NETGEAR®
PROSAFE®

ProSafe® 24- and 48-port 10/100/1000 Smart PoE Switch
GS724TP and GS748TP

Data Sheet

Full 24-port or 48-port PoE Solution, Plus Easy Browser-based Management



NETGEAR® ProSafe® Smart Switches fill the gap between unmanaged and fully managed switches. The family of ProSafe Smart Switches is designed for growing businesses that want control over their network without the cost and complexity of a full Layer 2 management implementation. These PoE-capable Smart Switches, the GS724TP and GS748TP, provide power and data using built-in IEEE 802.3af PoE on all 24 or 48 ports. In addition, they offer an intuitive Web-based management tool for quick and easy deployment and configuration making it ideal for deploying access points, VoIP phones and IP-based surveillance cameras. 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. With the utility of 24 or 48 10/100/1000 Mbps ports, two or four combination (copper/hot-swappable small form-factor pluggable (SFP)) Gigabit ports for optional fiber connectivity, growing business networks, classrooms and workgroups can benefit from superior performance and keep up with expanding network needs. These high-performing switches feature a non-blocking wire-speed architecture with a 48 Gbps or 96 Gbps switching capacity for maximum data throughput.

All 24 and 48 RJ-45 ports automatically negotiate to the highest speed and support Auto Uplink™ technology to make the right link.

Like all NETGEAR ProSafe Smart Switches, the GS724TP and GS748TP are backed by the NETGEAR ProSafe Lifetime Warranty†, and 1-Year ProSupport 24x7 Advanced Technical Support*.

Full-featured, Flexible Power over Ethernet (PoE)

With a total power budget of 192 Watts for the GS724TP and 384 Watts for the GS748TP, customers can choose to plug in up to 48 802.3af IP-based devices. Power-over-Ethernet (PoE), optimizes the installation and power management of network devices such as wireless access points (AP), Voice over IP (VoIP) phones, and IP-based surveillance cameras. Power-over-Ethernet (IEEE 802.3af) capabilities reduce installation time and costs for many new network productivity devices. Free your wireless AP deployments and IP cameras from the restrictions of power outlet proximity using a standard Cat 5 cable. Enable uninterruptible power supply for all your PoE devices by powering your switch from a UPS device.

Advanced Security

These switches also 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 or IP addresses.

Advanced Quality of Service

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 GS724TP and GS748TP provide several advanced QoS features:

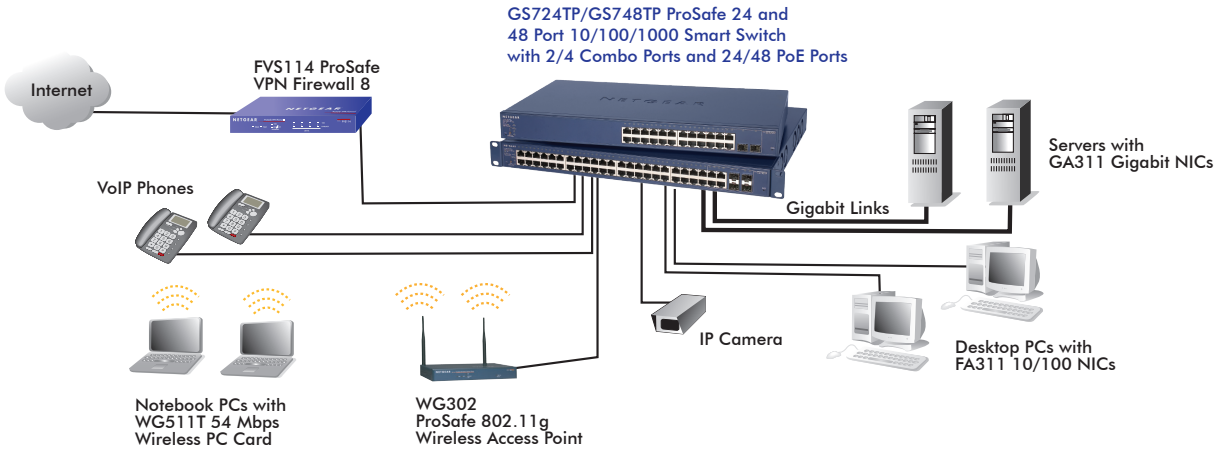
- 802.1p-based prioritization
- Layer 3-based (DSCP) prioritization
- Rate limiting

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"Smart" Management Features

Manage all ProSafe Smart Switches 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.

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
  - IEEE 802.3af (Power over Ethernet)
- **Power Supply**
  - Max 225W for GS724TP
  - Max 465W for GS748TP
  - 100-240V AC/50-60 Hz universal input
  - PoE Budget: GS724TP 192W; GS748TP 384W
- **Network Ports**
  - GS724TP:
    24 10/100/1000 Mbps auto-sensing Gigabit Ethernet
    2 combo Gigabit copper/SFP slots
  - GS748TP:
    48 10/100/1000 Mbps auto-sensing Gigabit Ethernet
    4 combo Gigabit copper/SFP slots
- **Physical Specifications**

  GS724TP
  - Dimensions (w x d x h):
    440 x 257 x 43 mm
    (17.3 x 10.1 x 1.6 in)
  - Weight: 3.7 kg (8.1 lb)

  GS748TP
  - Dimensions (w x d x h):
    440 x 438 x 43 mm
    (17.3 x 17.2 x 1.6 in)
  - Weight: 6.6 kg (14.5 lb)
- **Performance Specifications**
  - Forwarding modes: Store-and-forward
  - Bandwidth: GS724TP: 48 Gbps
    GS748TP: 96 Gbps
  - Network latency: <2,900 ns for 64-byte frames in store-and-forward mode for 1,000 Mbps to 1,000 Mbps transmission
  - Buffer memory: 3 Mb per system
  - Address database size: 4,000 media access control (MAC) addresses per system
  - Addressing: 48-bit MAC address
  - Mean time between failures (MTBF):
    - GS724TP: 165,589 hours (~19 years)
    - GS748TP: 147,559 hours (~17 years)
  - Acoustic noise:
    - GS724TP 46.5 dB
    - GS748TP 44.8 dB
- **Electromagnetic Emissions:**
  - CE mark, commercial
  - FCC Part 15 Class A
  - VCCI Class A
  - C-Tick
- **Environmental Specifications**
  - Operating temperature: 32° to 104° 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
- **LEDs**
  - Per port: (10/100 and Gigabit): Link/activity, speed
  - Per device: Power
  - Per device: Fan failure
  - Per PoE ports: PoE power, PoE fault

- **Electromagnetic Immunity**
  - EN 55024
- **Safety**
  - CE mark, commercial
  - cUL IEC 950/EN 60950
- **Administrative Switch Management**
  - IEEE 802.1Q static VLAN (128 groups, static)
  - Voice VLAN
  - IEEE 802.1p Class of Service (CoS)
  - Port-based QoS
  - DSCP-based QoS
  - IEEE802.3ad link aggregation (manual or LACP)
  - IEEE 802.1D Spanning Tree Protocol
  - IEEE 802.1w Rapid Spanning Tree Protocol
  - SNMP v1, v2c, v3
  - RFC 1213 MIB II
  - RFC 1643 Ethernet interface MIB
  - RFC 1493 bridge MIB
  - RMON group 1, 2, 3, 9
  - RFC 2131 DHCP client
  - IEEE 802.1x
  - Jumbo frame support
  - Port-based security by locked MAC addresses
  - Layers 2-4 based ACL
  - Storm control for broadcast, multicast and unknown unicast packets
  - IGMP snooping v1/v2
  - Port-based ingress rate limiting
  - SNTP
  - Port mirroring support (many to one)
  - Web-based configuration
  - Configuration backup/restore
  - Password access control
  - RADIUS support
  - TACACS+ support
  - Syslog
  - Firmware upgradeable

System Requirements

- Category 5 network cables
- Network card for each PC
- Network software (e.g., Windows®)
- Web browser (e.g., Internet Explorer 5.0 or higher, Netscape 6.0 or higher)

Modules

- AGM731F 1000BASE-SX SFP Module
- AGM732F 1000BASE-LX SFP Module
- AGM733 1000BASE-LZ SFP Module

Warranty and Support

- ProSafe Lifetime Warranty†
- ProSupport 24x7 Advanced Technical Support, 1 year (included)*

ProSupport™ Service Packs Available

- **GS724TP/GS748TP**
  - XPressHW, Category 2: PRR0332 (3-year next-business day hardware replacement contract)
  - OnCall 24x7, Category 2: PMB0332 (3-year Advanced Technical Support contract, including Remote Diagnostics performed by our technical experts for prompt resolution of technical issues, and next-business day hardware replacement)

Package Contents

- 24-port or 48-port Smart Switch with Gigabit Ports and PoE (GS724TP or GS748TP)
- Rubber footpads
- Power cord
- Rack-mount kit
- Resource CD
- Installation guide
- Warranty/support information card

Ordering Information

- **GS724TP**
  - North America: GS724TP-100NAS
  - Europe: GS724TP-100EUS
  - Asia: GS724TP-100AUS
  - Japan: GS724TP-100JPS
- **GS748TP**
  - North America: GS748TP-100NAS
  - Europe: GS748TP-100EUS
  - Asia: GS748TP-100AUS
  - Japan: GS748TP-100JPS

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* 1-year 24x7 Advanced Technical Support includes Remote Diagnostics performed by our technical experts for prompt resolution of technical issues.

† Lifetime warranty for product purchased after 05/01/2007. For product purchased before 05/01/2007, warranty is 3 years.