



### High Port Density Gigabit with Browser-based Management Included

Joining the NETGEAR® family of Smart Switches with simple switch management at no extra cost, this 1U high, 48-port Gigabit switch maximizes bandwidth and density for great value and capability. With 48 10/100/1000 Mbps ports, each capable of powering 2000 Mbps of data throughput in full-duplex mode, plus four optional (two combo and two dedicated) fiber ports, it provides a 100 Gbps backbone and connects servers or power users, delivering large amounts of multimedia, image, and video information in no time at all. Standards-based, it is ideal for combining 10, 100, and 1000 Mbps devices, as it delivers automatic speed and full/half-duplex sensing plus Auto Uplink™ on every port. Four hot-swappable small form-factor pluggable (SFP)\*\* GBIC slots provide optional fiber connectivity for greater distance. An intuitive, Web-browser interface offers simple switch management, making it a snap to monitor switch performance, configure ports, even setup trunks, VLANs, and prioritization.

### Highlights

#### High Density

- 48 10/100/1000 Mbps ports deliver full-speed packet forwarding in a 1U size to migrate your network to future-proof functionality. Four SFP GBIC fiber slots provide optional fiber connectivity for greater distance.

#### 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.

#### Right-sized

- Ideal for growing businesses who want the benefits of management without the cost. Compatible with Windows, MAC and Linux operating systems.\*\*\*

#### Easygoing and Durable

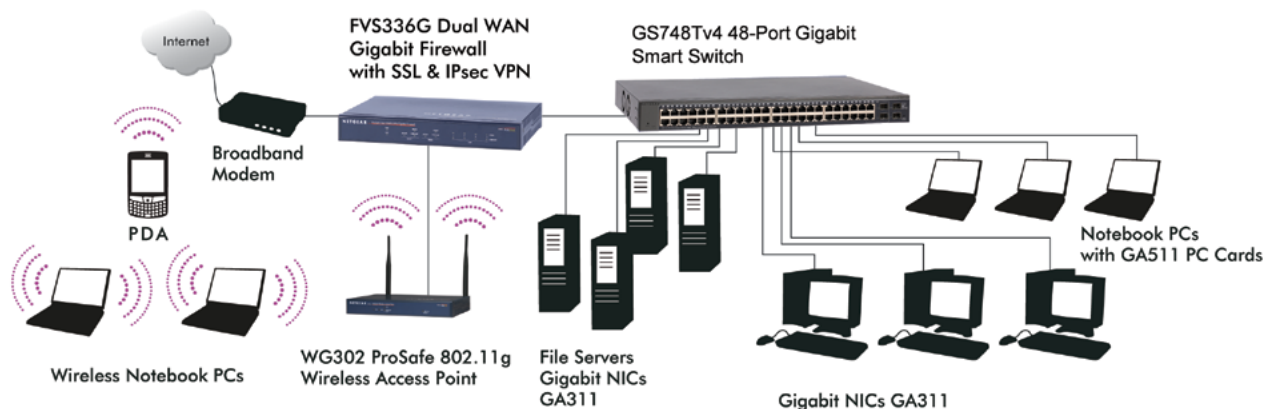
- Simple to set up and simple to use for effortless network monitoring and troubleshooting. Made to last, this sturdy switch is housed in a 17-inch metal box and comes with a rack-mounting kit.

- Like all NETGEAR ProSAFE Smart Switches, the GS748T is backed by the NETGEAR ProSAFE Lifetime Warranty†, and 1-Year ProSupport 24x7 Advanced Technical Support\*.

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

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

\*\*\* Requires PC for initial discovery of Smart Switch features.



### Technical Specifications

#### Interfaces

- 48 RJ-45 connectors for 10BASE-T, 100BASE-TX, and 1000BASE-T
- Two SFP combo ports for SFP modules
- Two dedicated SFP ports for SFP modules
- 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 (256 groups, Static)
- IEEE 802.1p Class of Service (CoS)
- 8 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)
- IEEE 802.1x Dynamic VLAN Assignment
- HTTPS/SSL: Secure HTTP GUI
- RADIUS accounting
- Layer 3 (DSCP) Quality of Service (QoS)

- TACACS+
- Port-based security by locked MAC addresses
- TCP/UDP-based priority mapping
- IGMP snooping v1, v2, v3
- ACLs (MAC, IPv4, IPv6 and TCP/UDP based)
- Storm control for broadcast, multicast and unknown unicast packets
- Port-based rate limiting
- SNMP
- DNS
- DHCP Filtering
- DoS and Auto DoS prevention
- IPv6 management and IPv6 QoS
- Static Routing
- Green Features:
  - Lower power consumption during link-down idle mode or with shorter cable length.
  - EEE (IEEE802.3az) mode
- RMON group 1, 2, 3, 9
- Private Enterprise MIB
- Port mirroring – many-to-one
- IEEE 802.3ab LLDP
- LLDP-MED
- Protected ports
- Cable test
- Smart Control Center discovery
- Web-based configuration
- Configuration backup/restore
- Password access control
- Firmware upgradeable

#### Performance Specifications

- Forwarding modes: Store-and-forward
- Bandwidth: 100 Gbps
- Network latency: Less than 20 microseconds for 64-byte frames in store-and-forward mode for 1000Mbps to 1000 Mbps transmission
- 64Mbytes System DDR SDRAM (32Mbx16)
- 16Mbytes Flash size
- Address database size: 8K media access control (MAC) addresses per system
- Mean Time Between Failure (MTBF): 231,684 hours at 50°C
- Acoustic noise: 52 dBA
- Addressing: 48-bit MAC address
- Number of VLANs is 256; Maximum VLAN id is 4093
- Number of 802.1p traffic classes is 8
- Number of LAGs is 8
- Number of static routes is 32
- Number of routed VLANs is 15
- Number of ARP Cache entries size is 1024
- Queues used for DiffServ is 8
- Number of ACLs (IPv4/IPv6) is 100

#### LEDs

##### Per RJ-45 port

- Speed/Link/Activity

##### Per SFP port

- Link/Activity

##### Per device

- Power

### Technical Specifications

#### Power Supply

- 100 VAC–240 VAC/50 Hz–60 Hz, 2.0A Max, universal input

#### Physical Specifications

##### Dimensions (H x W x D):

- 1.7 x 17.3 x 10.1 in
- 43 x 440 x 257 mm

##### Weight

- 3.8 kg (8.4 lbs)

#### Environmental Specifications

##### Operating temperature

- 0°C to 40°C (32°F to 104°F)

##### Operating humidity

- 10% to 90% maximum relative humidity, noncondensing

##### Storage temperature

- –20°C to 70°C (–4°F to 158°F)

##### Storage humidity

- 5% to 95% maximum relative humidity, noncondensing

#### Electromagnetic Emissions

- CE Class A, including EN 55022 (CISPR 22), EN 55024, and EN 50082-1
- FCC Part 15 Class A
- VCCI Class A
- C-Tick
- MIC

#### Safety

- UL/cUL
- CE EN 60950-1

#### System Requirements

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

#### Package Contents

- 48-port Gigabit Smart Switch (GS748T)
- Rubber footpads
- Power cord
- Rack-mount kit
- Smart Switch resource CD
- Smart Switch installation guide
- Warranty/support information card

#### Modules

- ProSAFE AGM731F 1000BASE-SX SFP GBIC
- ProSAFE AGM732F 1000BASE-LXSFP GBIC
- ProSAFE AGM733 1000BASE-ZXSFP GBIC

#### Ordering Information

**North America**  
GS748TNA

**Europe:**  
GS748TEU

**Asia:**  
GS748TAU

\* 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.

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