# NETGEAR®
Connect with Innovation™

# ProSafe® 10 Gigabit Aggregation Managed Switches

**Auto-iSCSI**
DETECTION
OPTIMIZATION

M7100 series

NETGEAR
PROSAFE
LIFETIME
WARRANTY*

Lifetime
Tech Support

NBD* 3-year
on-site service

The 10 Gigabit Aggregation M7100 series switches are NETGEAR affordable fully managed switches for 1G/10G server access layer in campus and enterprise networks, and for high–density, high–performance 10GbE backbone architectures. The M7100 series delivers pure line–rate performance for top-of-rack virtualization or convergence, without having to pay the exorbitant acquisition and maintenance costs associated by other networking vendors. NETGEAR 10 Gigabit Aggregation solutions combine latest advances in hardware and software engineering for higher availability, lower latency and stronger security, at a high–value price point. Like all NETGEAR products, the M7100 series delivers more functionality with less difficulty: Auto–iSCSI optimization, Private VLANs and Local Proxy ARP take the complexity out of delivering network services for virtualized servers and 10 Gigabit infrastructures.

## NETGEAR 10 Gigabit M7100 series key features:

- Line-rate 10G Copper "Base-T" switch solution with low latency

- 24 ports 10GBase-T (RJ45) supporting Fast Ethernet, Gigabit Ethernet and 10 Gigabit speeds for server and network progressive upgrade

- 4 ports SFP+ for 1G/10G fiber uplinks and other DAC connections

- IPv4 routing in Layer 2+ package (static routing) with IPv4/IPv6 ACLs and QoS

- Enterprise-class L2/L3 tables with 32K MAC, 6K ARP/NDP, 1K VLANs, 128 static L3 routes

- Two redundant, hot-swap power supplies (one PSU comes with the switch; second optional PSU is ordered separately)

- Two removable fan trays and front-to-back cooling airflow for best compatibility with data center hot aisle/cold aisle airflow patterns

- Auto-EEE Energy Efficient Ethernet associated with Power Back Off for 15% to 20% less consumption when short copper cables

## NETGEAR 10 Gigabit M7100 series software features:

- Innovative multi-vendor Auto-iSCSI capabilities for easier virtualization optimization, iSCSI flow acceleration and automatic protection/QoS

- 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

- IPv4/IPv6 Multicast filtering with IGMP and MLD snooping, Querier mode and MVR for for simplified video deployments

- Advanced classifier-based hardware implementation for L2 (MAC), L3 (IP) and L4 (UDP/TCP transport ports) security and prioritization

- Unidirectional Link Detection Protocol (UDLD) prevents forwarding anomalies

## NETGEAR 10 Gigabit M7100 series link aggregation and channeling features:

- Flexible Port-Channel/LAG (802.3ad) implementation for maximum compatibility, fault tolerance and load sharing with any type of Ethernet channeling

- Including static (selectable hashing algorithms) or dynamic LAGs (LACP)

- Multi-Chassis Link Aggregation (MLAG) in future maintenance release for active-active teaming across two independant M7100 series (Layer 2 LACP or STP)

## NETGEAR 10 Gigabit M7100 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

## NETGEAR 10 Gigabit M7100 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**

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# HARDWARE AT A GLANCE

| Model name | FRONT | | | | REAR | | Model number |
|---|---|---|---|---|---|---|---|
| | 100/1000/10GBase-T RJ45 ports | 1000/10GBase-X Fiber SFP+ ports | Management console | Storage (image, config) | Modular PSUs (redundant, hot-swap) | Modular Fan Trays (front-to-back cooling, hot-swap) | |
| M7100-24X | 24 | 4 (shared) | 1 x RS232 DB9, 1 x Mini-USB (selectable) | 1 x USB | 2 (Part-number: APS300W) (1 power supply already installed) | 2 (Part-number: AFT200) (2 fan trays already installed) | XSM7224 v1h1 |



**M7100-24X is a 24 x 10Gbase-T version, Layer 2+** 4 shared SFP+



**M7100 series rear view**

- 2 modular, redundant PSUs
  - Each M7100 series ships with one installed modular PSU
  - Aditional PSU unit is available for hot swap HA (APS300W)
- 2 modular fan trays
  - Each M7100 series ships with two installed fan trays
  - Spare units are available for hot swap HA (AFT200)

# SOFTWARE AT A GLANCE

| Model name | LAYER 2+ PACKAGE | | | | | | | Model number |
|---|---|---|---|---|---|---|---|---|
| | IPv4/IPv6 ACL and QoS | IPv4/IPv6 Multicast filtering | Auto-iSCSI Auto-VoIP | EEE (802.3az) Auto-EEE | VLANs | Convergence | IPv4 Unicast Static Routing | |
| M7100-24X | L2, L3, L4, ingress, egress, 1 Kbps | IGMP and MLD Snooping, Querier mode, MVR | Yes | Yes | Static, Dynamic, Voice, MAC, Subnet, Protocol-based, QoQ, Private VLANs | LLDP-MED, RADIUS, 802.1X, timer | Yes (Port-based, Subnet, VLANs) | XSM7224 v1h1 |

# PERFORMANCE AT A GLANCE

| Model name | TABLE SIZE | | | | | | | | | Model number |
|---|---|---|---|---|---|---|---|---|---|---|
| | Packet buffer | CPU | ACLs | MAC address table ARP/NDP table VLANs DHCP server | Fabric | Latency | Static Routes | Multicast IGMP Group membership | sFlow | |
| M7100-24X | 16 Mb | 800Mhz 256M RAM 128M Flash | 1K ingress 512 egress | 32K MAC 6K ARP/NDP VLANs: 1K DHCP: 16 pools 1,024 max leases | 480Gbps line-rate | 10GBase-T <3.7 $\mu$s SFP+ <1.8 $\mu$s | 128 IPv4 | 2K | 32 samplers 52 pollers 8 receivers | XSM7224 v1h1 |

† 24x7 Lifetime Advanced Technical Support includes Remote Diagnostics performed by our technical experts for prompt resolution of technical issues.

** 3-year Next business day onsite hardware replacement support included: see http://onsite.netgear.com for coverage, availability and terms and conditions.

+ Lifetime warranty for product purchased after 05/01/2007. For product purchased before 05/01/2007, warranty is 5 years.

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