





# Small, Yet Powerful Gigabit Smart Switch Packed with Advanced Features

Joining NETGEAR's ProSafe® family of Smart Switches with high performance and cost efficiency, this 10-port Gigabit Smart Switch is packed with powerful features capable of enhancing any type of business network. The GS110TP is designed for customers who need a low port density solution with the combination of Gigabit speed and PoE capability. The GS110TP comes with 8 dedicated 10/100/1000 Mbps copper ports to connect to your end devices and two additional Gigabit Fiber ports for uplinks with greater distance. With PoE capability on all 8 copper ports, the GS110TP can automatically detect PoE on the end devices and dynamically manage power assignments and priority. It is capable of delivering up to 15.4W of power to devices such as wireless access points, IP phones and IP cameras, providing flexibility and ease of deployment to your network.

The GS110TP comes with a comprehensive set of features, such as enhanced VLAN and QoS, access control lists (ACL), 802.1x port authentication, rate limiting and IGMP snooping and many more, to provide businesses with networks that are geared for growth while ensuring performance and reliability.

With the fanless design and compact form factor, the GS110TP offers quiet operation and is suitable for deployments in any type of environment, especially the ones which are sensitive to noise.

Like all NETGEAR ProSafe Smart Switches, the GS110TP is backed by the NETGEAR ProSafe Lifetime Warranty<sup>†</sup>, and 1-Year ProSupport 24x7 Advanced Technical Support\*.

## **PoE Power Management**

GS110TP offers useful PoE power management features to help you better control and monitor your power resource. The PoE timer can help turn off the PoE ports during certain times of the day so that your network can be more secure as well as energy efficient. It can also set prioritization on power usage so that specified ports are always guaranteed to get the power first if total power required exceeds the total power budget. The power will be assigned to the PoE ports dynamically depending on the actual power need of the individual network devices so that you don't need to do any calculation. The PoE LED on the front panel will light up if the PoE usage is reaching the threshold, meaning that insufficient PoE resource is left for powering up additional ports.

## **NETGEAR Green**

- Up to 70% power savings compared to the non-Green version
- Auto power-down mode saves energy when port is not in use
- Cable length detection reduces power usage when network cable is shorter than 10 meters

#### **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 GS110TP provides an extensive set of QoS features:

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

## **Advanced Security**

The GS110TP provides more robust security. This includes:

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



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## **Usability Enhancements**

The GS110TP is a powerful switch, yet very ease to manage. It comes with many usability enhancements to help customers fully utilize the features for a more optimized and secure network. For example, the Auto Voice VLAN and Auto Video features will assist customers to easily set up VoIP or IP surveillance networks with a couple of simple steps. You don't need to be an IT professional to set up VoIP or IP surveillance. Security is critical for business networks. However, not everyone knows how to set up a secure network. The ACL Wizards on the GS110TP will guide even naïve users through the setup of access control and address filtering.

## **Centralized Management via the New Smart Control Center**

With multiple switches in the network, managing configurations on each switch and upgrading firmware becomes a big challenge. NETGEAR's Smart Control Center that comes with the GS110TP and many other Smart switch models can help make this task much easier and simpler. It can perform discovery of the switches on your network, push configuration and firmware updates to multiple selected switches at once, and can even schedule when the tasks should be performed.



## **Technical Specifications**

- Network Protocol and Standards
  Compatibility
  - IEEE 802.3i 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 (DTE Power Via MDI)
- Power Supply
- Power consumption: 59.3W maximum

## Network Ports

 Eight (8) 10/100/1000 Mbps autosensing + 2 Gigabit SFP uplinks

## Physical Specifications

- Dimensions: (W x D x H):
  236 x 101.6 x 27 mm (9.3 x 4 x 1.07 in)
- Weight: 0.7 kg (1.55 lb)

#### Performance Specifications

- Forwarding modes: Store-and-forward
- Bandwidth: 20 Gbps full duplex
- Network latency: Less than 4 µs for 64-byte frames in store-and-forward mode for 1000 Mbps to 1000 Mbps transmission
- Buffer memory: 512 KB embedded memory per unit
- Address database size: 4k media access control (MAC) addresses per system
- Mean time between failures (MTBF): 157,004 hours (~18 years)
- Acoustic noise: 0 dB

## Electromagnetic Emissions

- CE mark, commercial
- FCC Part 15 Class B
- VCCI Class B
- C-Tick

## • 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

#### Status LEDs

- Per RJ45 port: Link/activity, speed, PoE status
- Per SFP port: Link/speed
- Per device: Power, PoE Max

## Power Adapter

 48V, 1.25A external power adapter, localized to country of sale

# ProSafe® 8-port Gigabit PoE Smart Switch with 2 Gigabit Fiber SFP

# GS110TP

• Electromagnetic Immunity - EN 55024

# Safety

- CE mark, commercial
- cUL IEC 950/EN 60950
- CB

# Administrative Switch Management

- IEEE 802.1Q static VLAN (64 groups, static)
- Protected ports
- IEEE 802.1p Class of Service (CoS)
- Port-based QoS
- DSCP-based QoS
- DiffServ
- IEEE 802.3ad Link Aggregation (manual or LACP)
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Trees Protocol (MSTP)
- IEEE 802.1 ab Link Layer Discovery Protocol (LLDP)
- LLDP-MED
- SNMP v1, v2c, v3
- RFC 1213 MIB II
- RFC 1643 Ethernet Interface MIB
- RFC 1493 Bridge MIB
- RMON group 1, 2, 3, 9
- Auto voice VLAN
- DHCP Filtering
- Auto denial-of-service (DoS) protection
- HTTP and HTTPS
- Ping and traceroute

- Green features: Power saving by cable length (<10 m)</li>
- Power saving when link down
- RFC 2131 DHCP client
- DHCP filtering
- IEEE 802.1x with Guest VLAN
- Jumbo frame support
- Port-based security by locked MAC addresses
- MAC and IP-based ACL
- Storm control for broadcast, multicast and unknown unicast packets
- IGMP snooping v1/v2
- Port-based egress rate limiting
- SNTP
- Port mirroring support (many-to-one)
- Web-based configuration
- Configuration backup/restore
- Password access control
- TACACS+ and RADIUS support
- Syslog
- Firmware upgradeable
- PoE (46 Watts of power budget)

# **NETGEAR Related Products**

## Network

- ProSafe<sup>®</sup> 802.11g Wireless Access Point (WG302)
- ProSafe<sup>®</sup> 802.11g Wireless Access Point (WG103)
- ProSafe<sup>®</sup> 802.11n Dual Band Wireless Access Point (WNDAP330)

# Desktops

- Gigabit Ethernet PCI Adapter (GA311)

# System Requirements

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

## Warranty and Support

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

## ProSupport<sup>™</sup> Service Packs Available

- 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**

- ProSafe<sup>®</sup> 8-port Gigabit PoE Smart Switch with 2 Gigabit Fiber SFP (GS110TP)
- AC adapter
- Rubber footpads
- Wall-mount kit
- Resource CD
- Installation guide

# **Ordering Information**

- Australia & Japan: GS110TP-100AJS
- Europe General: GS110TP-100EUS
- North America: GS110TP-100NAS

# **NETGEA**R<sup>°</sup>

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

<sup>+</sup> Lifetime warranty for product purchased after 05/01/2007. For product purchased before 05/01/2007, warranty is 3 years.