ProSafe® 24- and 48-port Gigabit Stackable Smart Switches
GS724TS, GS748TS

Data Sheet

Gigabit Stackable Smart Switches Enable Businesses to Grow with Ease

Growing 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. Businesses that are growing rapidly want full-featured network switches that can accommodate growth, support the full range of network applications and secure the network without the overhead and complexity of fully-managed switches. The ProSafe Gigabit Stackable Smart Switch family delivers the scalability, flexibility, reliability, and performance growing small and medium-sized businesses need in an affordable and easy-to-manage package.

A first in the industry, each ProSafe Gigabit Stackable Smart Switch comes with 24 or 48 10/100/1000 Mbps ports with four shared SFP ports that provide high performance Fibre connections for bandwidth-intensive applications like ERP and large file transfers. In addition, two dedicated ports on the rear of the switch provide a 20 Gbps, dual-ring, highly redundant stacking bus that accommodates growth and offers the highest level of resiliency, thus allowing you to stack up to six switches or 288 10/100/1000 Mbps ports – and easily manage them all with a single IP address. Finally, these switches come with a complete suite of advanced features for more robust security, higher quality of service and high availability. This switch is equipped with highly advanced features such as access control lists (ACL), 802.1x port authentication, enhanced QoS, 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 Stackable Smart Switches are designed for small and medium-sized growing businesses.

Scalability and High Availability

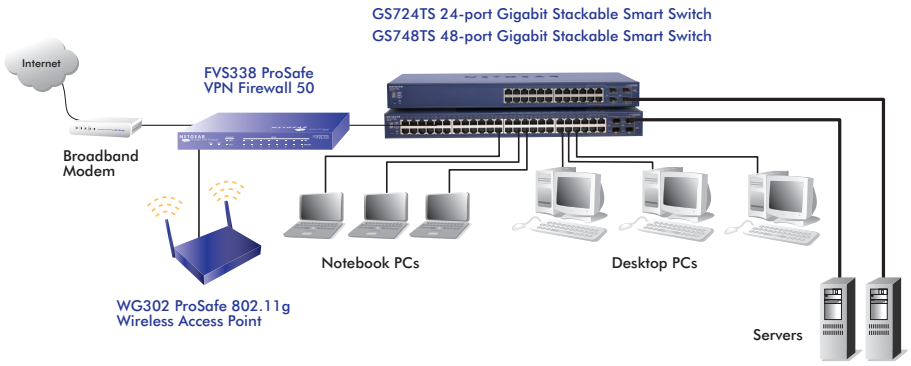
Each ProSafe Gigabit Stackable Smart Switch comes with 2 dedicated high-speed stacking ports on the rear of the switch providing 20 Gbps of bandwidth. Stack as many as six switches as you grow, and yet maintain high-speed connectivity across the stack with stacking cables. This stacking technology also provides several high-availability features to ensure business continuity:

- Resiliency: Due to redundant stacking port connections, there is an automatic fail-over in case any switch in the stack fails, with rapid reconfiguration, thus preventing network downtime.
- Hot-swappable: All switches in the stack are hot-swappable, and can be integrated or removed without disrupting the network.

Advanced Security

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

- 802.1x for authentication
- ACL filtering to permit or deny traffic based on MAC addresses or IP addresses.



24/7 TECHNICAL SUPPORT*

1-888-NETGEAR (638-4327)
Email: info@NETGEAR.com

NETGEAR ProSafe LIFETIME WARRANTY*

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 Stackable Smart Switches provide an extensive set of QoS features:

- 802.1p-based prioritization
- Layer 3-based (DSCP) prioritization
- Rate-limiting
- TCP/UDP-based prioritization

"Smart" Management Features

Manage all ProSafe Gigabit Stackable Smart Switches as though they are one unit from an easy-to-use Web console that can be used to configure all features, as well as monitor and trouble-shoot. These switches also have SNMP (v1, 2 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.

All ProSafe Gigabit Stackable Smart Switches 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 works with other SNMP-based management software.

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

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**
  - GS724TS: 24 10/100/1000 Mbps switching ports
  - GS748TS: 48 10/100/1000 Mbps switching ports
  - 4 Built-in shared SFP Gigabit Ethernet fiber ports for 100/1000 Mbps connectivity
  - 2 HDMI ports on the rear of the unit – used for stacking only
  - Auto-sensing and auto-negotiating capabilities for all copper ports
  - Auto Uplink™ on all ports to make the right connection
- **Administrative Switch Management**
  - IEEE 802.1Q VLAN (128 groups, Static)
  - Management VLAN
  - IEEE 802.1p Class of Service (CoS)
  - 4 hardware queues
  - Port-based QoS
  - IEEE 802.3ad Static or Dynamic Link Aggregation (LACP)
  - IEEE 802.1D Spanning Tree Protocol
  - IEEE 802.1w Rapid Spanning Tree Protocol
  - IEEE 802.1s Multiple Spanning Tree Protocol
  - SNMP v1, v2c, v3
  - RFC 1213 MIB II
  - RFC 1643 Ethernet Interface MIB
  - RFC 1493 Bridge MIB
  - RFC 2131 DHCP client
  - IEEE 802.1x (RADIUS)
  - RADIUS accounting
  - Layer 3 (DSCP) Quality of Service (QoS)
  - TACACS+
  - Port-based security by locked MAC addresses
  - TCP/UPD-based priority mapping
  - IGMP snooping v1, v2, v3
  - MAC and IP address ACL
  - Storm control for broadcast, multicast and unknown unicast packets
  - Port-based ingress/egress rate limiting
  - SNTP
  - RMON group 1, 2, 3, 9
  - Private Enterprise MIB
  - Port mirroring – many-to-one
  - IEEE 802.3ab LLDP
  - LLDP-MED
  - Protected ports
  - Cable test
  - Web-based configuration
  - Configuration backup/restore
  - Password access control
  - Firmware upgradeable
- **Performance Specifications**
  - Forwarding modes: Store-and-forward
  - Bandwidth: 48 Gbps for GS724TS, 96 Gbps for GS748TS
  - Stacking up to 6 switches or 288 ports per stack
  - Stacking bandwidth: 20 Gbps
  - Network latency: Less than 20 microseconds for 64-byte frames in store-and-forward mode for 1000 Mbps to 1000 Mbps transmission
  - Buffer memory:
    - GS724TS: 2 Mb
    - GS748TS: 6 Mb
  - Address database size: 8,000 media access control (MAC) addresses per system
  - Addressing: 48-bit MAC address
  - Mean time between failures (MTBF): 167,300 hours (~19 years) for GS724TS 125,500 hours (~14 years) for GS748TS

- **LEDs**
  - Unit: Power, fan, stack master, stack ID, PoE max
  - Per port: Link, speed, activity, stack
- **Power Supply**
  - Power consumption: 35.1W for GS724TS, 78.36W for GS748TS
  - 100-240V AC/50-60 Hz universal input
- **Physical Specifications**
  - Dimensions: (h x w x d):
  - **GS724TS**: 43.2 x 440 x 205 mm (1.70 x 17.32 x 8 in)
  - **GS748TS**: 43.2 x 440 x 310 mm (1.70 x 17.32 x 12.20 in)
  - Weight:
  - **GS724TS:** 2.87 kg (6.33 lb)
  - **GS748TS:** 5.16 kg (11.38 lb)
- **Environmental Specifications**
  - Operating temperature: 32° to 122° F (0° to 50° 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)

System Requirements

- Category 5 UTP Network cables or better
- Network card for each PC
- Network software (e.g., Windows®)

Warranty

- NETGEAR Lifetime Warranty†

ProSupport Service Packs Available

- **OnCall 24x7, Category 1**
  - PMB0331-100 (US)
  - PMB0331 (non-US)
- **XPressHW, Category 1**
  - PRR0331

Package Contents

- ProSafe 24 or 48-port Gigabit Smart Stackable Switch (GS724TS or GS748TS)
- Rubber footpads
- Power cord
- One stacking cable
- HDMI stacking cable
- Rack-mount kit
- Resource CD installation guide
- 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-ZX SFP GBIC: Module with LC connectors for 9um single-mode fiber cable

Ordering Information

- **GS724TS**
  - North America: GS724TS-100NAS
  - Europe: GS724TS-100EUS
  - Asia: GS724TS-100AUS
  - Japan: GS724TS-100JPS
- **GS748TS**
  - North America: GS748TS-100NAS
  - Europe: GS748TS-100EUS
  - Asia: GS748TS-100AUS
  - Japan: GS748TS-100JPS

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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 3 years.

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