

Powerful and intelligent PoE switch in a compact form factor for optimized utilization and efficiency



Power-over-Ethernet (PoE) technology brings simplicity and cost-savings to network deployment for all size of businesses. With more and more devices capable of receiving power over Ethernet, the PoE switches that can provide power to these end devices are in high demand. Traditional PoE switches come with high port density and are not flexible or optimized for small scale deployments. Users will end up with many unused ports.

The NETGEAR ProSAFE GS510TP provides a compact solution that fits nicely into a situation where low-port density is desired for specific areas or extension of the network. It comes with 8 PoE-capable Gigabit copper ports to connect to your PoE end devices and two additional dedicated Gigabit Fiber ports for uplinks with greater distance. Plus, with the PoE Plus support, GS510TP is able to provide sufficient power for those power-hungry devices with up to 30w per port with a total power budget of 130w on the switch. GS510TP is packed with powerful features capable of enhancing any type of business network.

The GS510TP comes with a comprehensive set of L2+/Layer 3 Lite features, such as enhanced VLAN and QoS, access control lists (ACL), 802.1x port authentication (MD5) rate limiting and IGMP snooping and many more, to provide businesses with networks that are geared for growth while ensuring performance and reliability.

Both an intuitive Web-browser GUI interface and Smart Control Center (Windows PC required), offer simple Smart Managed Switch management, making it a snap to monitor switch performance, configure ports, even set up port trunks, VLANs, and traffic prioritization.

Highlights

Power-over-Ethernet (PoE)

- Provide flexibility and simplicity for your VoIP and Video Surveillance deployments

PoE Plus

- Future-Proof, capable of powering your 11n WIFI access points as well as PTZ cameras and video phones

Traffic Management

- Prioritize traffic to ensure quality of latency-sensitive services and applications despite increasing traffic loads

Advanced Security with 802.1x and ACL

- User-based authentication (MD5) and added filtering to permit or deny traffic based on MAC or IP addresses

Auto Voice and Auto Video

- Assist customers to easily set up VoIP or IP surveillance networks with a couple of simple steps

PoE Power Management

- Automatically detect PoE on the end devices and dynamically manage power assignments and priority

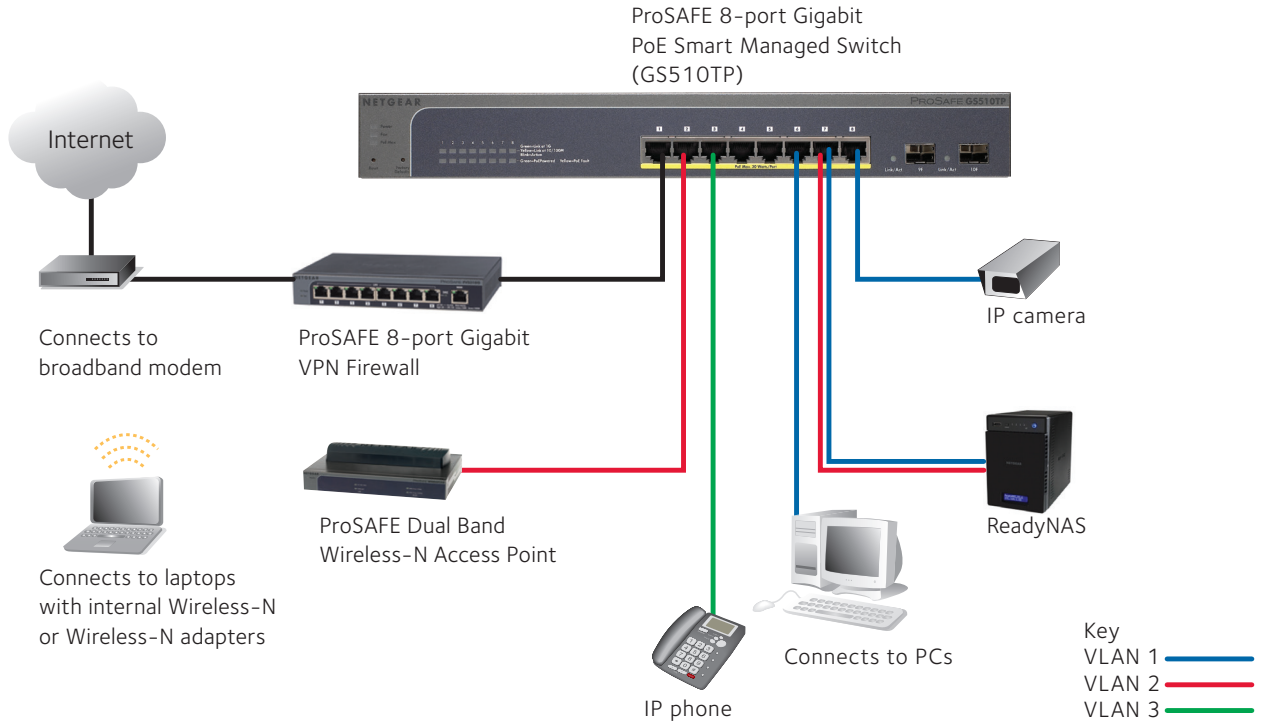
PoE Timer

- Schedule to turn off your WIFI network or VoIP phones outside of office hours for security and energy savings

Centralized Management via the New Smart Control Center

- Discover all the Smart Managed Switches in the network, configure them from a central location; schedule mass configuration and firmware uploads





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)
- IEEE 802.3at PoE

Power Supply

- Power consumption: 147W maximum
- 100–240VAC/50–60Hz universal input
- PoE budget: 130W

Network Ports

- 8 10/100/1000Mbps auto sensing Gigabit Ethernet
- 2 SFP slots

Physical Specifications

- Dimensions: (W x D x H): 328x169x43mm (12.91x6.65x1.7in)
- Weight: 1.68kg (3.7lb)

Electromagnetic Emissions

- CE EN 55022, EN 61000 and EN 55024
- FCC Part 15 Class A
- VCCI Class A
- C-Tick
- KCC
- RU EAC

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: 10,000ft (3,000m) maximum
- Storage altitude: 10,000ft (3,000m) maximum

LEDs

- Per port (10/100 and Gigabit): Link/activity, speed
- Per device: Power, Fan, PoE Max
- Per PoE port: PoE Power, PoE fault

Safety

- UL/cUL 60950-1
- CE EN 60950-1
- CCC
- CB
- KCC
- RU EAC

Technical Specifications (continued)

Administrative Switch Management

- IEEE 802.1Q static VLAN (64 groups, static)
- IEEE 802.1p Class of Service (CoS)
- Port-based QoS
- DSCP-based QoS
- DiffServ
- IEEE802.3ad link aggregation (manual or LACP)
- IEEE 802.1D Spanning Tree Protocol (STP)
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- IEEE 802.1ab 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
- RFC 2131 DHCP client
- Voice VLAN
- Auto-VOIP
- DHCP Filtering
- Auto denial-of-service (DoS) protection
- HTTP and HTTPS
- Ping and traceroute
- Power saving when link down
- IEEE 802.1x (MD5)

- Port-based security by locked MAC addresses
- IP and MAC ACL
- Storm control for broadcast, multicast and unknown unicast packets
- IGMP snooping v1/v2/v3
- Protected Port
- PoE Timer
- Port-based ingress and egress rate limiting
- SNMP
- Port mirroring support (many to one)
- Web-based configuration
- Configuration backup/restore
- Password access control
- RADIUS Support
- TACACS+ support
- Syslog
- Firmware upgradeable

Performance Specifications

- Forwarding modes: Store-and-forward
- Bandwidth: 20Gbps
- Network latency: <4µs for 64-byte frames in store-and-forward mode for 1000Mbps to 1000Mbps transmission
- Buffer memory: 512KBytes per system
- Address database size: 4,000 media access control (MAC) addresses per system
- Addressing: 48-bit MAC address
- Mean time between failures (MTBF): 458,124 hours at 25C (~52.3 years)
- Acoustic noise: <38dBA

Modules

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

NETGEAR Warranty*

- NETGEAR Lifetime Warranty
- Lifetime 24x7 Online Chat Technical Support
- 90 days (24/7) Live Phone Technical Support
- Lifetime Next Business Day (NBD) Hardware Replacement

ProSUPPORT OnCall 24x7, Category 1** Service Packages

- PMB0311 (1 yr.)
- PMB0331 (3 yrs.)
- PMB0351 (5 yrs.)

Package Contents

- ProSAFE® 8-port PoE Smart Managed Switch with 2 Gigabit SFP Ports (GS510TP)
- Rubber footpads
- Power cord
- Rack-mount kit
- Resource CD
- Installation guide

Ordering Information

- North America: GS510TP-100NAS
- Europe: GS510TP-100EUS
- Asia & Japan: GS510TP-100AJS

* This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller, and modifications to product may void the warranty; covers hardware, fans, and internal power supplies—not software or external power supplies; see <http://www.netgear.com/about/warranty/> for details. Lifetime technical support includes basic phone support for 90 days from purchase date and lifetime online chat support when purchased from a NETGEAR authorized reseller. This product was tested for quality and its components may be recycled. For indoor use only.

** The NETGEAR OnCall 24x7 contract provides unlimited phone and email technical support for your networking product. For ProSAFE products purchased prior to 06/2014, also includes next-business-day hardware replacement.