ProSafe™ 12 Port Gigabit Managed Switch

**High-Speed, Layer 2 Managed Gigabit Switching**

NETGEAR delivers wire-speed Gigabit performance and a full set of Layer 2 management features with unsurpassed affordability. This next-generation, high-speed switch delivers maximum throughput where you need it — to high-performance workgroups at the edge of the network, or as a backbone for 10/100 switches and Gigabit servers in demanding small networks. The non-blocking design offers full Gigabit throughput simultaneously to all 12 10/100/1000 ports to ensure reliable performance. Layer 2 management functionality delivers reliability, control, and availability. The very affordable NETGEAR ProSafe 12 Port Gigabit L2 Managed Switch GSM7212 creates a more productive — and future-proof — network. With increasing bandwidth requirements from applications such as video, voice, database management, and other services that slow throughput and response time, you can unleash your network and enable maximum productivity with Gigabit Ethernet for today’s high-performance environments. Optimize bandwidth, security, and control with full Layer 2 management capabilities. Fiber connectivity is enabled through 12 combination Small Form-factor Pluggable (SFP)** gigabit ports. Network administrators can use any combination of these features to ensure uptime, availability, bandwidth, and throughput.

**Powerful**

A full 12 10/100/1000 ports and a non-blocking design provide wire speed throughput and maximum bandwidth for the most demanding network environments. The 12 combination ports of Gigabit Ethernet interfaces provide the flexibility to deploy fiber or copper connectivity within your network environment. Small Form-factor Pluggable (SFP) modules deliver choice in 1000Base-SX or 1000Base-LX optics. The Layer 2 management features optimize bandwidth throughout the network — delivering Gigabit performance to systems, applications, and services. Take advantage of forwarding rates up to 17.8 million pps, and a switching capacity of 24 Gbps.

**Easy to Use**

Move up to Gigabit power in minutes. Use the GSM7212 as a managed switch out of the box — just plug and play! All ports are auto-negotiating and support Auto Uplink™ technology. Management features are simple to set up and use, with a next-generation browser interface for easy configuration. Choose from two management interface options — an easy-to-follow Web interface, and a command line interface available through console or Telnet. Comprehensive remote administration capabilities reduce the need for on-site administration. Easy to troubleshoot — built-in testing capability locates cable related network problems.

**Manageable**

Meet your management needs with SNMP (v1, v2c and v3), RMON, Command-Line Interface (CLI) and a complete Web-based GUI. Advanced features include up to 256 VLANs, DiffServ traffic prioritization and 802.1p (QoS) for Voice over IP services (VOIP), broadcast storm protection, RADIUS, 802.1x, port trunking, port mirroring, rapid spanning tree, and link aggregation. Full Layer 2 implementation allows you to configure your network for maximum performance, reliability, and availability. Optimized for NETGEAR ProSafe Network Management Software NMS100.

**Outstanding Value**

Layer 2 management and full Gigabit power at a compelling price. Use at the edge to improve workgroup connections, or at the core to upgrade a Gigabit Ethernet backbone — now you can afford the power your network deserves. Like all NETGEAR products, everything you need is in the box — including rack mount kit, power and serial cables, and more.

**Use with NETGEAR AGM731F 1000BASE-SX SFP GBIC module or NETGEAR AGM732F 1000BASE-LX SFP GBIC module.**
### Technical Specifications

- **Network Protocol and Standards Compatibility:**
  - IEEE 802.3 10BASE-T
  - IEEE 802.3u 100BASE-TX
  - IEEE 802.3ab 1000BASE-T
  - IEEE 802.3x Flow Control

- **Management Specifications:**
  - IEEE 802.1Q Static VLAN (Up to 256)
  - IEEE 802.1p Class of Service (CoS)
  - IEEE 802.3ad Link Aggregation Control Protocol (LACP)
  - IEEE 802.1D Spanning Tree Protocol
  - IEEE 802.1w Rapid Spanning Tree
  - IEEE 802.1s Multiple Spanning Tree
  - IEEE 802.1x Port Access Authentication
  - RFC 768 UDP
  - RFC 854-859 Telnet
  - RFC 1213 MIB II
  - RFC 1215 SNMP Traps
  - RFC 1216 RFC 1757 RMON groups 1,2,3, and 9
  - RFC 1493 Bridge MIB
  - RFC 1534 DHCP and BootP Interoperation
  - RFC 1902, 1903, 1904, 1905, 1906, 1907
  - RFC 2998 DiffServ
  - RFC 3046 DHCP Relay
  - RFC 4943 Ethernet Interface MIB
  - RFC 768 UDP
  - RFC 854-859 Telnet
  - RFC 1157, 1902, 1903, 1904, 1905, 1906
  - RFC 1213 MIB II
  - RFC 1215 SNMP Traps
  - RFC 1902, 1903, 1904, 1905, 1906
  - RFC 1213 MIB II
  - RFC 1215 SNMP Traps
  - RFC 1493 Bridge MIB
  - RFC 1534 DHCP and BootP Interoperation
  - RFC 1643 Ethernet Interface MIB
  - RFC 1757 RM Q groups 1.2.3.4.5
  - RFC 2865 RADIUS
  - RFC 2998 DiffServ
  - RFC 3046 DHCP Relay
  - Broadcast Storm Protection
  - Private Enterprise MIB
  - Broadcast Storm Protection
  - Weighted Round Robin (WRR) Queuing Technology

- **User Interfaces:**
  - Command Line Interface via console port (four sessions)
  - Web-based management via embedded HTTP server
  - Telnet remote login (five sessions)

- **Physical Interfaces:**
  - 12 RJ-45 connectors for 10BASE-T, 100BASE-TX, and 1000BASE-T (Auto Uplink and autonegotiate on all ports)
  - 12 SFP connectors for 1000BASE-LX SFP modules
  - RS-232 Console Port

- **LEDs:**
  - Per port: Speed, Link, Activity
  - Per device: Power, Fan Status

- **Performance Specifications:**
  - Forwarding modes: Store-and-forward
  - Bandwidth: 24 Gbps (non-blocking)
  - Network latency: Less than 20 microseconds for 64-byte frames
  - Buffer memory: 64 MB
  - Packet buffer memory: 171 KB embedded memory per port
  - Code Storage (Flash): 8 MB
  - Address database size: 8,000 media access control (MAC) addresses
  - Addressing: 48-bit MAC address
  - Number of VLANs: 256 (1-4069)
  - Number of trunks: 6
  - Number of Queues: 4
  - Acoustic noise: (AN SI-S10.12) 41.6 dB
  - Emission: Dissipation: 28.24 Btu/hr
  - Mean Time Between Failure (MTBF): 61,349 hours (~7 years)

- **Electrical Specifications:**
  - 31 W maximum
  - 100-240VAC/50-60 Hz universal inputs
  - WxDxH: 440 x 257 x 43 mm (17.32 x 10.12 x 1.7 in)

- **Environmental Specifications:**
  - Operating Temperature: 0 to 40 °C (32 to 104 °F)
  - Storage Temperature: -20 to 70 °C (-4 to 158 °F)
  - Operating Humidity: 90% maximum relative humidity, non-condensing
  - Storage Humidity: 95% maximum relative humidity, non-condensing
  - Operating Altitude: 10,000 ft (3,000 m) maximum
  - Storage Altitude: 10,000 ft (3,000 m) maximum

- **Electromagnetic Emissions:**
  - CE mark, commercial
  - FCC Part 15 Class A
  - VCCI Class A
  - EN 55022 (CISPR 22), Class A
  - C-Tick

- **Electromagnetic Immunity:**
  - EN 55022 (CISPR 22), Class A
  - EN 55024

- **Safety:**
  - CE mark, commercial
  - CSA certified (CSA 22.2 #950)
  - UL listed (UL 1950)/CUL IEC950/EN 60950

- **Warranty:**
  - NETGEAR 5-year warranty

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**Package Contents**

- GSM 7212 ProSafe 12 Port Gigabit L2 Managed Switch
- Gigabit switch
- Power cable
- N u1 modem cable
- Rubber footpads for tabletop installation
- Rack-mount Kit
- Installation guide
- Resource CD
- Warranty/Support Information

**Related Products**

- GSM 7224 ProSafe 24 Port Gigabit L2 Managed Switch
- GSM 7252 ProSafe 24 Port 10/100 L2 Managed Switch with 2 Gigabit Ports
- GSM 7265 ProSafe 24 Port 10/100 L2 Managed Switch with 2 Gigabit Ports
- GSM 7248T ProSafe 48 Port Gigabit Smart Switch
- GSM 7247T ProSafe 24 Port Gigabit Smart Switch
- GSM 7204T ProSafe 4 Port Gigabit Smart Switch
- GA311 32-bit Gigabit PCI Adapter
- GA511 Gigabit PC Card
- N M S100 Network Management Software
- AGM 731F 1000BASE-SX SFP GBIC
- AGM 732F 1000BASE-LX SFP GBIC
- P3L21 Layer 2 Support Pack - 1 year
- P3L23 Layer 2 Support Pack - 3 years

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**Related Products**

- GSM 7224 ProSafe 24 Port Gigabit L2 Managed Switch
- GSM 7252 ProSafe 24 Port 10/100 L2 Managed Switch with 2 Gigabit Ports
- GSM 7265 ProSafe 24 Port 10/100 L2 Managed Switch with 2 Gigabit Ports
- GSM 7248T ProSafe 48 Port Gigabit Smart Switch
- GSM 7247T ProSafe 24 Port Gigabit Smart Switch
- GA311 32-bit Gigabit PCI Adapter
- GA511 Gigabit PC Card
- N M S100 Network Management Software
- AGM 731F 1000BASE-SX SFP GBIC
- AGM 732F 1000BASE-LX SFP GBIC
- P3L21 Layer 2 Support Pack - 1 year
- P3L23 Layer 2 Support Pack - 3 years