# ProSafe® 48-port Gigabit Smart Switch **GS748T**

# HILLIAM HILLIAM E.E.

# 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 fiber ports, it provides a 96 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.

# **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.

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Like all NETGEAR ProSafe Smart Switches, the GS748T is backed by the NETGEAR ProSafe Lifetime Warranty $^{\dagger}$ , and 1-Year ProSupport 24x7 Advanced Technical Support\*.





<sup>\*\*</sup>Use with NETGEAR AGM731F 1000BASE-SX SFP GBIC module, NETGEAR AGM732F 1000BASE-LX SFP GBIC module or NETGEAR AGM733 1000BASE-ZX SFP GBIC Module

<sup>\*\*\*</sup> Requires PC for initial discovery of Smart Switch features.



# **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

- 48 RJ-45 connectors for 10BASE-T, 100BASE-TX, and 1000BASE-T (Auto Uplink on all ports)
- 4 shared SFP slots for fiber Gigabit Ethernet modules

# Administrative Switch Management

- IEEE 802.1Q Tag VLAN (up to 64 static VLAN groups)
- Port-based VLAN (up to 48 groups)
- IEEE 802.1p (Class of Service)
- Port-based QoS (options high/normal)
- DSCP Layer QoS
- Port trunking Manual as per IEEE802.3ad link aggregation
- DHCP client function
- Rapid Spanning Tree 802.1w
- IGMP snooping V1
- SNMP V1/V2c
- Port setting
- Web-based configuration, anywhere on the network
- Smart Wizard 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 and restricted
   IP access list
- Firmware upgradeable

#### Active Flow Control

- Half-duplex back-pressure control
- Full-duplex IEEE 802.3x pause frame flow control
- Rate limiting
- Trusted MAC access control

#### Performance Specifications

- Forwarding modes: Store-and-forward
- Bandwidth: 96 Gbps
- Network latency: Less than 20  $\mu$ s for 64-byte frames in store-and-forward mode for 100 Mbps to 100 Mbps transmission
- Jumbo frame support
- Buffer memory: 1,632 KB embedded memory per unit
- Address database size: 8,000 media access control (MAC) addresses per system
- Addressing: 48-bit MAC address
- Mean time between failure (MTBF):
   108,000 hours (~12 years)
- Acoustic noise: 52 dBA

#### • LEDs

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

#### Power Supply

- Power consumption: 66W maximum
- 100-240V AC/50-60 Hz universal input

# Physical Specifications

- Dimensions (H x W x D): 440 x 305 x 43mm (17.3 x 12.0 x 1.7in)
- Weight: 4.9 kg/10.8 lb

#### Environmental Specifications

- Operating temperature: 32° to 104°F (0° to 40° C)
- Storage temperature: 14° to 158°F (-10° to 70°C)
- Operating humidity: 90% maximum relative humidity, non-condensing
- Storage humidity: 95% maximum relative humidity, non-condensing
- Operating altitude: 3,000 m
   (10,000 ft) maximum
- Storage altitude: 3,000 m
   (10,000 ft) maximum

# • Electromagnetic Compliance

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

# Safety Agency Approvals

- UL listed (UL 1950)/cUL
- IEC 950/EN 60950

# **Warranty and Support**

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

# ProSupport™ Service Packs Available

- 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)

# **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-LX SFP GBIC
- ProSafe AGM733 1000BASE-ZX SFP GBIC

# **Ordering Information**

- North America: G\$748TNA

Europe: GS748TEUAsia: GS748TAU

# **NETGEAR®**

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- \* 1-year 24x7 Advanced Technical Support includes Remote Diagnostics performed by our technical experts for prompt resolution of technical issues.
- $^\dagger$  Lifetime warranty for product purchased after 05/01/2007. For product purchased before 05/01/2007, warranty is 3 years.

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