

#### Designed for SMB Customers with High Performance and Easy Management



The NETGEAR® family of ProSafe® Gigabit Smart Switches is purposely designed for SMB customers with high performance, SMB-oriented features and easy management. With 16 or 24 10/100/1000 Mbps ports, each capable of powering 2000 Mbps of data throughput in full-duplex mode per port, plus two shared SFP ports, the GS716T-200 and GS724T-300 will enable SMB networks to support Voice over IP (VoIP), streaming media, multicasting, security, and many other bandwidth-intensive applications like ERP and large file transfers.

The GS716T-200 and GS724T-300 come with a comprehensive set of 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 ensuring performance and reliability. The GS716T-200 and GS724T-300 are fan-less switches with silent operation for a pleasant environment.

In addition, an intuitive, Web-browser interface offers the simple Smart Switch management, making it a snap to monitor switch performance, configure ports, even set up port trunks, VLANs, and traffic prioritization. Alternatively, use SNMP-based software to manage your Smart Switch. Shipped ready for use straight out of the box, it delivers switching that's easy to set up and use. NETGEAR ProSafe Smart Switches are ideal for adding basic management to your unmanaged networks or extending your managed networks.

#### Green Ethernet

- Up to 70% power savings compared to the non-Green version
- Auto power-down mode saves energy when port is unused
- Cable length detection reduces power usage when network cable is shorter than 10 meters.

#### Intelligent

Smart Switch capability enables key management features for the value price of an unmanaged switch. Included are performance monitoring, port configuration, VLAN for traffic control, port trunking for increased bandwidth, and Class of Service (CoS) for traffic prioritization.

#### Ideal Advanced Security

These Gigabit Smart 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 or IP addresses.

#### Advanced Quality of Service (QoS)

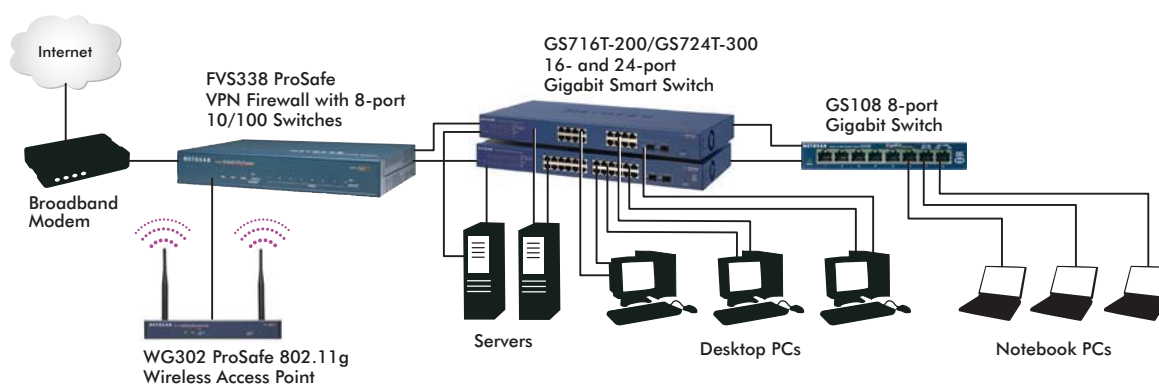
Priority queuing ensures high-priority traffic gets delivered efficiently, even during congestion from high-traffic bursts. Companies implementing network telephony or video conferencing, for example, need to be able to prioritize such voice and video traffic and other real-time applications over less 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 Switch provides an extensive set of QoS features:

- 802.1p-based prioritization
- Layer 3-based prioritization
- Rate-limiting

#### Easy-going and Durable

Simple to set up and simple to use for effortless network monitoring and troubleshooting. Made to last, this sturdy switch is housed in a 17-inch metal box and comes with a rack-mounting kit.

Like all NETGEAR ProSafe Smart Switches, the GS716T and GS724T are backed by the NETGEAR ProSafe Lifetime Warranty†, and 1-Year ProSupport 24x7 Advanced Technical Support\*..



## Technical Specifications

### • Network Protocol and Standards Compatibility

- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Fast Ethernet
- IEEE 802.3ab 1000BASE-T Gigabit Ethernet
- IEEE 802.3x full-duplex flow control

### • Interfaces

- GS724T-300: 24 RJ-45 connectors for 10BASE-T, 100BASE-TX, and 1000BASE-T (Auto Uplink on all ports)
- GS716T-200: 16 RJ-45 connectors for 10BASE-T, 100BASE-TX and 1000BASE-T (Auto Uplink on all ports)
- 2 Dual Personality SFP slots for fiber Gigabit Ethernet modules

### • Administrative Switch Management

- IEEE 802.1D Spanning Tree Protocol
- IEEE 802.1W Rapid Spanning Tree Protocol
- IEEE 802.1S Multiple Spanning Tree Protocol
- Auto-voice VLAN
- SNMP v1, v2c, v3
- RFC 1213 MIB II
- RFC 1643 Ethernet Interface MIB
- RFC1493 Bridge MIB
- Jumbo Frame Support (up to 9 KB)
- IEEE 802.1Q Tag VLAN
- GS716T-200: 128 Static VLANs
- GS724T-300: 128 Static VLANs
- IEEE 802.1p (Class of Service)
- DSCP - L3 QoS
- Port -based ingress/egress rate limiting
- IEEE 802.3ad static or dynamic link aggregation (LACP)
- DHCP client function
- Broadcast storm control
- Port mirroring (many-to-one)

- Port setting
- Green features: Power saving by cable length (<10m). Power saving by auto power when link down
- IGMP snooping v1/v2
- IEEE 802.1x (RAIDUS)
- Access control list (ACL) - MAC, IP
- SNMP
- IEEE 802.1ab LLDP
- Protected ports\*\*\*
- HTTP and HTTPS
- Auto denial-of-service (DoS) prevention
- Syslog
- Ping & traceroute
- Web-based configuration, anywhere on the network
- Smartwizard Discovery Utility program auto discovers devices (up to 254 agents/switches); set system configuration to each agent
- Configuration backup/restore (easy to configure more than one switch)
- Password access control
- Firmware upgradeable
- Support of Ethernet audio/video (EAV)

### • Active Flow Control

- Full-duplex IEEE 802.3x pause frame flow control
- Half-duplex back-pressure control

### • Performance Specifications

- Forwarding modes: Store-and-forward
- Bandwidth: GS724T-300 = 48 Gbps, GS716T-200 = 32 Gbps
- Network latency:
  - GS716T-200 average latency 4.5 us for 1000 Mbps with 64 bytes
  - GS724T-300 average latency 4.5 us for 1000 Mbps with 64 bytes
- Buffer memory: 512 KB embedded memory per unit
- Priority queues: 4

- Priority queuing: Weighted Round Robin (WRR)
- Address database size: 8,000 media access control (MAC) addresses per system
- Addressing: 48-bit MAC address
- Mean time between failures (MTBF):
  - GS716T-200: 307,681 hours
  - GS724T-300: 282,515 hours
- Acoustic Noise:
  - GS716T-200: 0 dBA
  - GS724T-300: 0 dBA

### • LEDs

- Unit: Power
- Per port: Link, activity, speed, duplex

### • Power Supply

- Maximum Power Consumption:
  - GS716T-200 - 16.5W
  - GS724T-300 - 21.5W
- 100-240V AC/50-60 Hz universal input

### • Physical Specifications

- Dimensions (h x w x d):
  - GS716T-200: 43 x 440 x 260 mm (1.7 x 17.3 x 10.2 in)
  - GS724T-300: 43 x 440 x 260 mm (1.7 x 17.3 x 10.2 in)
- Weight:
  - GS716T-200: 72 kg (5.99 lb)
  - GS724T-300: 87 kg (6.33 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

\*\*\* To be available via free firmware upgrade.

**• Electromagnetic Compliance**

- CE mark, commercial
- FCC Part 15 Class A
- VCCI Class A
- EN 55022 (CISPR 22)
- EN 55024 (CISPR 24)
- C-Tick

**• Safety Agency Approvals**

- UL listed (UL 1950)/cUL
- IEC 950/EN 60950
- CE mark, commercial
- CUL 60950 (Listed)/EN 60950 (Low Voltage Directive)
- CB
- CCC

**System Requirements**

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

**Modules**

- NETGEAR ProSafe AGM731F 1000BASE-SX SFP GBIC Module with LC connectors for 50um or 62.5um multi-mode fiber cable
- NETGEAR ProSafe AGM732F Fiber 1000BASE-LX SFP GBIC Module with LC connectors for 9um single-mode fiber cable
- NETGEAR ProSafe AGM733 Fiber 1000BASE-ZX SFP GBIC Module with LC connectors for 9um single-mode fiber cable

**Warranty and Support**

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

**ProSupport™ Service Packs Available****• GS716T-200/GS724T-300**

- XPressHW, Category 1: PRR0331 (3-year next-business day hardware replacement contract)
- OnCall 24x7, Category 1: PMB0331 (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**

- 16- or 24-port Gigabit Smart Switch (GS716T-200 or GS724T-300)
- Rubber footpads
- Power cord
- Rack-mount kit
- Smart Switch resource CD
- Smart Switch installation guide

**Ordering Information****• GS716T-200**

- North America: GS716T-200NAS
- Europe: GS716T-200EUS
- Asia & Japan: GS716T-200AJS

**• GS724T-300**

- North America: GS724T-300NAS
- Europe: GS724T-300EUS
- Asia & Japan: GS724T-300AJS