



Flexible, Stackable, Fast Ethernet Switching!

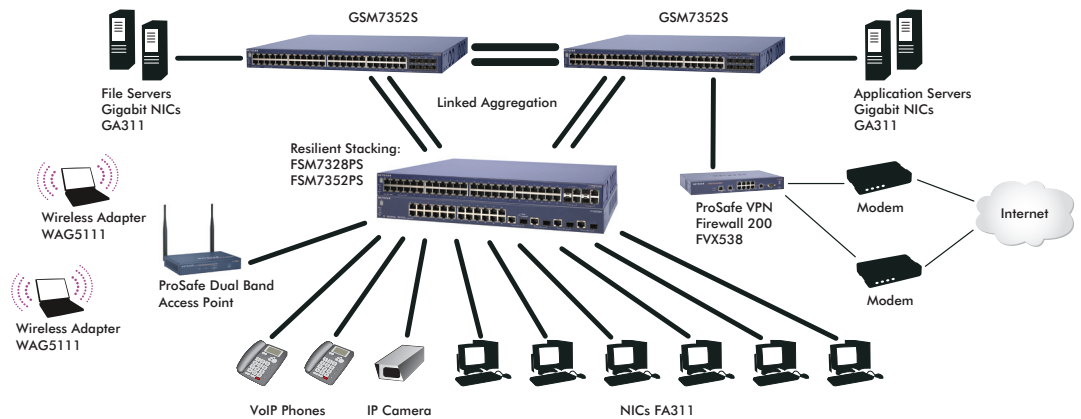
The ProSafe FSM7328PS and FSM7352PS are feature-rich Fast Ethernet Layer 3 Managed Stackable Switches with Power over Ethernet (PoE) that deliver wire-speed performance at an affordable price.

With PoE on all ports, the ProSafe FSM7328PS and FSM7352PS feature 24 or 48 auto-sensing 10/100 ports and 4 10/100/1000 ports enabling fiber connectivity through four combination hot-swappable small form-factor pluggable (SFP) Gigabit interfaces. The non-blocking design delivers full wire-speed throughput simultaneously to all ports ensuring reliable, low-latency throughput in a 1U rack-mount form factor.

Built-in dynamic Layer 3 switching delivers the advantage of routing between VLANs and network segmentation where and when you need it at no additional cost. Multiple VLANs, QoS, bandwidth-limiting, and access control features enable smooth, clear VoIP telephony and video conferencing.

Convenient front-panel stacking via standard Gigabit Ethernet interfaces can stack up to 8 switches providing expandability to meet your growing needs. A member of the ProSafe Fast Ethernet Layer 3 stacking family, the FSM7328PS and FSM7352PS will stack with the FSM7328S and FSM7352S switches for a variety of port densities in PoE and non-PoE options. Robust security features include IEEE 802.1x port-based authentication and access control lists to help ensure that only authorized users can access your network. Secure management of the switch is available through Secure Sockets Layer (SSLv3) for the Web GUI and Secure Shell (SSH) for command line sessions, while multiple switches can be securely managed via SNMPv3 with NETGEAR's ProSafe Network Management Software. For workgroup deployments needing high-performance Layer 3 switching, additional Gigabit capability, integrated PoE ports and the flexibility of stacking - NETGEAR's ProSafe 24- and 48- Port 10/100 Layer 3 Stackable Switches with 4 Gigabit Ports and PoE is the PoE solution that means business.

* Use with NETGEAR AGM731F 1000BASE-SX SFP GBIC module, NETGEAR AGM732F 1000BASE-LX SFP GBIC module or NETGEAR AGM733 1000BASE-ZX SFP GBIC module



Technical Specifications

• Physical Interfaces

- RJ-45 Connectors for 10/100 Mbps ports (Auto Uplink™ and PoE on all ports):
 - FSM7328PS 24 ports
 - FSM7352PS 48 ports
- 4 RJ-45 connectors for 10/100/1000 Mbps ports with optional SFP connectors for fiber connections
- RS-232 console port

• Power over Ethernet (PoE)

- FSM7328PS:
 - 24 ports support PoE (IEEE 802.3af)
 - up to 12 ports support 15.4W each
- FSM7352PS:
 - 48 ports support PoE (IEEE 802.3af)
 - up to 28 ports support 15.4W each

• 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 VLAN & port VLAN
- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1s Multiple Spanning Tree
- IEEE 802.3ad link aggregation (LACP) up to 6 trunks
- IEEE 802.1x port access authentication
- IGMP v1, v2, v3 snooping support
- Network storm protection including broadcast, multicast and unicast traffic
- Static multicast filtering
- Port locking
- Ingress rate limit in 1 Kbps increments
- GARP/GVRP/GMRP

• Layer 3 Services

- VLAN routing
- Port routing
- RIP v1/v2 (RFC 1058, 2453)
- OSPF v2 (RFC 1583, 2328)
- OSPF equal-cost multi-path (ECMP)
- VRRP (RFC 2338, 2787) 64 instances
- Access control lists (ACL) - MAC, IP, TCP
- ACLs – 1,024 Global
- COS
- DiffServ QoS (RFC 2998)
- DNS caching
- DHCP/BOOTP relay - primary and backup (RFC 3046, option 82)

• 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 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 (both switch and management access)
- RFC 2866 RADIUS accounting
- Private enterprise MIB
- Port mirroring support
- RFC 2236 IGMP v2
- IGMP querier
- RFC 2030 Simple Network Time Protocol (SNTP)
- RFC 1027 Proxy ARP
- SYSLOG
- Firmware upgrade via TFTP or HTTP
- Port descriptions
- RFC 1519 CIDR
- Proxy ARP
- DNS lookup
- DHCP server
- DHCP relay (with backup servers)

• 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

• Performance Specifications

- Forwarding modes: Store-and-forward
- FSM7328PS: 12.8 Gbps; 9.5 Mpps
- FSM7352PS: 17.6 Gbps; 13.1 Mpps
- Switch latency: Less than 80 microseconds for 64-byte frames
- System memory: 256 MB
- Packet buffer memory: 122 KB embedded memory per port
- Code storage (flash): 16 MB
- Address database size: 16,000 media access control (MAC) addresses
- Number of VLANs: 512 (1-4096)
- Number of trunks: 6
- Number of queues: 8
- Number of routes: 128

- Jumbo frame support: up to 9K packet size
- Acoustic noise:
 - FSM7328PS: 38.6 dB
 - FSM7352PS: 60 dB
- Heat Dissipation:
 - FSM7328PS: 979 Btu/hr
 - FSM7352PS: 2005 Btu/hr
- Mean time between failures (MTBF):
 - FSM7328PS: 210,685 hours (~ 24 years)
 - FSM7352PS: 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 Secure Shell (SSH v1.5, v2)

• LEDs

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

• Network Standards Compatibility

- IEEE 802.3i 10BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3z 1000BASE-X
- IEEE 802.3x Flow Control
- IEEE 802.3ae 10000BASE-X
- IEEE 802.3af PoE

• Physical Specifications

- Dimensions (w x d x h):
 - FSM7328PS: 440 x 257 x 43.2mm (17.32 x 10.12 x 1.70 in)
 - FSM7352PS: (w x d x h): 440 x 385 x 43 mm (17.32 x 15.16 x 1.7 in)
- Weight:
 - FSM7328PS: 3.77 kg (8.316 lb)
 - FSM7352PS: 5.99 kg (13.2 lb)

• Environmental Specifications

- Operating temperature:
 - FSM7328PS: 0° to 50° C (32° to 122°)
 - FSM7352PS: 0° to 40° C (32° to 104° F)
- Thermal sensor with SNMP trap settings
- 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: 3,000 m (10,000 ft) maximum
- Storage altitude: 3,000 m (10,000 ft) maximum
- **Electrical Specifications**
 - Power Consumption:
 - FSM7328PS: Max power consumption = 285W AC; PoE budget = 192W, 8W for 24p, 15.4 for 12p
 - FSM7352PS: Max power consumption = 587W AC; PoE budget = 440W, 8W for 48p, 15.4 for 28p
- **Electromagnetic Compatibility (EMC)**
 - CE mark
 - EN 55022 Class A - Emissions
 - EN 55024 - Immunity
 - FCC Part 15 Class A
 - VCCI Class A
 - C-Tick
- **Electrical Safety**
 - CE mark
 - EN 60950-1
 - UL/cUL 60950-1

Warranty

- NETGEAR Lifetime Warranty†

Package Contents

- ProSafe Stackable L3 PoE Switch (FSM7328PS or FSM7352PS)
- Null modem cable
- Rubber footpads
- Power cable
- Rack-mount kit
- Installation guide
- Resource CD-ROM
- Warranty/support information card

Ordering Information

- **North America**
 - FSM7328PS-100NAS
 - FSM7352PSNA
- **Europe**
 - FSM7328PS-100EUS
 - FSM7352PSEU
- **Asia**
 - FSM7328PS-100AUS
 - FSM7352PSAU
- **Japan**
 - FSM7328PS-100JPS
 - FSM7352PSJP

Modules

- ProSafe AGM731F 1000BASE-SX SFP GBIC
- ProSafe AGM732F 1000BASE-LX SFP GBIC
- ProSafe AGM733 1000BASE-ZX SFP GBIC

ProSupport Service Packs Available

- **FSM7328PS**
 - OnCall 24x7, Category 2**
 - PMB0332
 - XPressHW, Category 2**
 - PRR0332-100
- **FSM7352PS**
 - OnCall 24x7, Category 3**
 - PMB0333
 - XPressHW, Category 3**
 - PRR0333-100

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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.