Enabling Small and Mid-sized Businesses to Effectively Manage Bandwidth and Security

NETGEAR ProSafe® Advanced Smart Switches provide small and mid-sized companies with a viable alternative to fully managed switches. This range of switches provide customers with all the features typically found in fully managed switches, without adding complexity or additional costs.

Growing small and mid-sized companies rely on their network to provide the foundation for essential business applications: mission-critical data applications, security, Voice over IP (VoIP), video-conferencing and much more. They need full-featured network switches that can accommodate and manage growth, support the full range of network applications and secure the network without the overhead and complexity of fully managed switches. The GS724AT and GS748AT ProSafe Gigabit Smart Switches with Advanced Features deliver the scalability, flexibility, reliability, and performance growing small and medium-sized businesses need in an affordable and easy-to-manage package.

Each ProSafe Gigabit Smart Switch with Advanced Features comes with either 24 or 48 10/100/1000 ports with four shared SFP ports, respectively, that provide high performance for bandwidth-intensive applications like ERP and large file transfers. In addition, these switches come with a complete suite of advanced features for more robust security, higher quality of service and high availability. These switches are equipped with highly advanced features such as access control lists (ACL), 802.1x port authentication, enhanced QoS, Auto-voice VLAN, rate limiting and IGMP snooping among others to provide a small and medium-sized business with a network that is geared for growth while providing scalability and reliability.

An intuitive, Web-browser interface provides simple yet comprehensive management, making it a snap to fully realize the potential of the rich feature-set offered by these switches. Why buy fully managed stackable network switches designed and priced for the enterprise? NETGEAR ProSafe Gigabit Smart Switches with Advanced Features are designed for small and growing businesses.

Advanced Security

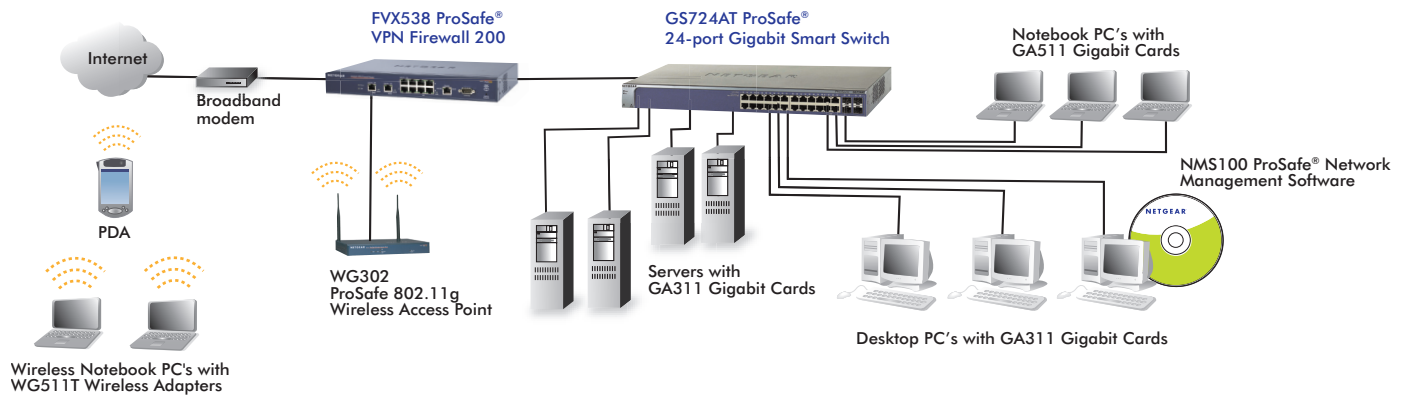These switches provide advanced features that provide more robust security to the SMBs. These include:

- 802.1x for authentication
- ACL filtering to permit or deny traffic based on MAC, IP and TCP/UDP addresses.

*Optional modules include AGM731F ProSafe 1000BASE-SX SFP GBIC, AGM732F ProSafe 1000BASE-LX SFP GBIC, AGM733 ProSafe 1000BASE-LZ SFP GBIC

24/7
TECHNICAL SUPPORT*

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Email: info@NETGEAR.com

NETGEAR®
PROSAFE®
LIFETIME WARRANTY®

FVX538 ProSafe®
VPN Firewall 200

GS724AT ProSafe®
24-port Gigabit Smart Switch

Notebook PC's with
GA511 Gigabit Cards

Internet

Broadband
modem

PDA

NMS100 ProSafe® Network
Management Software

WG302
ProSafe 802.11g
Wireless Access Point

Servers with
GA311 Gigabit Cards

Desktop PC's with GA311 Gigabit Cards

Wireless Notebook PC's with
WG511T Wireless Adapters

Advanced Quality of Service (QoS)

Priority queuing ensures high-priority traffic gets delivered efficiently, even during congestion from high-traffic bursts. Companies implementing network telephony or video conferencing, for example, need to be able to prioritize such voice and video traffic and other real-time applications over less latency-sensitive traffic to ensure reliability and quality. The ability to prioritize traffic ensures quality of latency-sensitive services and applications despite increasing traffic loads. The ProSafe Gigabit Smart Switches with Advanced Features provide an extensive set of QoS features:

• 802.1p-based prioritization

• Layer 3-based (DSCP, TOS) prioritization

• Auto-Voice VLAN

• Rate-limiting

'Smart' Management Features

Manage all ProSafe Gigabit Smart Switches with Advanced Features from an easy-to-use Web console that can be used to configure all features, as well as monitor and troubleshoot. These switches also have SNMP (v1, 2c and 3) to collect and track data to monitor the network health, as well as manage devices, and more easily enforce critical IT controls and policies. SNMP v2c is most commonly deployed, as it provides better reporting capabilities than SNMP v1. Companies interested in more robust security may opt for SNMP v3, which provides data encryption.

The ProSafe Gigabit Smart Switches with Advanced Features provide world-class reliability with a NETGEAR Lifetime Warranty and optional ProSupport Maintenance Packages. These switches are optimized for ProSafe Network Management Software (NMS100) and work with other SNMP-based management software.

Technical Specifications

• Network Protocol and 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 full-duplex flow control

• Interfaces
– 24 or 48 10/100/1000 Mbps switching ports
– 4 built-in shared SFP Gigabit Ethernet fiber ports for 100/1000 Mbps connectivity
– Auto-sensing and auto-negotiating capabilities for all copper ports
– Auto Uplink™ on all ports to make the right connection

• Administrative Switch Management
– IEEE 8021.Q VLAN (128 groups, Static)
– Auto-Voice VLAN
– IEEE 802.1p Class of Service (CoS)
– IEEE 802.3ad static or dynamic link aggregation (LACP)
– IEEE 802.1D Spanning Tree Protocol
– IEEE 802.1ab LLDP & LLDP-MED
– SNMP v1, v2c, v3
– RFC 1213 MIB II
– RFC 1643 Ethernet Interface MIB
– RFC 1493 Bridge MIB
– RFC 2131 DHCP client
– RMON group 1, 2, 3, 9
– Private Enterprise MIB
– IEEE 802.1x (RADIUS)
– RADIUS accounting
– Access control list (ACL)
– Layer 3 Quality of Service (QoS)

– TACACS+
– RADIUS accounting
– Port-based security by locked MAC addresses
– Protected ports
– IGMP snooping
– Storm control for broadcast, multicast and unknown unicast packets
– Port-based ingress/egress rate limiting
– SNTP
– Port mirroring support
– Web-based configuration
– Configuration backup/restore
– Password access control
– Firmware upgradeable
– Cable test

• Performance Specifications
– Forwarding modes: Store-and-forward
– Bandwidth:
  - GS724AT - 48 Gbps
  - GS748AT - 98 Gbps
– Network latency: Less than 3 microseconds for 64-byte frames in store-and-forward mode for 1000 Mbps to 1000 Mbps transmission
– Buffer memory:
  - GS724AT - 3 MB
  - GS748AT - 6 MB
– Address database size: 8,000 media access control (MAC) addresses per system
– Addressing: 48-bit MAC address
– Mean time between failures (MTBF):
  - GS724AT - 330,000 hours (~37 years)
  - GS748AT - 208,700 hours (~ 23.8 years)

– LEDs
– Unit: Power, fan
– Per port: Link, speed, activity
– Per Gigabit port: Link, speed, activity

• Power Supply
– Power consumption:
  - GS724AT - 35.6W
  - GS748AT - 66.9W
– 100-240V AC/50-60 Hz universal input

• Physical Specifications
– Dimensions (h x w x d):
  - GS724AT: 43 x 440 x 205 mm (1.7 x 17.3 x 8.1 in)
  - GS748AT: 43 x 440 x 257 mm (1.7 x 17.3 x 10.1 in)
– Weight:
  - GS724AT: 3.1 kg (6.83 lb)
  - GS748AT: 5.0 kg (11 lb)

• Environmental Specifications
– Operating temperature: 32° to 131° F (0° to 55° C)
– Storage temperature: -4° to 158° F (-20° to 70° C)
– 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 Compliance
– CE mark, commercial
– FCC Part 15 Class A
– VCCI Class A
– EN 55022 (CISPR 22)
– EN 55024 (CISPR 24)
– C-Tick

• Safety
– CE mark, commercial
– CUL 60950 (Listed)/ EN 60950 (Low Voltage Directive)

Warranty
– NETGEAR Lifetime Warranty†

System Requirements
– Category 5 network cables
– Network card for each PC
– Network software (e.g., Windows®)

Package Contents
– ProSafe 24-or 48-port Gigabit Smart Switch with Advanced Features (GS724AT or GS748AT)
– Rubber footpads
– Power cord
– Rack-mount kit
– Resource CD installation guide with Smart Wizard Discovery program
– Warranty/support information card

Modules
– AGM731F ProSafe 1000BASE-SX SFP GBIC: Module with LC connectors for 50um or 62.5um multi-mode fiber cable
– AGM732F ProSafe 1000BASE-LX SFP GBIC: Module with LC connectors for 9um single-mode fiber cable
– AGM733 ProSafe 1000BASE-LZ SFP GBIC: Module with LC connectors for 9um single-mode fiber cable

Ordering Information
– GS724AT
  North America: GS724AT-100NAS
  Europe: GS724AT-100EUS
  Australia: GS724AT-100AUS
  Asia: GS724AT-100JPS
– GS748AT
  North America: GS748AT-100NAS
  Europe: GS748AT-100EUS
  Asia: GS748AT-100AJS

ProSupport Service Packs Available

• OnCall 24x7, Category 1
– PMB0331-100 (U.S. only)
– PMB0331

• XPressHW, Category 1
– PRR0331

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

†Lifetime warranty for product purchased after 05/01/2007.