



# GSM7328S, GSM7352S

## ProSafe™ 24 and 48 Port Gigabit L3 Managed Stackable Switch with 4 10-Gigabit Ethernet Module Bays

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

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

### Flexible, Stackable, High Speed Switching!

NETGEAR's low-cost, stackable, Gigabit Ethernet switches deliver maximum throughput and flexibility where you need it — to high-speed, high-density workgroups at the edge of the network, in the backbone of growing networks or for bandwidth thirsty file and application servers. The ProSafe GSM7328S and GSM7352S fully managed switches deliver 24 and 48 ports of auto-sensing 10/100/1000 Mbps interfaces for high-density copper connectivity. Four (GSM7328S) or eight (GSM7352S) hot-swappable Small Form-factor Pluggable (SFP) gigabit interfaces provide optional fiber connectivity for longer reach Gigabit Ethernet requirements. Additionally, four high-speed module bays offer modular expansion for 10 Gigabit Ethernet or 24 Gigabit Stacking connectivity. The non-blocking design of the switches delivers simultaneous, full wire-speed, low-latency throughput to all ports.

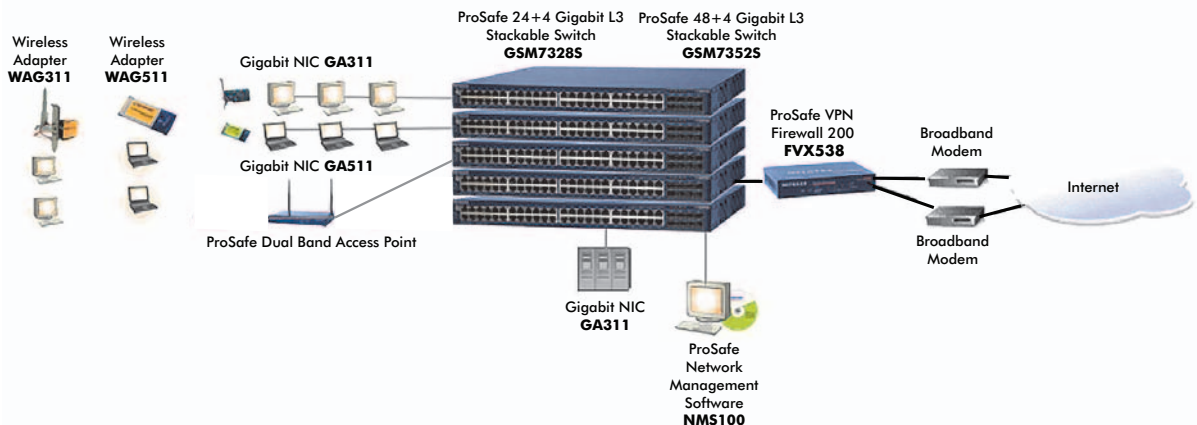
A full suite of Layer 3 switching functionality ensures reliable routing between VLANs and network segmentation where and when you need it, at no additional cost. By configuring the switches into a stack of up to 8 units across a 48 Gbps bi-directional ring, a high-density, single IP-addressable switch can be built.

Robust security features include IEEE 802.1x port-based authentication and access control lists, ensuring that only authorized users can access your network. Secure management of the switches is available through Secure Sockets Layer (SSLv3) for the Web GUI and Secured Shell (SSH) for command-line sessions. Additionally, multiple switches can be securely managed via SNMPv3 with NETGEAR's ProSafe Network Management Software NMS100. For workgroup deployments in cost-sensitive organizations that require Layer 3 switching, additional Gigabit capacity, high-value price point, flexibility of stacking, and reduced maintenance requirements, NETGEAR's ProSafe 10/100 Layer 3 Stackable switches deliver the ideal access-edge solution.

With their high-value price point, flexible design, and reduced maintenance requirements, NETGEAR's ProSafe 10/100/1000 Layer 3 Stackable switch solutions yield a high return on investment, and are ideal for delivering highly reliable, converged voice, video, and data services over a single network infrastructure.

**Powerful** In desktop switching environments, wire-speed performance with full QoS control for all 10/100/1000 interfaces is critical. The 4 high-speed 10G/24G module bays provide unprecedented flexibility, whether you are stacking between switches, attaching bandwidth-thirsty file servers, or aggregating critical data to the core of your network.

**Easy to Use** Simplify and reduce IT staff workload and mean time-to-repair with intuitive, GUI-based device configuration, and an industry-standard command-line interface (CLI). Stacking capabilities allow you to build a single-IP manageable device with up to eight switches utilizing ultra-high-speed 24 Gigabit stacking cables to deliver 48Gbps across an intelligence bi-directional redundant interconnect.



**Physical Interfaces**

- RJ-45 Connectors for 10BASE-T, 100BASE-TX, and 1000BASE-T (Auto Uplink™ on all ports):
  - GSM7328S 24 ports
  - GSM7352S 48 ports
- Small form-factor pluggable (SFP) modules for fiber Gigabit Ethernet interfaces:
  - GSM7328S 4 slots
  - GSM7352S 8 slots
- (4) 10 Gigabit Ethernet/24G Stacking Module Bays
- RS-232 Console Port

**Layer 2 Services:**

- IEEE 802.1Q Static VLAN (Up to 4k)
- IEEE 802.1p Class of Service (CoS)
- IEEE 802.1D Spanning Tree Protocol
- IEEE 802.1v Protocol VLAN & Port VLAN
- IEEE 802.1 Q-in-Q
- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1s Multiple Spanning Tree
- IEEE 802.3ad Link Aggregation (LACP)
- IEEE 802.1x Port Access Authentication
- IGMP v1, v2 Snooping Support
- Network Storm Protection including Broadcast, multicast and unicast traffic
- Ingress Rate Limit in 1Kbps increments

**Layer 3 Services:**

- VLAN routing
- Port routing
- RIP v1/v2 (RFC 1057, 2453)
- OSPF v2 (RFC 1583, 2328)
- VRRP (RFC 2338, 2787)
- ACLs – 1,024 Global
- DiffServ QOS (RFC 2998)
- DHCP/Bootp Relay (RFC3046)

**Switch Management Specifications:**

- SNMP v1, v2c, v3
- RFC 1157, 1901-1910, 2574, 2575
- RFC 768 UDP
- RFC 854-859 Telnet
- RFC 951 BootP
- RFC 1213 MIB II
- RFC 1757 RMON groups 1,2,3, and 9
- RFC 1215 SNMP Traps
- RFC 1493 Bridge MIB
- RFC 1643 Ethernet Interface MIB
- RFC 1534 DHCP and BootP Interoperation
- RFC 2131, 2132 DHCP and BootP
- RFC 2865 RADIUS
- RFC 2866 RADIUS Accounting
- Private Enterprise MIB
- Port Mirroring Support
- RFC 2236 IGMP v2
- RFC 2030 Simple Network Time Protocol (SNTP)
- RFC 1027 Proxy ARP
- SYSLOG

**Performance Specifications:**

- **Forwarding modes:** Store-and-forward
- **Bandwidth:** GSM7328S 144 Gbps (non-blocking)  
GSM7352S 196 Gbps (non-blocking)
- **Switch latency:** < 6 us for 64-byte frames (10G to 10G)  
< 2 us for 64-byte frames (10G to 10G)
- **System memory:** 256 MB
- **Packet buffer memory:** 334 KB embedded memory per port
- **Code Storage (Flash):** 32 MB
- **Address database size:** 16K media access control (MAC) addresses
- **Number of VLANs:** 512 (1-4096)
- **Number of trunks:** 6
- **Number of Queues:** 8
- **Number of routes:** 512
- **Jumbo frame support:** up to 9K packet size
- **Acoustic noise:** GSM7328S 52.4 dB  
GSM7352S 52.8 dB
- **Heat Dissipation:** GSM7328S 273.12 BTU/hr  
GSM7352S 375.54 BTU/hr

- **Mean Time Between Failure (MTBF):**  
117,747 hours (~ 13.4 years)

**User Interfaces:**

- Command Line Interface (CLI) via console port
- Web-based management via embedded HTTP server protected with Secured Sockets Layer (SSLv3) or Transport Layer Security (TLS v1)
- Telnet remote login (5 sessions) securable with Secured Shell (SSH v1.5, v2)

**LEDs:**

- **Per port:** Speed, Link, Activity
- **Per device:** Power, Fan Status, Stack ID, RPS, Master

**Network Standards Compatibility:**

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3z 1000BASE-X
- IEEE 802.3x Flow Control
- IEEE 802.3ac 10000BASE-X

**Physical Specifications:**

- **Dimensions (w x d x h):** 440 x 385 x 43 mm  
(17.32 x 15.16 x 1.7 in)
- **Weight:** GSM7328S 4.5kg (10lbs)  
GSM7352S 5.4 kg (12lbs)

**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, noncondensing
- **Storage humidity:** 95% maximum relative humidity, noncondensing
- **Operating altitude:** 3,000 m (10,000 ft) maximum
- **Storage altitude:** 3,000 m (10,000 ft) maximum

**Electrical Specifications**

- **Power Consumption:** GSM7328S 80 W maximum  
GSM7352S 110 W 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

**Modules:**

- ProSafe AGM731F 1000BASE-SX SFP GBIC
- ProSafe AGM732F 1000BASE-LX SFP GBIC
- ProSafe AGM733 1000BASE-ZX SFP GBIC
- ProSafe AX741 10 Gigabit Ethernet XFP Adapter
- ProSafe AX742 24 Gigabit Stackable Modul
- ProSafe AXM751 10GBASE-SR
- ProSafe AXM752 10GBASE-LR

**Warranty:**

- Limited Lifetime

ProSupport Packs	GSM7328S	GSM7352S
- OnSite 24x7	PMP1133	PMP1134
- OnSite 9x5	PMP3333	PMP3334
- OnCall 24x7	PMB0333	PMB0334

**Related Products**

- **Accessories**
  - NMS100 ProSafe Network Management Software
- **Access Points**
  - WAG302 ProSafe Dual Band Wireless Access Point
  - WG302 ProSafe 802.11g Wireless Access Point
- **VPN Firewalls**
  - FVX538 ProSafe VPN Firewall 200
  - FVL328 ProSafe VPN Firewall 100
  - FVS338 ProSafe VPN Firewall 50 w/Dial Backup
- **Switches**
  - FSM7352S ProSafe 48+4 10/100 L3 Stackable Switch
  - FSM7352PS ProSafe 48+4 10/100 L3 Stackable Switch w/48 PoE
  - FSM7328S ProSafe 24+4 10/100 L3 Stackable Switch

**Package Contents**

- ProSafe Gigabit L3 Managed Switch
- Null modem cable
- Rubber footpads
- Power cable
- Rack-mount kit
- Installation Guide
- Resource CD-ROM with 30 day trial of NMS100
- Warranty/Support information card



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\* Free basic installation support provided for 90 days from date of purchase. Advanced product features and configurations are not included in free basic installation support; optional premium support available.