

**Flexible, Stackable, Fast Ethernet Switching!**

NETGEAR's low-cost, stackable, Fast Ethernet switches deliver maximum throughput and flexibility where you need it — to high-density workgroups at the edge of the network, or in the backbone of small networks. The ProSafe FSM7226RS and FSM7250RS are managed 24-port and 48-port switches with auto-sensing 10/100 ports and two 10/100/1000 ports. This enables fiber connectivity through two hot-swappable small form-factor pluggable (SFP) Gigabit interfaces. The non-blocking design of the switches delivers simultaneous, full wire-speed, low-latency throughput to all ports. In addition, their 1U rack-mount form factor uses less rack space and provides a lower per-port cost than comparable Fast Ethernet switches.

Static routing ensures reliable routing between VLANs and network segmentation where and when you need it, at no additional cost. Plus, two high speed (2.5 Gbps) dedicated stacking ports in the back provide extra bandwidth for stacking application.

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 Secure 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 2 switching, the flexibility of stacking and additional Gigabit capability, NETGEAR's ProSafe 10/100 Layer 2+ Stackable switches deliver the ideal access-edge solution.

**Powerful**

In desktop switching environments, wire-speed performance with full QoS control for all 10/100 interfaces is critical. The 2 Gigabit Ethernet combo interfaces 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). New 2.5 Gbps, high-speed stacking capabilities allow you to build a single IP manageable device with up to eight switches.

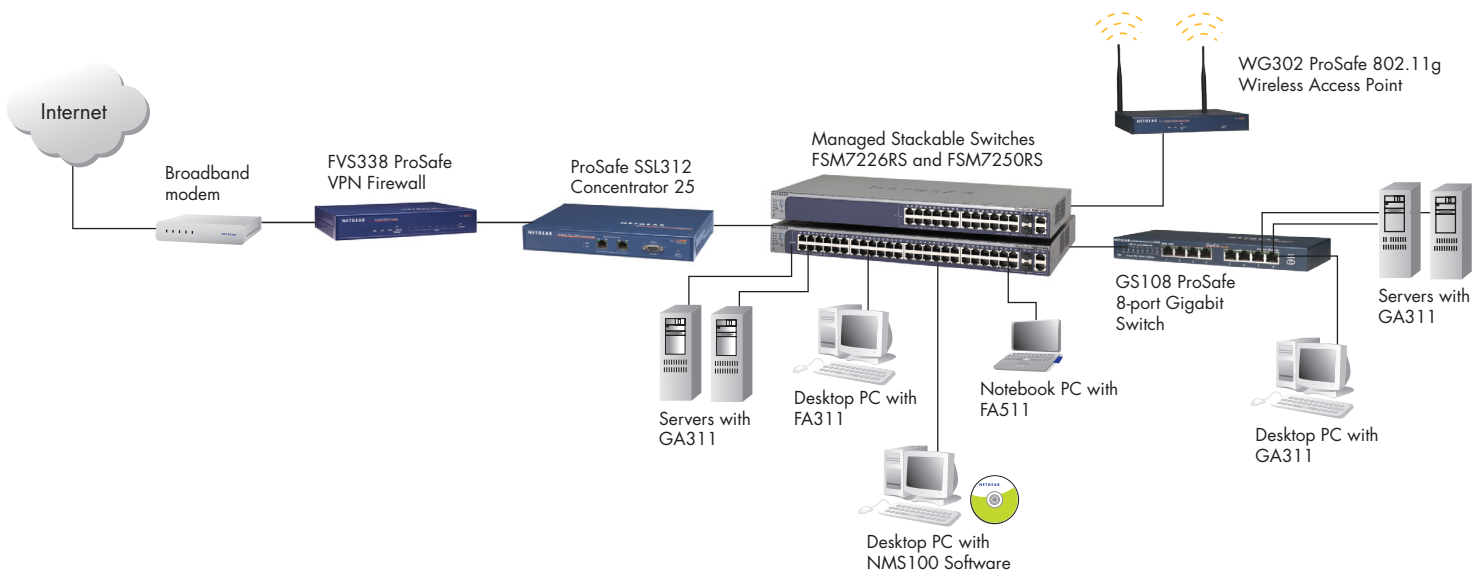
**Outstanding Value**

With their high-value price point, flexible design, and reduced maintenance requirements, NETGEAR's ProSafe 10/100 Layer 2+ 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.

**Work Space Friendly**

The switch has a built-in thermal sensor to automatically speed up the fan to increase air flow in warm environments, and slow down the fan to reduce the noise when operating in an office environment.





## Technical Specifications

### • Network Protocol and Standards Compatibility

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3z 1000BASE-X
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3x flow control

### • Layer 2 Services

- IEEE 802.1Q static VLAN (up to 512)
- IEEE 802.1p Class of Service (CoS)
- IEEE 802.1D Spanning Tree Protocol
- IEEE 802.1v protocol VLAN & port VLAN
- IEEE 802.1w Rapid Spanning Tree Protocol
- IEEE 802.1s Multiple Spanning Tree Protocol
- IEEE 802.3ad link aggregation (Static, LACP)
- IEEE 802.1x port access authentication
- Mac-based VLAN
- IGMP v1, v2, v3 snooping support
- IGMP querier
- Network storm protection, including broadcast, multicast and unicast traffic
- Static multicast filtering
- Ingress rate limit in 1Kbps increments
- Protected port
- Private group VLAN
- Double VLAN
- MAC filter
- Port security

### • Layer 3 Services

- VLAN routing
- Static routing
- Port-based routing
- Access Control Lists - MAC, IP, TCP
- ACLs - 224 global rules

- DiffServ QoS (RFC 2998)
- DNS caching
- DHCP/BOOTP relay - primary and backup (RFC3046, option 82)
- UDP relay

### • Switch Management Specifications

- SNMP v1, v2c, v3 with multiple IP addresses
- RFC 1157, 1901-1910, 2574, 2575
- RFC 768 UDP
- UDP relay
- RFC 854-859 telnet
- RFC 951 BOOTP
- RFC 1027 Proxy ARP
- 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 2030 Simple Network Time Protocol (SNTP)
- RFC 2131, 2132 DHCP and BOOTP
- RFC 2865 RADIUS (both switch and management access)
- RFC 2866 RADIUS accounting
- Private enterprise MIB
- CPU traffic monitor
- Port mirroring support (many-to-one)
- SYSLOG
- Firmware upgrade via TFTP or HTTP
- Port description
- TACACS+
- LLDP/LLDP-MED
- DHCP server
- DHCP option 81

### • Single IP Address Management (firmware version 7.3 or higher)

- Manage up to 48 fully managed switches
- Feature can be used with the following models:
  - FSM726E, FSM7226RS, FSM7250RS
  - FSM7328S, FSM7352S, FSM7328PS, FSM7352PS
  - GSM7224R, GSM7248R
  - GSM7328S, GSM7328FS, GSM7352S

### • User Interfaces

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

### • LEDs

- Per port: Speed, link, activity
- Per device: Power, fan status, stack ID, master, RPS

### • Physical Interfaces

- 24 (FSM7226RS) or 48 (FSM7250RS) RJ-45 connectors for 10BASE-T, 100BASE-X (Auto Uplink and auto negotiate on all ports)
- 2 1000Base-X with optional SFP connectors for fiber connection
- 2 stacking ports at 2.5 Gbps each
- RS-232 console port

### • Performance Specifications

- Forwarding modes: Store and forward
- Bandwidth:
  - FSM7226RS: 18.8 Gbps; 6.5 Mpps
  - FSM7250RS: 23.6 Gbps; 10.1 Mpps
- Switch latency: Less than 80 microseconds for 64-byte frames
- System memory: 128 MB
- Packet buffer memory: 1 MB
- Code storage (flash): 32 MB
- MAC addresses size: 8K
- Number of VLANs: 512 (1-4093 ID)
- Number of trunks: 24
- Number of QoS queues: 8
- Number of static routes: 32
- Jumbo frame support: up to 9K packet size
- Number of multicast groups: 256

### • Electrical Specifications

- Power consumption:
  - FSM7226RS - 15W
  - FSM7250RS - 33W
- 100-240V AC/50-60 Hz universal input
- External RPS unit (12V)

### • Physical Specifications

#### FSM7226RS

- Dimensions (w x d x h):  
440 x 205 x 43 mm  
(17.32 x 8.1 x 1.7 in)
- Weight: 2.8 kg (6.2 lb)
- Acoustic noise: (ANSI-S10.12) 36.6 dB
- Heat dissipation: 51 Btu/hr
- Mean time between failures (MTBF):  
562,110 hours (~64 years)
- Thermal sensor

#### FSM7250RS

- Dimensions (w x d x h):  
440 x 257 x 43 mm  
(17.32 x 10.1 x 1.7 in)
- Weight: 3.6 kg (7.9 lb)
- Acoustic noise: (ANSI-S10.12) 38.3 dB
- Heat dissipation: 112 Btu/hr
- Mean time between failures (MTBF):  
385,102 hours (~44 years)
- Thermal sensor

### • Environmental Specifications

- Operating temperature: -5° to 50° C  
(23° to 131° 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 IEC 950
- EN 60950

### Warranty

- NETGEAR Lifetime Warranty†

### Package Contents

- ProSafe L2+ Managed Switch (FSM7226RS or FSM7250RS)
- Power cable
- Null modem cable
- Stack cable
- Rubber footpads for tabletop installation
- Rack-mount kit
- Quick Installation guide
- Resource CD-ROM with user manual
- ProSafe NMS100 30-Day Trial CD-ROM
- Warranty/support information card

### NETGEAR Related Products

- 1000BASE-SX SFP GBIC (AGM731F)
- 1000BASE-LX SPF GBIC (AGM732F)
- 1000BASE-ZX SFP GBIC (AGM733)
- NMS100 Network Management Software

### ProSupport Service Packs Available

#### FSM7226RS

#### • OnCall 24x7, Category 1

- PMB0331-100 (US)
- PMB0331 (non-US)

#### • XPressHW, Category 1

- PRR0331

#### FSM7250RS

#### • OnCall 24x7, Category 2

- PMB0332

#### • XPressHW, Category 2

- PRR0332-100

### Ordering Information

#### • FSM7226RS

- North America: FSM7226RS-100NAS
- Europe: FSM7226RS-100EUS
- Asia: FSM7226RS-100AJS

#### • FSM7250RS

- North America: FSM7250RS-100NAS
- Europe: FSM7250RS-100EUS
- Asia: FSM7250RS-100AJS

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\*Basic technical support provided for 90 days from date of purchase.

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