

ProSAFE® Next-Gen Edge Managed Switches



Auto-iSCSI
DETECTION
OPTIMIZATION

M5300 series

The Next-Gen Edge M5300 series switches are NETGEAR top of the line Gigabit stackable fully managed switches for modern access layer in campus and enterprise networks with 10 Gigabit Ethernet backbone requirements. The M5300 series delivers pure line-rate performance for virtualization or convergence, without having to pay the exorbitant acquisition and maintenance costs associated by other networking vendors. NETGEAR Next-Gen Edge solutions combine latest advances in hardware and software engineering for higher availability, stronger security, better scalability, and even more energy efficiency (1.5W per port line-rate traffic for 48+4 port versions). Like all NETGEAR products, the M5300 series delivers more functionality with less difficulty: operating software and system management features take the complexity out of delivering network services for virtualized servers, IP telephony, wireless deployments, and video surveillance infrastructures.

NETGEAR Next-Gen Edge M5300 series key features:

- 24 and 48 Gigabit models, 24 and 48 Gigabit PoE+ models up to full-power capacity, and one 24 Gigabit SFP fiber model
- Layer 2+ models with Layer 3 license upgrades available, or built-in Layer 3 models for the exact fit per application and best investment protection
- IPv4 routing in Layer 2+ package (static routing) and IPv4/IPv6 routing in Layer 3 package (dynamic routing)
- Enterprise-class L2/L3 tables with 32K MAC, 6K ARP/NDP, 4K VLANs, 2K route table size
- 4 or 24 uplink fiber (SFP) ports for Fast Ethernet or Gigabit optics
- 2 built-in uplink 10 Gigabit combo ports with either 10Gbase-T copper RJ45, or SFP+ fiber
- 2 additional uplink or stacking 10 Gigabit I/O bays for a large variety of modules and various 10 Gigabit installations
- Uplink capacity per switch is 4-port 10 Gigabit total, mixing 10GBase-T (RJ45), 10GBase-X (SFP+), 10GBase-CX4 (802.3ak) and 48 Gbps stacking ports

NETGEAR Next-Gen Edge M5300 series stacking features:

- True Virtual Chassis Stacking technology with up to 384 Gbps interconnect for network operations simplification
- Meshed stacking for multi-resiliency and advanced load balancing capabilities
- Up to 384 ports Gigabit and 16 available uplink 10 Gigabit ports per Virtual Chassis of 8 switches
- Investment protection: backward stacking capability with previous GSM72xxPS v1h1 and GSM73xxS v2h1 models

NETGEAR Next-Gen Edge M5300 series power and PoE+ features:

- 380W PoE+ budget built-in per switch and full PoE+ power budget capacity with external EPS
- Example: 96-port PoE+ in a 3 rack unit (RU) form factor and 30W power on all ports (2,880W budget) using two units M5300-52G-POE+ and one RPS4000
- Redundant power supply functionality with one hot-swap modular power supply
 - Optional single switch RPS option (RPS5412, one-to-one protection)
 - Optional four-switch RPS option (RPS4000, providing power backup up to four switches concurrently as for one-to-one mode)
 - Optional four-switch EPS option (RPS4000 in External Power Supply mode for PoE+ application of up to 2,880W PoE+ budget)

NETGEAR Next-Gen Edge M5300 series software features:

- Automatic multi-vendor Voice over IP prioritization based on SIP, H323 and SCCP protocol detection
- Voice VLAN and LLDP-MED for automatic IP phones QoS and VLAN configuration
- Multi-hop RP multicast PIM routing advanced implementation for resilient video deployments
- Advanced classifier-based hardware implementation for L2 (MAC), L3 (IP) and L4 (UDP/TCP transport ports) security and prioritization
- Innovative multi-vendor Auto-iSCSI capabilities for easier virtualization optimization

NETGEAR Next-Gen Edge M5300 series management features:

- DHCP/BootP innovative auto-installation including firmware and configuration file upload automation
- Industry standard SNMP, RMON, MIB, LLDP, AAA and sFlow implementation
- Selectable serial RS232 DB9 and Mini-USB port for management console
- Standard USB port for local storage, logs, configuration or image files
- Dual firmware image and configuration file 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 Next-Gen Edge M5300 series warranty and support:

- NETGEAR ProSAFE Lifetime Hardware Warranty†
- Included ProSupport Lifetime 24x7 Advanced Technical Support*
- Included 3-Year Next Business Day Onsite Hardware Replacement**



Hardware at a Glance

Model name	FRONT				REAR						Model number
	10/100/1000 Base-T RJ45 ports	100/1000X Fiber SFP ports	100/1000/10GBase-T RJ45 ports	1000/10GBase-X Fiber SFP+ ports	Additional 10 Gigabit I/O bays	Modular PSU (hot-swap when RPS)	RPS connector	PoE budget	Management console	Storage (image, config, log files)	
M5300-28G	24	4 (shared)	2 built-in	2 (shared) built-in	2 modules	1 (APS135W)	1 (RPS)	-	1 x RS232 DB9, 1 x Mini-USB (selectable)	1 x USB	GSM7228S v1h1
M5300-52G	48	4 (shared)				1 (APS135W)	1 (RPS)	-			GSM7252S v1h1
M5300-28G-POE+	24 PoE+ 380W	4 (shared)				1 (APS525W)	1 (RPS or EPS)	Up to 720W (EPS)			GSM7228PS v1h2
M5300-52G-POE+	48 PoE+ 380W	4 (shared)				1 (APS525W)	1 (RPS or EPS)	Up to 1,440W (EPS)			GSM7252PS v1h2
M5300-28GF3	4 (shared)	24				1 (APS135W)	1 (RPS)	-			GSM7328FS v2h1
M5300-28G3	24	4 (shared)				1 (APS135W)	1 (RPS)	-			GSM7328S v2h2
M5300-52G3	48	4 (shared)				1 (APS135W)	1 (RPS)	-			GSM7352S v2h2

Software at a Glance

Model name	LAYER 2+ PACKAGE						LAYER 3 PACKAGE				Model number
	IPv4/IPv6 ACL and QoS	IPv4/IPv6 Multicast filtering	Auto-VoIP Auto-iSCSI	VLANs	Convergence	IPv4 Static Routing	IPv6 Static Routing	IPv4 Dynamic Routing	IPv6 Dynamic Routing	IPv4/IPv6 Multicast Routing	
M5300-28G	L2, L3, L4, ingress, egress, 1 Kbps	IGMP and MLD Snooping, Querier mode, MVR	Yes	Static, Dynamic, Voice, MAC, Subnet, Protocol-based, QoQ, Private VLANs	LLDP-MED, RADIUS, 802.1X, PoE timer	Yes (Port-based, Subnet, VLANs, Loopback)	Layer 3 licence upgrade: GSM7228L-10000S				GSM7228S v1h1
M5300-52G							Layer 3 licence upgrade: GSM7252L-10000S				GSM7252S v1h1
M5300-28G-POE+							Layer 3 licence upgrade: GSM7228PL-10000S				GSM7228PS v1h2
M5300-52G-POE+							Layer 3 licence upgrade: GSM7252PL-10000S				GSM7252PS v1h2
M5300-28GF3							Yes (Port-based, Subnet, VLANs)	RIP, OSPF, VRRP, ECMP, Proxy ARP, Multinetting	OSPFv3 Configured 6to4 Automatic 6to4	Static routes, PIM-SM, PIM-DM	GSM7328FS v2h1
M5300-28G3										GSM7328S v2h2	
M5300-52G3										GSM7352S v2h2	

Performance at a Glance

Model name	TABLE SIZE										Model number
	Packet buffer	CPU	ACLs	MAC ARP/NDP VLANs DHCP server	Number of Routes (IPv4/IPv6)	RIP/OSPF application route scaling	Static Routes	Multicast IGMP Group membership	IP Multicast Forwarding Entries	sFlow	
M5300-28G	16 Mb	800Mhz 512M RAM 128M Flash	100 ACLs 16,384 rules ingress, egress	32K MAC 6K ARP/NDP VLANs: 4K DHCP: 16 pools 1,024 max leases	L3 route table size: 12,256	RIP: 512 OSPF: 12,256	512 IPv4 512 IPv6	2K IPv4 2K IPv6	1K IPv4 or 512 IPv4 256 IPv6	32 samplers 52 pollers 8 receivers	GSM7228S v1h1
M5300-52G	32 Mb										GSM7252S v1h1
M5300-28G-POE+	16 Mb										GSM7228PS v1h2
M5300-52G-POE+	32 Mb										GSM7252PS v1h2
M5300-28GF3	16 Mb										GSM7328FS v2h1
M5300-28G3	16 Mb										GSM7328S v2h2
M5300-52G3	32 Mb										GSM7352S v2h2