The M4300 Stackable L3 Managed Switch Series comes with 40G, 10G and 1G models in a variety of form factors including PoE+ full provisioning. SDN-ready with OpenFlow 1.3, 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
- SDN-Ready OpenFlow 1.3 support for maximum investment protection

**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 (B02.3ad - 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
- Enhanced IPv4/IPv6 multicast forwarding with IGMPv3/MLDv2 ASM and SSM Proxy and Control Packet Flooding protection
- 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 (PVST+/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 and RSPAN remote mirroring implementation
- 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 Lifetime Hardware Warranty
- Included Lifetime Technical Support
- Included Lifetime Next Business Day Hardware Replacement
## Hardware at a Glance

### 10G models

<table>
<thead>
<tr>
<th>Model name</th>
<th>Form-Factor</th>
<th>Switching Fabric</th>
<th>10GBASE-T RJ45 ports</th>
<th>10GBASE-X SFP+ ports</th>
<th>40GBASE-X QSFP+ ports</th>
<th>PSU</th>
<th>Fans</th>
<th>Out-of-band Console</th>
<th>Model number</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4300-8X8F</td>
<td>Half-width 1-unit 1U rack mount</td>
<td>320 Gbps</td>
<td>8 ports (independent) 100M, 1G, 10G</td>
<td>8 ports (independent) 1G, 10G</td>
<td>- Modular 1 bay 1 PSU included APS250W</td>
<td>Fixed Front-to-back 36.9dB</td>
<td>Ethernet: Out-of-band 1G port (Front)</td>
<td>Console: RJ45 RS232 (Front)</td>
<td>Storage: USB (Front)</td>
</tr>
<tr>
<td>M4300-12X12F</td>
<td>Half-width 1-unit 1U rack mount</td>
<td>480 Gbps</td>
<td>12 ports (independent) 100M, 1G, 10G</td>
<td>12 ports (independent) 1G, 10G</td>
<td>- Modular 1 bay 1 PSU included APS250W</td>
<td>Fixed Front-to-back 36.9dB</td>
<td>Ethernet: Out-of-band 1G port (Back)</td>
<td>Console: RJ45 RS232 (Back)</td>
<td>Storage: USB (Front)</td>
</tr>
<tr>
<td>M4300-24X</td>
<td>Full width 1-unit 1U rack mount</td>
<td>960 Gbps</td>
<td>24 ports (independent) 100M, 1G, 10G</td>
<td>4 ports (shared back) 1G, 10G</td>
<td>- Modular 2 bays 1 PSU included APS250W</td>
<td>Fixed Front-to-back 37dB</td>
<td>Ethernet: Out-of-band 1G port (Back)</td>
<td>Console: RJ45 RS232 (Back)</td>
<td>Storage: USB (Front)</td>
</tr>
<tr>
<td>M4300-24X24F</td>
<td>Full width 1-unit 1U rack mount</td>
<td>960 Gbps</td>
<td>48 ports (independent) 100M, 1G, 10G</td>
<td>4 ports (shared) 1G, 10G</td>
<td>- Modular 2 bays 1 PSU included APS250W</td>
<td>Fixed Front-to-back 38.8dB</td>
<td>Ethernet: Out-of-band 1G port (Back)</td>
<td>Console: RJ45 RS232 (Back)</td>
<td>Storage: USB (Front)</td>
</tr>
<tr>
<td>M4300-48X</td>
<td>Full width 1-unit 1U rack mount</td>
<td>960 Gbps</td>
<td>48 ports (independent) 100M, 1G, 10G</td>
<td>4 ports (shared) 1G, 10G</td>
<td>- Modular 2 bays 1 PSU included APS250W</td>
<td>Fixed Front-to-back 40.3dB</td>
<td>Ethernet: Out-of-band 1G port (Back)</td>
<td>Console: RJ45 RS232 (Back)</td>
<td>Storage: USB (Front)</td>
</tr>
<tr>
<td>M4300-96X</td>
<td>Modular 1-unit 2U rack mount</td>
<td>1,920 Tbps</td>
<td>up to 96 ports 100M, 1G, 2.5G, 5G, 10G</td>
<td>up to 96 ports 1G, 10G</td>
<td>Up to 24 ports 40G</td>
<td>Modular 2 bays for APS600W or APS1200W</td>
<td>Fixed Front-to-back 35.8dB (no PoE) 66.8dB (max PoE)</td>
<td>Ethernet: Out-of-band 1G port (Back)</td>
<td>Console: RJ45 RS232 (Back)</td>
</tr>
</tbody>
</table>

* Only first 6 slots are delivering PoE power to APM408P cards for 48 PoE+ ports per switch APS1200W PSU is preferred for PoE applications.

110V / 220V AC input
- 0 W PoE Budget with 1 x APS600W PSU
- 634 W PoE Budget with 2 x APS600W PSUs in shared EPS mode
- 720 W PoE Budget with 1 x APS1200W PSU
- 720 W PoE Budget with 2 x APS1200W PSUs in redundant RPS mode
- 1,084 W PoE Budget with APS600W + APS1200W PSUs in shared EPS mode
- 1,440 W PoE Budget with 2 x APS1200W PSUs in shared EPS mode

### SDVoE-Ready M4300-96X

**Up to 96-port 10G, PoE options**

## Hardware at a Glance

<table>
<thead>
<tr>
<th>1G models</th>
<th>Model name</th>
<th>Form-Factor</th>
<th>Switching Fabric</th>
<th>10/100/1000 BASE-T RJ45 ports</th>
<th>100/1000/10G BASE-T RJ45 ports</th>
<th>1000/10G BASE-X SFP+ ports</th>
<th>PSU</th>
<th>Fans</th>
<th>Out-of-band Console</th>
<th>Model number</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4300-28G</td>
<td>Full width 1-unit 1U rack-mount</td>
<td>128 Gbps</td>
<td>2 ports (independent) 100M, 1G, 10G</td>
<td>2 ports (independent) 1G, 10G</td>
<td>Modular 2 bays</td>
<td>Fixed Front-to-back 30.3dB</td>
<td>Ethernet: Out-of-band 1G port (Front) Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)</td>
<td>GSM432BS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M4300-52G</td>
<td>Full width 1-unit 1U rack-mount</td>
<td>176 Gbps</td>
<td>48 ports (independent) 100M, 1G, 10G</td>
<td>2 ports (independent) 1G, 10G</td>
<td>Modular 2 bays</td>
<td>Fixed Front-to-back 31.5dB</td>
<td>Ethernet: Out-of-band 1G port (Front) Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)</td>
<td>GSM4352S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M4300-28G-PoE+</td>
<td>Full width 1-unit 1U rack-mount</td>
<td>128 Gbps</td>
<td>24 ports PoE+ 480W PoE Budget with 1 PSU</td>
<td>2 ports (independent) 100M, 1G, 10G</td>
<td>Modular 2 bays</td>
<td>Fixed Front-to-back 39.8dB</td>
<td>Ethernet: Out-of-band 1G port (Front) Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)</td>
<td>GSM432PA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M4300-52G-PoE+</td>
<td>Full width 1-unit 1U rack-mount</td>
<td>176 Gbps</td>
<td>48 ports PoE+ 480W PoE Budget with 1 PSU</td>
<td>2 ports (independent) 100M, 1G, 10G</td>
<td>Modular 2 bays</td>
<td>Fixed Front-to-back 39.8dB</td>
<td>Ethernet: Out-of-band 1G port (Front) Console: RJ45 RS232 (Back) Console: Mini-USB (Front) Storage: USB (Front)</td>
<td>GSM4352PA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 reversely).
**Software at a Glance**

|------------|------------|------------------------|-----------------------------------|------------------------------|----------------------------------|-------------------------------|-------|-----------------------|----------------------------------|-------------------------|--------------------------|--------------|

**Performance at a Glance**

<table>
<thead>
<tr>
<th>Model name</th>
<th>MAC ARP/NDP</th>
<th>Routing / Switching Capacity</th>
<th>Throughput</th>
<th>Application Route Scaling</th>
<th>Packet Buffer</th>
<th>Latency</th>
<th>IP Multicast Forwarding Entries</th>
<th>CPU</th>
<th>Multicast IGMP Group member- ship</th>
<th>VLANs</th>
<th>DHCP</th>
<th>sFlow</th>
<th>Model number</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4300-96X</td>
<td>256K MAC</td>
<td>1.920 Tbps Line-rate</td>
<td>2.857 Mbps</td>
<td>Static: 64v4/64v6</td>
<td>96Mb</td>
<td>64-byte frames</td>
<td>2.048 IPv4 1.024 IPv6</td>
<td>2048G 2GB FLASH</td>
<td>2K IPv4 2K IPv6</td>
<td>4K</td>
<td>4096</td>
<td>416</td>
<td>XSM4396K0 XSM4396K1</td>
</tr>
<tr>
<td>M4300-8X8F</td>
<td>16K MAC</td>
<td>Up to 480 Gbps</td>
<td>Up to 357 Mbps</td>
<td>Static: 64v4/64v6</td>
<td>96 IPv4</td>
<td>32 IPv6</td>
<td>16G 1GB FLASH</td>
<td>4096</td>
<td>416</td>
<td>416</td>
<td>XSM4398F XSM4398F</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 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.
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.

NETGEAR, the NETGEAR Logo and ProSAFE are trademarks of NETGEAR, Inc. in the United States and/or other countries. Other brand names mentioned herein are for identification purposes only and may be trademarks of their respective holder(s). Information is subject to change without notice. © 2018 NETGEAR, Inc. All rights reserved.