single rack space for redundant top-of-rack
- Compared with single top-of-rack switch installation, such two-unit horizontal stacking is cost-effective yet highly efficient for HA
- Management unit hitless failover and nonstop forwarding ensure no single point of failure for servers and storage

Building 2

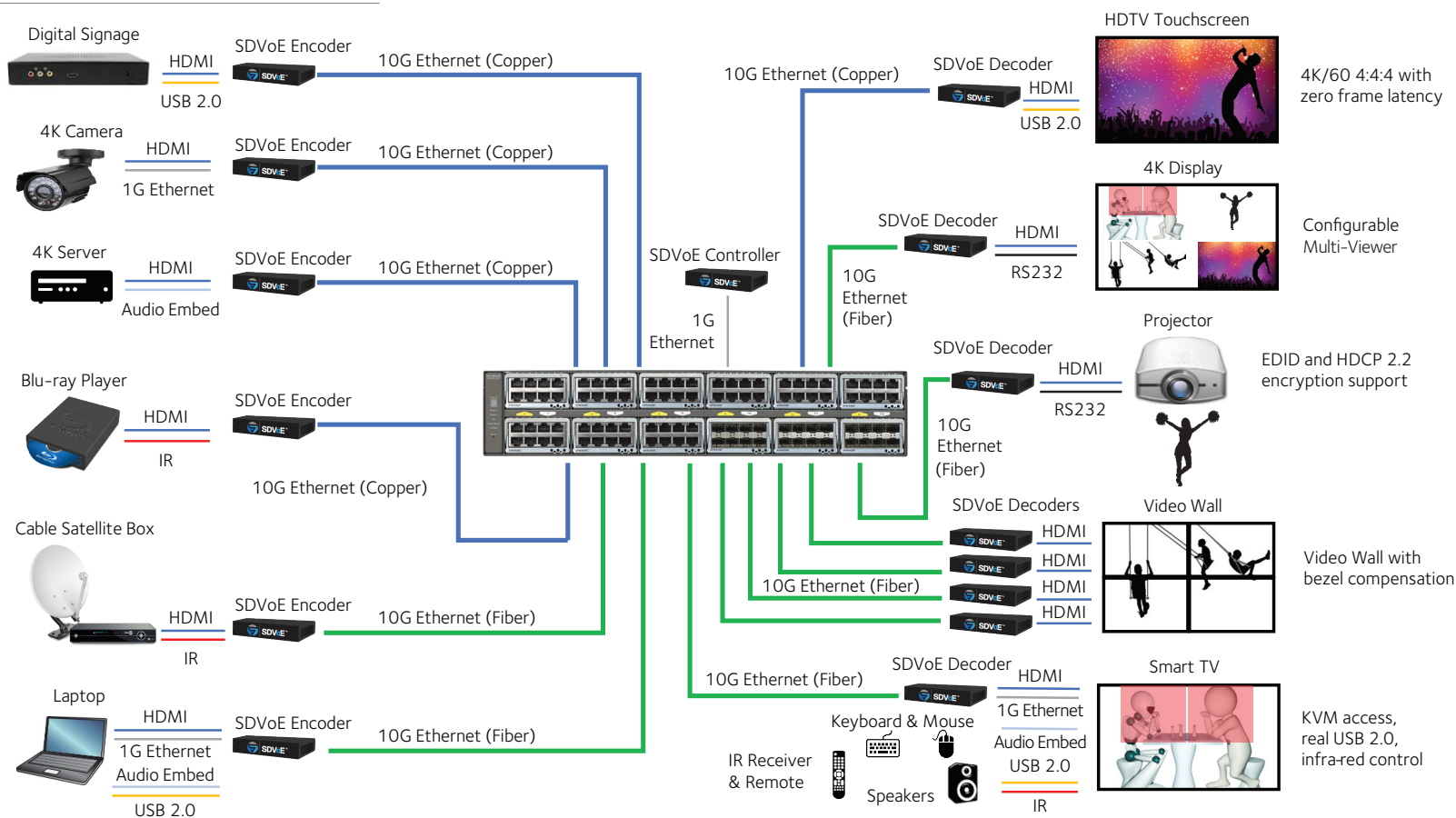
- Common for intermediate distribution frames (IDF) in K-12 and other large campuses, stacking topologies greatly simplify deployments at the edge
- While reducing the number of logical units to manage, stacking also brings network resiliency with distributed uplinks in aggregation to the core
- Management unit hitless failover and Non-Stop Forwarding (NSF) ensures continuous uptime for clients across the stack

Building 3

- For typical collapsed core installations, with a variety of 1G and 10G access ports in branch offices, server rooms or campus high performance labs
- M4300 10G models can stack with M4300 1G models, enabling innovative "spine and leaf" topologies
- Spine and leaf architectures deliver highest performance with every leaf switch (1G) connecting to every spine switch (10G) for a fully non-blocking deployment
- With management unit hitless failover and nonstop forwarding, leaf switches keep forwarding L2 and L3 traffic in and out, while backup spine unit guarantees connectivity to the core



Target Application (SDVoE)



To take the complexity out of your AV-over-IP deployment, NETGEAR created M4300 switches that are preconfigured for easy, true AV and multicast Zero Touch network configuration. Namely, IGMP Snooping, IGMP Fast Leave, IGMP Querier are already enabled for the default VLAN 1 that all your devices will automatically use. Connect your encoder and decoder devices, and power on the switch – it just works!

Enabling Zero-Touch install of SDVoE Video-over-IP

- M4300-96X streamlines AV-over-IP SDVoE solutions, replacing 48x48 switchers and any other in/out distribution
 - Non-blocking fabric for 96x10G or 24x40G or a combination
 - 12 empty slots in 2RU for 8x10G or 2x40G port expansion cards
- Use the M4300-96X online configurator to design your modular switch
 - www.netgear.com/96x-config
- Plug and play and ready to grow as per your requirements
- Takes the complexity out of your AV-over-IP deployment
- Zero Touch AV-over-IP with pre-configured L2 Multicast (SDVoE-ready)
 - IGMP Snooping, IGMP Fast Leave, IGMP Querier are already enabled
- Easy-to-use Web browser-based management GUI

The SDVoE Alliance is an eco-system of companies in and around the AV-over-IP space, working together to create a platform for the next generation of audiovisual applications. NETGEAR SDVoE Partners provide the SDVoE audio-video products and NETGEAR provides the backbone network that makes it all possible.

SDVoE is a trademark of the SDVoE Alliance
www.sdvoe.org



M4300 Series Features

The M4300 Stackable L3 Managed Switch Series comes with 40G, 10G and 1G models in a variety of form factors including PoE+ full provisioning. M4300 Switch Series delivers IPv4/IPv6 rich services for mid-enterprise edge and SMB core with mixed stacking between 40-, 10- and 1-Gigabit models. Layer 3 feature set includes static and policy-based routing, RIP, VRRP, OSPF, and PIM dynamic routing. M4300 is ideal for server aggregation, wireless access, unified communications and Video-over-IP.

NETGEAR M4300 series key features:

- Cost effective 1G access layer in campus LAN networks, and high performance 10G/40G distribution layer for midsize organizations networks
- Zero Touch AV-over-IP with pre-configured L2 Multicast (SDVoE-ready)
- Advanced Layer 2, Layer 3 and Layer 4 feature set – no license required – including Policy Based Routing, RIP, VRRP, OSPF and PIM
- Innovative mixed “Spine and Leaf”, 1G, 10G and 40G stacking with nonstop forwarding (NSF) and hitless failover redundancy
- Low acoustics, half-width 16-port and 24-port 10G models can be paired in a single rack space for redundant Top of Rack
- Modular 12-slot 2RU model scaling up to 96-port 10G by multiple of 8 ports or 24-port 40G by multiple of 2 ports
- Up to 768 (10 Gigabit) ports, 192 (40 Gigabit) ports or 384 (1 Gigabit) ports, or a combination in a single logical switch
- PoE+ (30 watts per port) with hot swap, redundant power supplies and full provisioning

NETGEAR M4300 series software features:

- Advanced classifier-based, time-based hardware implementation for L2 (MAC), L3 (IP) and L4 (UDP/TCP transport ports) security and prioritization
- Selectable Port-Channel / LAG (802.3ad – 802.1AX) L2/L3/L4 hashing for fault tolerance and load sharing with any type of Ethernet channeling
- Voice VLAN with SIP, H323 and SCCP protocols detection and LLDP-MED IP phones automatic QoS and VLAN configuration
- Efficient authentication tiering with successive DOT1X, MAB and Captive Portal methods for streamlined BYOD
- Comprehensive IPv4/IPv6 static and dynamic routing including Proxy ARP, OSPF, Policy-based routing and automatic 6-to-4 tunneling
- Scalable Pro AV deployments with IGMP+ automatic L2 multicast (only subscribed videos flow from one switch to the other across the L2 topology)
- High performance IPv4/IPv6 multicast routing with PIM timer accuracy and unhandled PIM (S,G,rpt) state machine events transitioning
- Advanced IPv4/IPv6 security implementation including malicious code detection, DHCP Snooping, IP Source Guard protection and DoS attacks mitigation
- Innovative multi-vendor Auto-iSCSI capabilities for easier virtualization optimization

NETGEAR M4300 series resiliency and availability features:

- Dual redundant, modular power supplies equipping full width models contribute to business continuity management
- Vertical or horizontal flexible stacking with management unit hitless failover and nonstop forwarding (NSF) across operational stack members
- Spine and leaf architecture with every leaf switch (1G access switches) connecting to every spine switch (distributed 10G “core” switches)
- Stacking and distributed link aggregation allow for multi-resiliency with zero downtime and load balancing capabilities
- Link Dependency new feature enables or disables ports based on the link state of different ports
- Per VLAN Spanning Tree and Per VLAN Rapid Spanning Tree (PVSTP/PVRSTP) offer interoperability with PVST+ infrastructures

NETGEAR M4300 series management features:

- DHCP/BootP innovative auto-installation including firmware and configuration file upload automation
- Industry standard SNMP, RMON, MIB, LLDP, AAA, sFlow, RSPAN and PTPv2 1-step transparent clock implementation (select M4300 models)
- Service port for out-of-band Ethernet management (OOB)
- Standard RS232 straight-through serial RJ45 and Mini-USB ports for local management console
- Standard USB port for local storage, logs, configuration or image files
- Dual firmware image for updates with minimum service interruption
- Industry standard command line interface (CLI) for IT admins used to other vendors commands
- Fully functional Web console (GUI) for IT admins who prefer an easy to use graphical interface
- Single-pane-of-glass NMS300 management platform with mass-configuration support

NETGEAR M4300 series warranty and support:

- NETGEAR ProSAFE Limited Lifetime Hardware Warranty**
- Included Lifetime Technical Support
- Included Lifetime Next Business Day Hardware Replacement

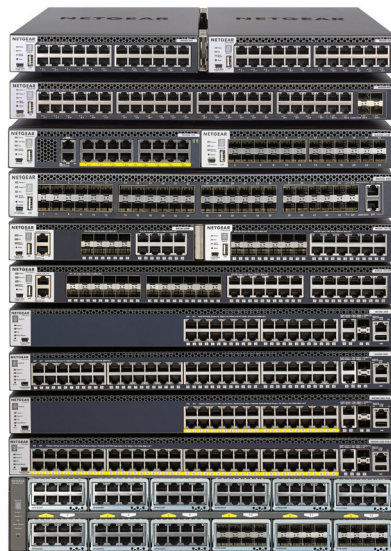
Hardware at a Glance

			FRONT			REAR		MANAGEMENT	
10G models Model name	Form-Factor	Switching Fabric	10GBASE-T RJ45 ports	10GBASE-X SFP+ ports	40GBASE-X QSFP+ports	PSU	Fans	Out-of-band Console	Model number
M4300-8X8F	Half-width 1-unit 1U 2-unit 1U rack mount	320 Gps	8 ports (independent) 100M; 1G; 10G	8 ports (independent) 1G; 10G	-	Modular 1 bay 1 PSU included: APS250W	Fixed Front-to-back 36.9dB	Ethernet: Out-of-band 1G port (Front) Console: RJ45 RS232 (Front) Console: Mini-USB (Front) Storage: USB (Front)	XSM4316S
M4300-16X	Half-width 1-unit 1U 2-unit 1U rack mount	480 Gps	16 ports PoE+100M; 1G; 2.5G; 5G; 10G	-	-	Modular 1 bay For either APS299W or APS600W	Fixed Front-to-back 35dB	Ethernet: Out-of-band 1G port (Back) Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)	
			199W PoE Budget			1 PSU included: APS299W			XSM4316PA
			500 W PoE Budget			1 PSU included: APS600W			XSM4316PB
M4300-12X12F	Half-width 1-unit 1U 2-unit 1U rack mount	480 Gps	12 ports (independent) 100M; 1G; 10G	12 ports (independent) 1G; 10G	-	Modular 1 bay 1 PSU included: APS250W	Fixed Front-to-back 36.9dB	Ethernet: Out-of-band 1G port (Back) Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)	XSM4324S
M4300-24X	Half-width 1-unit 1U 2-unit 1U rack mount	480 Gps	24 ports 100M; 1G; 10G	4 ports (shared, back) 1G; 10G	-	Modular 1 bay 1 PSU included: APS250W	Fixed Front-to-back 37dB	Ethernet: Out-of-band 1G port (Back) Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)	XSM4324CS
M4300-24XF	Half-width 1-unit 1U 2-unit 1U rack mount	480 Gps	2 ports (shared, back) 100M; 1G; 10G	24 ports 1G; 10G	-	Modular 1 bay 1 PSU included: APS250W	Fixed Front-to-back 39.07dB	Ethernet: Out-of-band 1G port (Back) Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)	XSM4324FS
M4300-24X24F	Full width 1-unit 1U rack mount	960 Gps	24 ports (independent) 100M; 1G; 10G	24 ports (independent) 1G; 10G	-	Modular 2 bays 1 PSU included: APS250W	Fixed Front-to-back 35.8dB	Ethernet: Out-of-band 1G port (Front) Console: RJ45 RS232 (Front) Console: Mini-USB (Front) Storage: USB (Front)	XSM4348S
M4300-48X	Full width 1-unit 1U rack mount	960 Gps	48 ports 100M; 1G; 10G	4 ports (shared) 1G; 10G	-	Modular 2 bays 1 PSU included: APS250W	Fixed Front-to-back 40.3dB	Ethernet: Out-of-band 1G port (Back) Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)	XSM4348CS
M4300-48XF	Full width 1-unit 1U rack mount	960 Gps	2 ports (shared) 100M; 1G; 10G	48 ports 1G; 10G	-	Modular 2 bays 1 PSU included: APS250W	Fixed Front-to-back 42.04dB	Ethernet: Out-of-band 1G port (Back) Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)	XSM4348FS

Hardware at a Glance

			FRONT			REAR		MANAGEMENT		
10G models Model name	Form-Factor	Switching Fabric	10GBASE-T RJ45 ports	10GBASE-X SFP+ ports	40GBASE-X QSFP+ports	PSU	Fans	Out-of-band Console	Model number	
M4300-96X	Modular 1-unit 2U rack mount	1.920 Tbps	up to 96 ports 100M; 1G; 2.5G; 5G; 10G	up to 96 ports 1G; 10G	Up to 24 ports 40G	Modular 2 bays for APS600W or APS1200W	Fixed Front-to-back 35.8dB (no PoE) 66.8dB (max PoE)	Ethernet: Out-of-band 1G port (Back)Console: RJ45 RS232 (Back) Console: Mini-USB (Back) Storage: USB (Back)		
			APM408C (8 ports) APM408P (8 ports PoE+)*	APM408F (8 ports)	APM402XL (2 ports)	Empty switch version, no PSU (PSU must be purchased separately)				XSM4396K0
			* Only first 6 slots are delivering PoE power to APM408P cards for 48 PoE+ ports per switch. APS1200W PSU is preferred for PoE applications.			Starter Kit with the switch, 48 x SFP+ (6 x APM408F) and 1 PSU APS600W				XSM4396K1
			110V/220V AC	34W (min) 232W (max) PoE Budget with 1 x APS600W PSU, or 1+1 redundant*		110V/220V AC	1,440W (min/max) PoE Budget with 2 x APS1200W PSUs in shared mode*			
			110V/220V AC	634W (min) 832W (max) PoE Budget with 2 x APS600W PSUs in shared mode		110V AC	1,084W (min) 1,282W (max) PoE Budget with APS600W+APS1200W PSUs in shared mode			
M4300-96X online configurator: www.netgear.com/96x-config			110V AC	484W (min) 682W (max) PoE Budget with 1 x APS1200W PSU, or 1+1 redundant		220V AC	1,234W (min) 1,432W (max) PoE Budget with APS600W+APS1200W PSUs in shared mode			
			220V AC	634W (min) 832W (max) PoE Budget with 1 x APS1200W PSU, or 1+1 redundant						
* PoE Budget depends on number of PSU and APM port cards per switch. Min values above are guaranteed when 6xAPM408P (48x10G PoE+) plus any combination of 6 other port cards. Max values are guaranteed when only 6xAPM408P (48x10G PoE+) per switch, or less. APS600W provides 600W@110V/220VAC; APS1200W delivers 1,050W@110VAC or 1,200W@220VAC per PSU. The system consumes 110W, plus 5W per empty slot. APM408C/APM408P consume 38W per port card. APM408F/APM402XL consume 23W per port card.										

Front View



M4300-24X
M4300-48X
M4300-16X
M4300-24XF
M4300-48XF
M4300-8X8F
M4300-12X12F
M4300-24X24F
M4300-28G
M4300-52G
M4300-28G-PoE+
M4300-52G-PoE+
M4300-96X

Rear View



Hardware at a Glance

			FRONT			REAR		MANAGEMENT	
1G models Model name	Form-Factor	Switching Fabric	10/100/ 1000 BASE-T RJ45 ports	100/1000/ 10G BASE-T RJ45 ports	1000/10G BASE-X SFP+ ports	PSU	Fans	Out-of-band Console	Model number
M4300-28G	Full width 1-unit 1U rack mount	128 Gps	24 ports (No 10M/half on ports 17-24)	2 ports (independent) 100M; 1G; 10G	2 ports (independent) 1G; 10G	Modular 2 bays 1 PSU included: APS150W	Fixed Front-to-back 30.3dB	Ethernet: Out-of-band 1G port (Front)Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)	GSM4328S
M4300-52G	Full width 1-unit 1U rack mount	176 Gps	48 ports (No 10M/half 17-24 and 41-48)	2 ports (independent) 100M; 1G; 10G	2 ports (independent) 1G; 10G	Modular 2 bays 1 PSU included: APS150W	Fixed Front-to-back 31.5dB	Ethernet: Out-of-band 1G port (Front)Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)	GSM4352S
M4300-28G-PoE+	Full width 1-unit 1U rack mount	128 Gps	24 ports PoE+ (No 10M/half on ports 17-24)	2 ports (independent) 100M; 1G; 10G	2 ports (independent) 1G; 10G	Modular 2 bays 1 PSU included: APS550W	Fixed Front-to-back 39.8dB	Ethernet: Out-of-band 1G port (Front)Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)	GSM4328PA
			110V/220V AC input	480W PoE Budget with 1 PSU 480W PoE Budget with 2 PSUs in RPS mode 720W PoE Budget with 2 PSUs in EPS mode		1 PSU included: APS550W			GSM4328PB
			110V AC input	630W PoE Budget with 1 PSU 630W PoE Budget with 2 PSUs in RPS mode 720W PoE Budget with 2 PSUs in EPS mode		1 PSU included: APS1000W			
M4300-52G-PoE+	Full width 1-unit 1U rack mount	176 Gps	220V AC input	720W PoE Budget with 1 PSU 720W PoE Budget with 2 PSUs in RPS mode					
			48 ports PoE+ (No 10M/half 17-24 and 41-48)	2 ports (independent) 100M; 1G; 10G	2 ports (independent) 1G; 10G	Modular 2 bays RPS connector	Fixed Front-to-back 39.8dB	Ethernet: Out-of-band 1G port (Front)Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)	
			110V/220V AC input	480W PoE Budget with 1 PSU 480W PoE Budget with 2 PSUs in RPS mode 720W PoE Budget with 2 PSUs in EPS mode		1 PSU included: APS550W	External RPS4000 for power redundancy (RPS) when 2 internal PSUs are used in EPS mode		GSM4352PA
			110V AC input	591W PoE Budget with 1 PSU 591W PoE Budget with 2 PSUs in RPS mode 1,010W PoE Budget with 2 PSUs in EPS mode		1 PSU included: APS1000W	External RPS4000 for power redundancy (RPS) when 2 internal PSUs are used in EPS mode		GSM4352PB
			220V AC input	860W PoE Budget with 1 PSU 860W PoE Budget with 2 PSUs in RPS mode 1,440W PoE Budget with 2 PSUs in EPS mode					

PoE models: APS550W and APS1000W cannot be mixed and matched. A switch can only have two APS550W, or two APS1000W. PA versions can be upgraded to PB, but their APS550W must be replaced by APS1000W (and reverse).

Software at a Glance

	LAYER 3 PACKAGE											
Model name	Management	Usability Enhancements	IPv4/IPv6 ACL and QoS, DiffServ	IPv4/IPv6 Multicast filtering	IPv4 / IPv6 Policing and Convergence	Spanning Tree Green Ethernet	VLANs	Trunking Port Channel	IPv4/IPv6 Authentication Security	IPv4/IPv6 Static Routing	IPv4/IPv6 Dynamic Routing	Model number
M4300 series	Out-of-band; Web GUI; HTTPs; CLI; Telnet; SSH SNMP, MIBs RSPAN Radius Users, TACACS+	Stacking NSF with Hitless Failover Link Dependency (Enable or Disable one or more ports based on the link state of one or more different ports) Syslog and Packet Captures can be sent to USB storage	Ingress/egress 1 Kbps shaping Time-based Single Rate Policing	IGMP+ for automatic IGMP IGMPv3 MLDv2 Snooping, Proxy ASM & SSM IGMPv1,v2 Querier (compatible v3) Control Packet Flooding	Auto-VoIP Auto-iSCSI Policy-based routing (PBR) LLDP-MED IEEE 1588 PTPv2** 1-Step End-to-End Transparent Clock	STP, MTP, RSTP PV(R)STP ¹ BPDU/STRG Root Guard EEE (802.3az)	Static, Dynamic, Voice, MAC GVRP/GMRP Double VLAN mode Private VLANs	Distributed LAG across the stack Static or Dynamic LACP (LACP automatically reverts to and from Static LAG) Seven (7) L2/L3/L4 hashing algorithms	Successive Tiering (DOT1X; MAB; Captive Portal) DHCP Snooping Dynamic ARP Inspection IP Source Guard	Port, Subnet, VLAN routing, DHCP Relay; Multicast static routes; Stateful DHCPv6 Server	IPv4: RIP, VRRP IPv4/IPv6: OSPF, Proxy ARP, PIM-SM, PIM-DM, 6-to-4 tunnels	All models

¹ CLI only

** All M4300 models except 48-port 10G platforms (M4300-24X24F, M4300-48X, M4300-48XF)

Performance at a Glance

	TABLE SIZE*												
Model name	MAC ARP/NDP	Routing / Switching Capacity	Throughput	Application Route Scaling	Packet Buffer	Latency	IP Multicast Forwarding Entries	CPU	Multicast IGMP Group membership	VLANs	DHCP	sFlow	Model number
M4300-96X	256K MAC* 8K ARP/NDP*	1.920 Tbps Line-rate	2,857 Mpps	Static: 64v4/64v6 RIP: 512 OSPF: 12,000	96Mb	64-byte frames <2.56µs 10G RJ45 <0.89µs 10G SFP	2,048 IPv4 1,024 IPv6	CPU 1.4 Ghz 2GB RAM 256MB Flash	2K IPv4 2K IPv6	4K VLANs	DHCP Server: 2K leases IPv4: 256 pools IPv6: 16 pools	416 samplers 416 pollers 8 receivers	XSM4396K0 XSM4396K1
M4300-24X24F M4300-48X M4300-48XF	128K MAC* 8K ARP/NDP*	960 Gbps Line-rate	714 Mpps	Static: 64v4/64v6 RIP: 512 OSPF: 12,000	56Mb	M4300-24X24F <2.39µs 10G RJ45 <0.88µs 10G SFP+ M4300-48X <2.41µs 10G RJ45 <1.51µs 10G SFP+ M4300-48XF <1.245µs 10G RJ45 <0.9µs 10G SFP+	1,024 IPv4 512 IPv6	CPU 800 Mhz 1GB RAM 256MB Flash					XSM4348S XSM4348CS XSM4348FS
M4300 other models	16K MAC 888 ARP/NDP	Up to 480 Gbps All models Line-rate	Up to 357 Mpps	Static: 64v4/64v6 RIP: 512 OSPF: 512	M4300-12X12F: 32Mb Others: 16Mb	M4300-8X8F: <2.43µs 10G RJ45 <0.89µs 10G SFP+ All others: <2.76µs 10G RJ45 <1.83µs 10G SFP+	96 IPv4 32 IPv6	CPU 800 Mhz 1GB RAM 256MB Flash					All other models

* For mixed stacking between more capable devices and less capable devices, SDM mixed stacking template is used based on "least common denominator" set of capacities and capabilities. Other SDM "native" templates can be used on superior platforms, for a larger table size. A stack requires an uniform table size across all stack members.

Components

M4300-8X8F Stackable Managed Switch

Ordering information

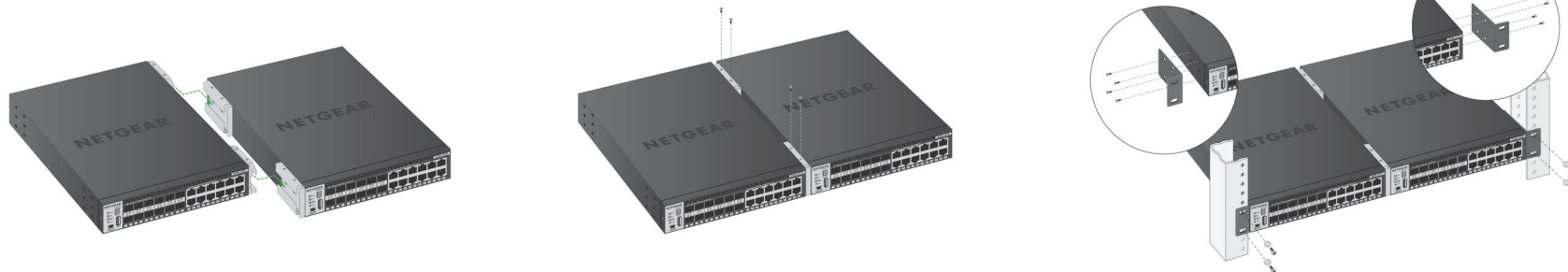
- Americas, Europe: XSM4316S-100NES
- Asia Pacific: XSM4316S-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



To install a single half-width switch in a rack, a 19-inch rack-mount kit is supplied with the switch:



To install two half-width switches in a rack, inside and outside middle mounts and rack-mount brackets are supplied with the switches:



- 8-port 10GBASE-T (RJ45) all independent
- 8-port 10GBASE-X (SFP+) all independent
- 320Gbps non-blocking fabric across 16 ports
- Out-of-band 1G Ethernet management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Half-width form factor with one- and two-unit rack mount kit
- Two half-width switches can be installed in a single rack space for redundant top-of-rack
- Ships with one modular APS250W PSU in its power supply slot
- Low acoustics (36.9dB @25°C / 77°F), or fans off



Components

M4300-12X12F Stackable Managed Switch

Ordering information

- Americas, Europe: XSM4324S-100NES
- Asia Pacific: XSM4324S-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 12-port 10GBASE-T (RJ45) all independent
- 12-port 10GBASE-X (SFP+) all independent
- 480Gbps non-blocking fabric across 24 ports
- Out-of-band 1G Ethernet management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Half-width form factor with one- and two-unit rack mount kit
- Two half-width switches can be installed in a single rack space for redundant top-of-rack
- Ships with one modular APS250W PSU in its power supply slot
- Low acoustics (36.9dB @25°C / 77°F)



M4300-16X Stackable Managed Switch

Ordering information

- Americas, Europe (299W PSU): XSM4316PA-100NES
- Americas, Europe (600W PSU): XSM4316PB-100NES
- Asia Pacific (299W PSU): XSM4316PA-100AJS
- Asia Pacific (600W PSU): XSM4316PB-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 16-port 100M/1G/2.5G/5G/10GBASE-T with PoE+ (copper RJ45)
- 320Gbps non-blocking fabric across 16 ports
- Out-of-band 1G Ethernet management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Half-width form factor with one- and two-unit rack mount kit
- Two half-width switches can be installed in a single rack space for redundant top-of-rack
- (XSM4316PA) Ships with one modular APS299W PSU in its power supply slot
- (XSM4316PB) Ships with one modular APS600W PSU in its power supply slot
- Low acoustics (36dB with APS299W, 35dB with APS600W, @25°C / 77°F)



Components

M4300-24X Stackable Managed Switch

Ordering information

- Americas, Europe: XSM4324CS-100NES
- Asia Pacific: XSM4324CS-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 24-port 10GBASE-T (RJ45)
- 4-port 10GBASE-X (SFP+) (shared, back)
- 480Gbps non-blocking fabric across 24 ports
- Out-of-band 1G Ethernet management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Half-width form factor with one- and two-unit rack mount kit
- Two half-width switches can be installed in a single rack space for redundant top-of-rack
- Ships with one modular APS250W PSU in its power supply slot
- Low acoustics (37dB @25°C / 77°F)



M4300-24XF Stackable Managed Switch

Ordering information

- Americas, Europe: XSM4324FS-100NES
- Asia Pacific: XSM4324FS-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 24-port 10GBASE-X (SFP+)
- 2-port 10GBASE-T (RJ45) (shared, back)
- 480Gbps non-blocking fabric across 24 ports
- Out-of-band 1G Ethernet management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Half-width form factor with one- and two-unit rack mount kit
- Two half-width switches can be installed in a single rack space for redundant top-of-rack
- Ships with one modular APS250W PSU in its power supply slot
- Low acoustics (39.7dB @25°C / 77°F)



Components

M4300-24X24F Stackable Managed Switch

Ordering information

- Americas, Europe: XSM4348S-100NES
- Asia Pacific: XSM4348S-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 24-port 10GBASE-T (RJ45) all independent
- 24-port 10GBASE-X (SFP+) all independent
- 960Gbps non-blocking fabric across 48 ports
- Out-of-band 1G Ethernet Management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Full width form factor with one-unit rack mount kit
- Ships with one modular APS250W PSU in first power supply slot
- Ship with a blank cover in the second power supply slot
- Low acoustics (35.8dB @25°C / 77°F)



M4300-48X Stackable Managed Switch

Ordering information

- Americas, Europe: XSM4348CS-100NES
- Asia Pacific: XSM4348CS-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 48-port 10GBASE-T (RJ45)
- 4-port 10GBASE-X (SFP+) (shared)
- 960Gbps non-blocking fabric across 48 ports
- Out-of-band 1G Ethernet Management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Full width form factor with one-unit rack mount kit
- Ships with one modular APS250W PSU in first power supply slot
- Ship with a blank cover in the second power supply slot
- Low acoustics (40.3dB @25°C / 77°F)



Components

M4300-48XF Stackable Managed Switch

Ordering information

- Americas, Europe: XSM4348FS-100NES
- Asia Pacific: XSM4348FS-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 48-port 10GBASE-X (SFP+)
- 2-port 10GBASE-T (RJ45) (shared)
- 960Gbps non-blocking fabric across 48 ports
- Out-of-band 1G Ethernet Management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Full width form factor with one-unit rack mount kit
- Ships with one modular APS250W PSU in first power supply slot
- Ship with a blank cover in the second power supply slot
- Low acoustics (42.4dB @ 25°C / 77°F)



SDVoE-Ready M4300-96X

Up to 96-port 10G,
PoE options

Modular. Granular. Unique.



SDVoE is a trademark of the SDVoE Alliance
www.sdvoe.org

Components

M4300-96X Stackable and Modular Managed Switch

Ordering information

- Worldwide (Empty Switch, No PSU): XSM4396K0-10000S
- Americas, Europe (Starter Kit 48xSFP+): XSM4396K1-100NES
- Asia Pacific (Starter Kit 48xSFP+): XSM4396K1-100AJS
- Worldwide (10G Copper card): APM408C-10000S
- Worldwide (10G Copper PoE+ card): APM408P-10000S
- Worldwide (10G Fiber card): APM408F-10000S
- Worldwide (40G Fiber card): APM402XL-10000S
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



Empty version (XSM4396K0)



- 1.92Tbps non-blocking fabric for 96-port 10G or 24-port 40G or a combination
 - 12 slots (front) available in 2RU for 8x10G or 2x40G port expansion cards
 - XSM4396K0 is the SKU for the M4300-96X empty switch (no PSU)
 - XSM4396K1 is the starter kit including 48xSFP+ and 1x600W PSU
- 4 port cards and hundreds of combinations
 - APM408C features 8-port 100M/1G/2.5G/5G/10GBASE-T (copper RJ45)
 - APM408P features 8-port 100M/1G/2.5G/5G/10GBASE-T with PoE+ (copper RJ45)
 - APM408F features 8-port 1G/10GBASE-X (fiber SFP+)
 - APM402XL features 2-port 40GBASE-X (QSFP+)
- PoE over 10G is supported up to 48 x 10G PoE+ 30W per system (first 6 slots)
- Out-of-band 1G Ethernet Management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Full width 2RU form factor with 2-post and 4-post rack mount kit
- Ships with blank covers in empty slots (front I/O; rear PSU)
- Low acoustics (35.8dB @25°C / 77°F) when no PoE
- 66.8dB @25°C / 77°F with Max PoE (1,440W)

Use the **M4300-96X online configurator** to design your modular switch:
www.netgear.com/96x-config



48xSFP+ and 1x600W PSU Starter Kit (XSM4396K1)



8x10GBASE-T Port Card - 100M/1G/2.5G/5G/10G (APM408C)



8xSFP+ Port Card - 1G/10G (APM408F)



8x10GBASE-T PoE+ Port Card - 100M/1G/2.5G/5G/10G (APM408P)



2xQSFP+ Port Card - 40G (APM402XL)

Components

M4300-28G Stackable Managed Switch

Ordering information

- Americas, Europe: GSM4328S-100NES
- Asia Pacific: GSM4328S-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 24-port 1000BASE-T (RJ45)
- 2-port 10GBASE-T (RJ45) all independent
- 2-port 10GBASE-X (SFP+) all independent
- 128Gbps non-blocking fabric across 28 ports
- Out-of-band 1G Ethernet Management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Full width form factor with one-unit rack mount kit
- Ships with one modular APS150W PSU in first power supply slot
- Ship with a blank cover in the second power supply slot
- Low acoustics (30.3dB @25°C / 77°F)



M4300-52G Stackable Managed Switch

Ordering information

- Americas, Europe: GSM4352S-100NES
- Asia Pacific: GSM4352S-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 48-port 1000BASE-T (RJ45)
- 2-port 10GBASE-T (RJ45) all independent
- 2-port 10GBASE-X (SFP+) all independent
- 176Gbps non-blocking fabric across 52 ports
- Out-of-band 1G Ethernet Management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Full width form factor with one-unit rack mount kit
- Ships with one modular APS150W PSU in first power supply slot
- Ship with a blank cover in the second power supply slot
- Low acoustics (31.5dB @25°C / 77°F)



Components

M4300-28G-PoE+ Stackable Managed Switch

Ordering information

- Americas, Europe (550W PSU): GSM4328PA-100NES
- Americas, Europe (1,000W PSU): GSM4328PB-100NES
- Asia Pacific (550W PSU): GSM4328PA-100AJS
- Asia Pacific (1,000W PSU): GSM4328PB-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 24-port 1000BASE-T (RJ45) PoE+
- 2-port 10GBASE-T (RJ45) all independent
- 2-port 10GBASE-X (SFP+) all independent
- 128Gbps non-blocking fabric across 28 ports
- Out-of-band 1G Ethernet Management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Full width form factor with one-unit rack mount kit
- (GSM4328PA) Ships with one modular APS550W PSU in first power supply slot
- (GSM4328PB) Ships with one modular APS1000W PSU in first power supply slot
- Ship with a blank cover in the second power supply slot



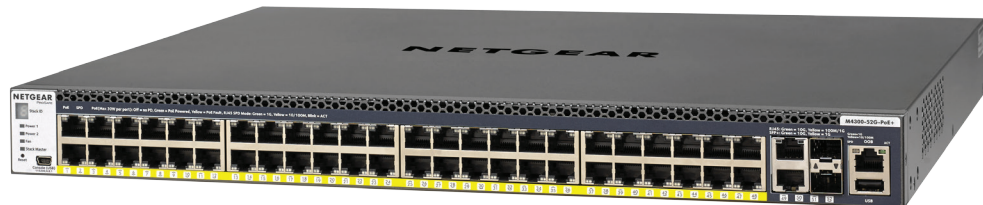
M4300-52G-PoE+ Stackable Managed Switch

Ordering information

- Americas, Europe (550W PSU): GSM4352PA-100NES
- Americas, Europe (1,000W PSU): GSM4352PB-100NES
- Asia Pacific (550W PSU): GSM4352PA-100AJS
- Asia Pacific (1,000W PSU): GSM4352PB-100AJS
- Warranty: Limited Lifetime ProSafe Hardware Warranty**



- 48-port 1000BASE-T (RJ45) PoE+
- 2-port 10GBASE-T (RJ45) all independent
- 2-port 10GBASE-X (SFP+) all independent
- 176Gbps non-blocking fabric across 52 ports
- Out-of-band 1G Ethernet Management port
- Mini-USB and RJ45 RS232 console ports and USB storage port
- Full L3 feature set and non-stop forwarding (NSF) stacking
- Full width form factor with one-unit rack mount kit
- (GSM4352PA) Ships with one modular APS550W PSU in first power supply slot
- (GSM4352PB) Ships with one modular APS1000W PSU in first power supply slot
- Ship with a blank cover in the second power supply slot



Components

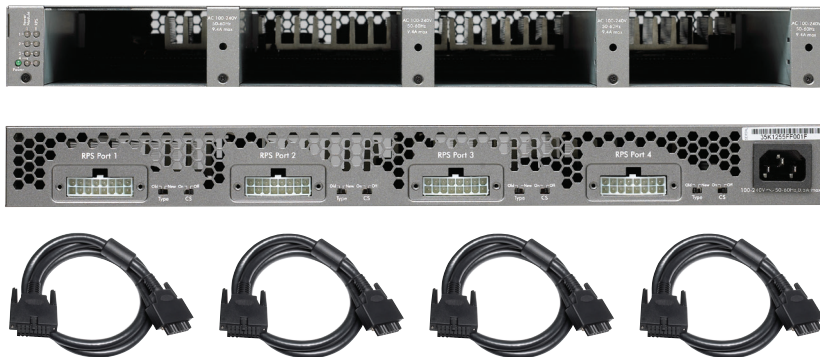
RPS4000v2 RPS unit for up to 4 concurrent switches

Ordering information

- Americas, Europe: RPS4000-200NES
- Asia Pacific: RPS4000-200AJS
- Warranty: 5 years

RPS mode: provide N+1 redundancy to M4300-52G-PoE+ when its two internal PSUs are used in EPS (shared) mode

- One APS1000W per M4300-52G-PoE+ connected to the RPS4000 unit
- Up to four (4) M4300-52G-PoE+ switches per RPS4000 unit



Front view

- RPS4000 is 1RU unit with four (4) empty slots

Rear view

- Four (4) embedded RPS connectors
- Switch selectors for RPS/EPS power modes

Included:

- Four (4) RPS cables – 60cm each (~2 ft)
- Rack mount kit

Components

APS1200W Power Supply Unit

Ordering information

- Americas, Europe: APS1200W-100NES
- Asia Pacific: APS1200W-100AJS
- Warranty: 5 years

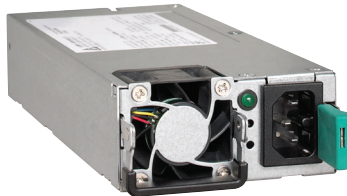


- Modular PSU for M4300-96X (PoE applications)
- C15 connector
- Capacity:
 - 110V-240V AC power input
 - Up to 1,200W output power at 110V/220V AC

APS1000W Power Supply Unit

Ordering information

- Americas, Europe: APS1000W-100NES
- Asia Pacific: APS1000W-100AJS
- Warranty: 5 years



- Power module for RPS4000 unit
- Additional PSU for M4300-28G-PoE+ (GSM4328PB) and M4300-52G-PoE+ (GSM4352PB)
- C15 connector
- Capacity:
 - 110V-240V AC power input
 - Up to 640W output power at 110V AC
 - Up to 910W output power at 220V AC

APS600W Power Supply Unit

Ordering information

- Americas, Europe: APS600W-100NES
- Asia Pacific: APS600W-100AJS
- Warranty: 5 years



- Modular PSU for M4300-96X (non-PoE applications)
- Replacement PSU for M4300-16X (PoE applications)
- C14 connector
- Capacity:
 - 110V-240V AC power input
 - Up to 600W output power at 110/220V AC

Components

APS550W Power Supply Unit

Ordering information

- Americas, Europe: APS550W-100NES
- Asia Pacific: APS550W-100AJS
- Warranty: 5 years



- Additional PSU for M4300-28G-PoE+ (GSM4328PA) and 4300-52G-PoE+ (GSM4352PA)
- C14 connector
- Capacity:
 - 110V-240V AC power input
 - Up to 575W output power at 110/220V AC

APS299W Power Supply Unit

Ordering information

- Americas, Europe: APS299W-100NES
- Asia Pacific: APS299W-100AJS
- Warranty: 5 years



- Replacement PSU for M4300-16X (no or limited PoE applications)
- C14 connector
- Capacity:
 - 110V-240V AC power input
 - Up to 250W output power at 110/220V AC

APS250W Power Supply Unit

Ordering information

- Americas, Europe: APS250W-100NES
- Asia Pacific: APS250W-100AJS
- Warranty: 5 years



- Replacement PSU for M4300-8X8F, M4300-12X12F, M4300-24X, M4300-24XF
- Additional PSU for M4300-24X24F, M4300-48X, M4300-48XF
- C14 connector
- Capacity:
 - 110V-240V AC power input
 - Up to 250W output power at 110/220V AC

APS150W Power Supply Unit

Ordering information




- Americas, Europe: APS150W-100NES
- Asia Pacific: APS150W-100AJS
- Warranty: 5 years



- Additional PSU for M4300-28G and M4300-52G
- C14 connector
- Capacity:
 - 110V-240V AC power input
 - Up to 150W output power at 110/220V AC



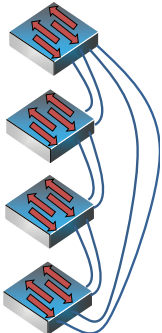
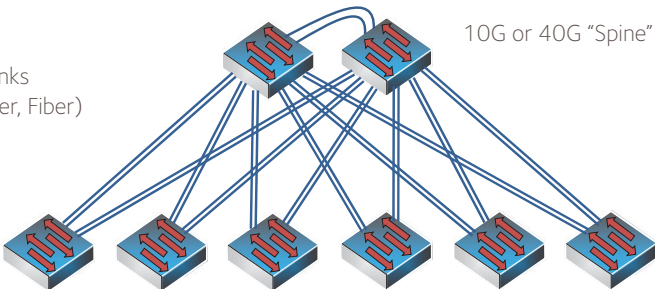
Accessories

GBIC SFP and SFP+ Optics for M4300 series

Ordering information • Worldwide: see table below • Warranty: 5 years	Multimode Fiber (MMF)		Single mode Fiber (SMF)
	OM1 or OM2 62.5/125µm	OM3 or OM4 50/125µm	9/125µm
40 Gigabit QSFP+  • Fits into M4300-96X / APM402XL QSFP+ interfaces		AXLM761 40GBASE-SR4-BiDi Duplex 1 MMF link - LC duplex connector up to 100m (328 ft) AXLM761-10000S (1 unit)	AXLM762 40GBASE-LR4 long reach single mode LC duplex connector up to 10km (6.2 miles) AXLM762-10000S (1 unit)
10 Gigabit SFP+  • Fits into M4300 models SFP+ interfaces	AXM763 10GBase-LRM long reach multimode 802.3aq - LC duplex connector up to 220m (722 ft) AXM763-10000S (1 unit)	AXM763 10GBase-LRM long reach multimode 802.3aq - LC duplex connector up to 260m (853 ft) AXM763-10000S (1 unit) AXM761 10GBase-SR short reach multimode LC duplex connector OM3: up to 300m (984 ft) OM4: up to 550m (1,804 ft) AXM761-10000S (1 unit) AXM761P10-10000S (pack of 10 units)	AXM762 10GBase-LR long reach single mode LC duplex connector up to 10km (6.2 miles) AXM762-10000S (1 unit) AXM762P10-10000S (pack of 10 units) AXM764 10GBase-LR LITE single mode LC duplex connector up to 2km (1.2 mile) AXM764-10000S (1 unit)
Gigabit SFP  • Fits into M4300 models SFP+ interfaces	AGM731F 1000Base-SX short range multimode LC duplex connector up to 275m (902 ft) AGM731F (1 unit)	AGM731F 1000Base-SX short range multimode LC duplex connector OM3: up to 550m (1,804 ft) OM4: up to 1,000m (3,280 ft) AGM731F (1 unit)	AGM732F 1000Base-LX long range single mode LC duplex connector up to 10km (6.2 miles) AGM732F (1 unit)


Accessories

GBIC SFP and SFP+ Optics for M4300 series

<p>AGM734 1000BASE-T RJ45 SFP (Gigabit)</p>	<p>Ordering information</p> <ul style="list-style-type: none">• Worldwide: AGM734-10000S• Warranty: 5 years		<ul style="list-style-type: none">• Fits into M4300 models SFP+ interfaces• 1 port Gigabit RJ45• Supports only 1000Mbps full-duplex mode• Up to 100m (328 ft) with Cat5 RJ45 or better• Conveniently adds 1G copper connectivity to M4300 fiber interfaces
<p>AXM765 10GBASE-T RJ45 SFP+ (10 Gigabit)</p>	<p>Ordering information</p> <ul style="list-style-type: none">• Worldwide: AXM765-10000S• Warranty: 5 years		<ul style="list-style-type: none">• Fits into M4300 models SFP+ interfaces• 1 port 10GBASE-T RJ45• Copper connectivity up to 30 m (98 feet) distance• CAT6a or better wiring required for 10GBASE-T up to 30 meters• Conveniently adds 10G copper connectivity to M4300 fiber interfaces
<p>M4300 series Layer 3 software package provides advanced IPv4/IPv6 fault tolerant routing capabilities for interfaces, VLANs, subnets and multicast</p>			
<p>Example of single or dual ring topology:</p>  <p>10G links (Copper, Fiber)</p> <p>1 G models: up to (4) 10G ports per switch can be used for stacking (depending on inter-switch links oversubscription requirements)</p>	<p>Example of spine and leaf topology:</p>  <p>10G or 40G "Spine" Switches</p> <p>1G "Leaf" Switches</p> <p>10G/40G models: up to (16) 40G or 10G ports per switch can be used for stacking (again, depending on oversubscription requirements between switches)</p>		

Accessories

Direct Attach Cables for M4300 series

ORDERING INFORMATION WORLDWIDE: SEE TABLE BELOW WARRANTY: 5 YEARS	SFP+ to SFP+		
	1 meter (3.3 ft)	3 meters (9.8 ft)	
40 Gigabit DAC • Fits into M4300-96X / APM402XL QSFP+ interfaces	AXLC761 40G QSFP+ Cu (passive) QSFP+ connectors AXLC761-10000S (1 unit)	AXLC763 40G QSFP+ Cu (passive) QSFP+ connectors AXLC763-10000S (1 unit)	
10 Gigabit DAC 	1 meter (3.3 ft)	3 meters (9.8 ft)	5 meters (16.4 ft)
	AXC761 10GSFP+ Cu (passive) SFP+ connectors AXC761-10000S (1 unit)	AXC763 10GSFP+ Cu (passive) SFP+ connectors AXC763-10000S (1 unit)	AXC765 10GSFP+ Cu (active) SFP+ connectors AXC765-10000S (1 unit)
	7 meters (23.0 ft)	10 meters (32.8 ft)	15 meters (49.2 ft)
	AXC767 10GSFP+ Cu (active) SFP+ connectors AXC767-10000S (1 unit)	AXC7610 10GSFP+ Cu (active) SFP+ connectors AXC7610-10000S (1 unit)	AXC7615 10GSFP+ (duplex fiber optic) SFP+ connectors AXC7615-10000S (1 unit)
	20 meters (65.6 ft)		
	AXC7620 10GSFP+ (duplex fiber optic) SFP+ connectors AXC7620-10000S (1 unit)		

- Fits into M4300 models SFP+ interfaces

** This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller and modifications to product may void the warranty; covers hardware, fans and internal power supplies – not software or external power supplies See <http://www.netgear.com/about/warranty/> for details. Lifetime technical support includes basic phone support for 90 days from purchase date and lifetime online chat support when purchased from a NETGEAR authorized reseller.

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