



# GSM7224

## 24-port Layer 2 Managed Gigabit Switch

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

- *Help is there when you need it!* NETGEAR provides 24x7 technical support\* in English, with selected local language support during office hours.

NETGEAR delivers wirespeed 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 24 10/100/1000 ports. Layer 2 management functionality delivers reliability, control, and availability. It's an easy to use solution that delivers maximum performance right out of the box. The very affordable NETGEAR GSM7224 Layer 2 Managed Gigabit Switch 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 — extensive VLAN support, resiliency, traffic prioritization, port trunking, port mirroring, RADIUS, SNMP, and DHCP features, as well as broadcast storm protection. Fiber connectivity is enabled through four combination Small Form-factor Pluggable (SFP\*\*) gigabit ports. Network administrators can use any combination of these features to ensure uptime, availability, bandwidth, and throughput.

**P o w e r f u l** ● A full 24 10/100/1000 ports and a non-blocking design provide wire speed throughput and maximum bandwidth for the most demanding network environments. 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 35.7 million pps, and a switching capacity of 48 Gbps.

**E a s y   t o   U s e** ● Move up to Gigabit power in minutes. Use the GSM7224 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.

**M a n a g e a b l e** ● Meet your management needs with SNMP, RMON, DHCP, and BootP. Advanced features include up to 224 VLANs, DiffServ traffic prioritization 802.1p (QoS) for Voice over IP services (VOIP), broadcast storm protection, RADIUS, 802.1x, port trunking, rapid spanning tree, and link aggregation. Full Layer 2 implementation allows you to configure your network for maximum performance, reliability, and availability.

**O u t s t a n d i n g   V a l u e** ● 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.

## Package Contents

- GSM7224 Managed L2 Gigabit Switch
- Power cable
- Null modem cable
- Rubber footpads for tabletop installation
- Rack-mount kit
- Installation guide
- Resource CD
- Warranty/Support Information card

## NETGEAR Related Products

- AGM731F 1000BASE-SX SFP GBIC
- AGM732F 1000BASE-LX SPF GBIC
- FSM726S 26+2 Managed Switch
- FSM750S 48+2 Managed Switch

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\* Free basic installation support provided for 90 days from date of purchase; optional premium support available.

\*\*NETGEAR AGM732F SFP GBIC LX module for 1000BASE-LX connections

## 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 224)
  - 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
  - IGMP Snooping Support
  - Port Mirroring Support
  - RFC 951 BootP
  - RFC 1157, 1902, 1903, 1904, 1905, 1906, 1907 SNMP v1, v2c, v3
  - 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 RMON groups 1,2,3, and 9
  - RFC 2131, 2132 DHCP and BootP
  - 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:**
  - 24 RJ-45 connectors for 10BASE-T, 100BASE-TX, and 1000BASE-T (Auto Uplink and auto-negotiate on all ports)
  - 4 SFP connectors for fiber connection (shared with the last four copper ports)
  - RS-232 Console Port
- **LEDs:**
  - Per port: Speed, Link, Activity
  - Per device: Power, Fan Status
- **Performance Specifications:**
  - Forwarding modes: Store-and-forward
  - Bandwidth: 48 Gbps (non-blocking)
  - Switch latency: Less than 20 microseconds for 64-byte frames
  - System memory: 64 MB
  - Packet buffer memory: 122 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: 228 (1-4069)
  - Number of trunks: 6
  - Number of Queues: 4
  - Acoustic noise: (ANSI-S10.12) 60 dB
  - Heat Dissipation: 28.24 Btu/hr
  - Mean Time Between Failure (MTBF): 58,300 hours (~ 6.5 years)
- **Electrical Specifications:**
  - Power Consumption: 36 W maximum
  - 100-240VAC/50-60 Hz universal inputs
- **Physical Specifications:**
  - W: 440 mm (17.32 inches)
  - D: 257 mm (10.12 inches)
  - H: 43 mm (1.7 inch)
- **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 50082-1
  - EN 55024
- **Safety:**
  - CE mark, commercial
  - CSA certified (CSA 22.2 #950)
  - UL listed (UL 1950)/CUL IEC950/EN60950
- **Warranty:**
  - NETGEAR 5-year warranty