NETGEAR®

ProSAFE® Easy-Mount Switch
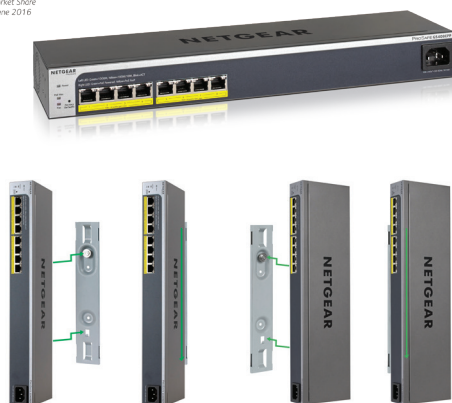
#1 IN UNMANAGED, WEB, & SMART SWITCHES

In North America Market Share according to NPD, June 2016

Put Your PoE Ports Exactly Where You Need Them

The NETGEAR ProSAFE® GS408EPP Easy-Mount 8-port Gigabit Ethernet PoE+ Web Managed Switch features a unique **Virtually Anywhere**™ mounting system that allows to install more PoE+ ports exactly where you need them. The unique mounting system allows you to put the Easy-Mount Switch up in the ceiling, strapped to a pole, or mounted under a desk or tabletop, making it the perfect switch for deploying Wireless APs, Pan/Tilt/Zoom and fixed IP Cameras, VoIP Phones, access-limited security door locks or any other IoT PoE-powered devices.

Should you decide to rack mount the GS408EPP switch, you can save space by installing two (2) switches in just a single 1U slot as all connections (power and Ethernet) are located on the front side, allowing back-to-back installation. As a member of the NETGEAR Web Managed (Plus) Switch family, the GS408EPP also includes a full set of software features such as traffic prioritization, VLANs, QoS, Port Trunking/Link Aggregation and PoE power allocation. The GS408EPP also features Energy Efficient Ethernet (IEEE 802.3az) for maximum power savings and comes with the NETGEAR Lifetime Limited Warranty and 24/7 support including lifetime chat.

Highlights

Hardware Highlights

- 8 PoE/PoE+ ports (124W total PoE power budget) to power up AC Wave 2 Access Points, Pan/Tilt/Zoom Security Cameras, VoIP/video conferencing phones, security door locks, etc.

- Easy-Mount Virtually Anywhere mounting system allows for wall, pole, under-surface, in-ceiling, and even two per 1U rack slot mounting (back-to-back) as all connections (power and Ethernet) are located on the front side.

- Secure placement above drop-down ceilings, or along ventillation ducts (plenum-rated), and where other switches cannot go, vertical or horizontal, flat or perpendicular

- Whisper quiet 26.9dB acoustics when operating at 25°C (77°F), well below normal offices ambient background noise

- Internal power supply to eliminate power brick

- Turn LED lights ON/OFF for non-distracting operation in dark environments

Software Highlights

- VLAN support for traffic segmentation

- Quality of Service (QoS) for traffic prioritization

- Auto Denial-of-Service (DoS) prevention

- Advanced per-port PoE controls

- Loop detection and broadcast storm controls

- IGMP snooping v1, v2 and v3 support for multicast optimization

- Rate limiting for better bandwidth allocation

- Port mirroring for network monitoring

- Port trunking for bigger uplink bandwidth

- Jumbo frame support

- Energy Efficient Ethernet (IEEE 802.3az) support for maxium power savings

Industry Leading Warranty

- LIFETIME Hardware Warranty*
- LIFETIME 24/7 Technical Support
- LIFETIME Next Business Day Replacement

LIFETIME WARRANTY Hardware Warranty   **LIFETIME WARRANTY** Next Business Day   **LIFETIME** Tech Support

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ProSAFE® Easy-Mount Switch

Data Sheet

GS408EPP

Hardware at a Glance

Model name	Form-Factor	10M/100M/1G Copper Ports	Internal Power Supply	Mounting Options	PoE/PoE+ ports	Case Material	Fans
GS408EPP	Easy-Mount Virtually Anywhere™ plus 1U rackmount (up to two per slot)	8	Yes	Attached to a wall, round or rectangular pole. Vertical, horizontal, flat or perpendicular mounting	8-port PoE+ (124W budget)	Metal	1 (Fixed) Side-to-side 26.9dB Low acoustics

- 8 x Gigabit Copper Ports
- 8 x PoE/PoE+ Capable Ports (124W budget)

- Dimensions WxDxH :   380 x 100 x 43mm (15.0 x 3.9 x 1.7in)

Software at a Glance

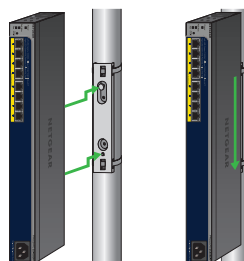| Management	VLANs	QoS	Port Trunking (Manual LAG)	IP Multicast Filtering	Rate Limiting & Priority Queueing	Jumbo Frame Support	IEEE (802.3az) Energy Effiecient Ethernet
Web Browser–based GUI (HTTP), PC–Based ProSAFE Plus Utility	Port–based, IEEE 802.1Q–based, Voice	Port–based, IEEE 802.1p/DSCP–based	Static LAG	IGMP Snooping	Yes	Yes	Yes

Performance at a Glance

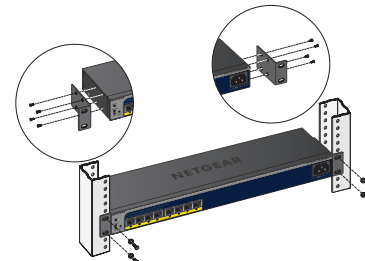| Model name	Fabric	Packet Buffer	Latency (Max Connection Speed)	VLANS	MAC Address Table	Priority Queues	Multicast IGMP Group	Packet Forwarding Rate (64 byte)	Jumbo Frames (bytes)
GS408EPP	16Gbps line–rate	192KB	10Mbps: <76.9μs 100Mbps: <9.1μs 1000Mbps:<2.7μs	64	4K Entries (dynamic)	4 (WRR)	128	11.9 Mfps	up to 9K

Attaching the Switch to a Wall or Under Tabletop/Desktop

Attaching the Switch to a Round Pole

Standard Rack Mounting

Features and Benefits
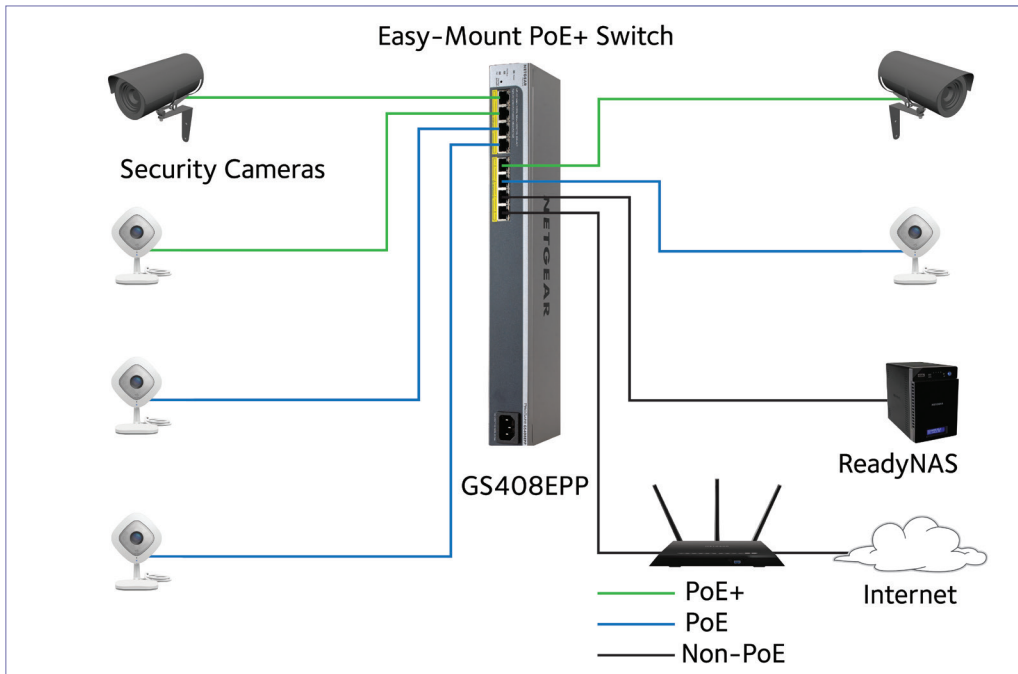
Hardware Features	Benefits
PoE/PoE+ support	• All 8 ports are PoE+ for a total of 124W of power enabling powering of all types of PoE devices • 802.3af and 802.3at Power-over-Ethernet (PoE/PoE+) for flexibility of deployment • Single wire deployment of power and network connectivity to PoE+ devices • Perfect switch for deploying Wireless AP, IP Cameras, VoIP Phones, Access-Controlled Security Door Locks or any other IoT PoE-powered devices
Virtually Anywhere™ Mounting	• Deploy your PoE switch closest to your PoE devices • Put your PoE ports exactly where you need them • Orient the switch ports up, down, or out (belly-mount or spine-mount) • Vertical, horizontal, flat or perpendicular mounting
Unique 2 per 1U Rack-Mountable	• Deploy more PoE+ devices in less rack space • As both Ethernet ports and power connection are on the same side of the Easy-Mount switch, two GS408EPP switches can fit back-to-back in a single 1U rack slot
Software Features	**Benefits**
Port-based and 802.1Q-based VLANs	Segment network into smaller groups for more secure and efficient use of network resources.
Comprehensive QoS features: • Port-based or 802.1p-based prioritization • Layer 3-based (DSCP) prioritization • Port-based ingress and egress rate limiting	Advanced controls for optimized network performance and better delivery of mission-critical traffic such as voice and video. Ingress and egress rate limiting allows for bandwidth shaping for mitigating network resources constraints or for optimizing guest access bandwidth on the network.
IGMP Snooping	For improved network efficiency on delivering multicast traffic. Save cost and improve network efficiency by ensuring multicast traffic only reaches designated receivers without the need of an extra multicast router.
Port trunking/Link Aggregation	Build up bigger bandwidth to support aggregated uplink/downlink traffic or to provide redundant link(s) using Static Manual LAGs.
Advanced per-port PoE Controls	Advanced per port PoE controls for remote power management of PoE connected devices (eg. Wireless AP, IP security cameras, LED lighting, door locks, IoT devices...)
Voice VLAN	The feature enables auto assignment of voice traffic (based on OUI) to a special VLAN (AKA Voice VLAN), allowing the assignment of special QoS parameters to that traffic, and tagging the port automatically, giving it high priority services. Voice VLAN must be enabled on a per port basis.
Loop detection and auto DoS prevention	Detect accidental network loops and protect against DoS attacks.
Port Mirroring	For better and quicker network diagnostics and troubleshooting.
Energy Efficient Ethernet (IEEE 802.3az)	For maximum power savings and reduced energy costs.
Cable Test	Easily identify bad Ethernet cables.

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ProSAFE® Easy-Mount Switch

Example Applications

Security and Surveillance

Easy-Mount PoE+ Switch

Security Cameras

GS408EPP

ReadyNAS

Internet

— PoE+
— PoE
— Non-PoE

In a Business Environment

Easy-Mount PoE+ Switch

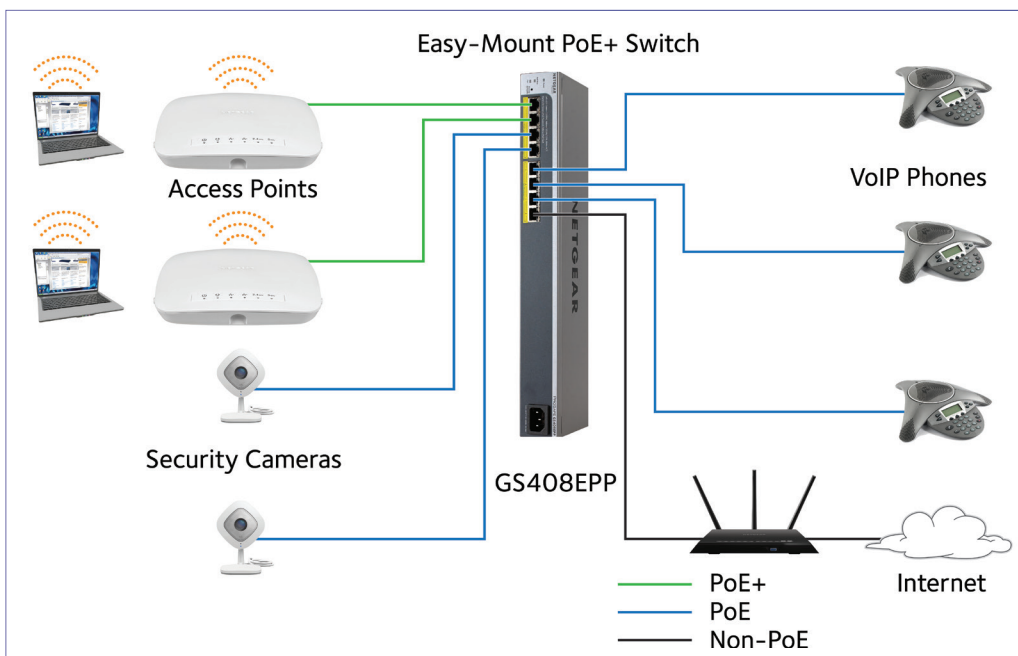Access Points

Security Cameras

GS408EPP

VoIP Phones

Internet

— PoE+
— PoE
— Non-PoE

Why Easy-Mount and Why from NETGEAR?

Why the NETGEAR GS408EPP Easy-Mount Switch is the ideal upgrade for SMB networks:

1. Full PoE+ Easy-Mount Switch for in-ceiling, wall, pole or desk mount capabilities

2. 8-ports Gigabit Ethernet PoE+ ports (124W total PoE power) allows connection of up to 7 PoE+ (802.3af and 802.3at) devices (1 port for uplink)

3. Full set of Web Managed (Plus) Switch software features such as traffic prioritization, VLANs, QoS, Port Trunking/Link Aggregation (manual LAG), and multicast

4. Per port PoE controls to turn on/off PoE for remote power management of PoE connected devices (eg. Wireless APs, IP security cameras, LED lighting, secure access door locks, IoT devices…)

5. Lifetime limited warranty, lifetime support chat and 24/7 support

Technical Specifications

PRODUCT SPECIFICATIONS	
Product	**GS408EPP**
100M/1G RJ-45 copper ports	8
PoE/PoE+ ports	8 PoE+ (124W PoE Budget)
PERFORMANCE SPECIFICATION	
Packet buffer memory (Dynamically shared across only used ports)	192KB
Forwarding modes	Store-and-forward
Bandwidth (full-duplex fabric)	16Gbps
Priority queues	4
Priority queuing	Weighted Round Robin (WRR)
MAC address database size (48-bit MAC addresses)	4K
Multicast groups	128
Number of VLANs	64
Packet forwarding rate (64 byte packet size) (Mfps or Mpps)	11.9Mfps
Speed/Latency	10Mbps: <76.9µs 100Mbps: <9.1µs 1000Mbps: <2.7µs
Jumbo frame support	Up to 9K packet size
Acoustic noise level @ 25° C (dBA) (ANSI-S10.12)	26.9 dBA
Mean Time Between Failures (MTBF) @ 25° C	2,715,369 hours
L2 SERVICES – VLANS	
IEEE 802.1Q VLAN tagging	Yes
Port-based VLANs (physical)	Yes
L2 SERVICES – AVAILABILITY	
Broadcast, multicast, unknown unicast storm control	Yes
Link Aggregation/Port Trunking (Static Manual LAGs only)	2 LAGs with max 4 members in each LAG
IEEE 802.3x (full duplex and flow control)	Yes
L2 SERVICES – MULTICAST FILTERING	
IGMP snooping (v1, v2 and v3)	Yes
IGMP snooping queries	No
Block unknown multicast	Yes
Static multicast router port	No
L3 SERVICES – DHCP	
DHCP Client	Yes
LINK AGGREGATION	
Static Manual LAGs (Port Trunking)	Yes
# of Static LAGs/# of members in each LAG	2 LAGs with max 4 members in each LAG

Technical Specifications

NETWORK SECURITY	
Broadcast, multicast, unknown unicast storm control	Yes
DoS attacks prevention	Yes
QUALITY OF SERVICE (QOS)	
Port-based rate limiting	Ingress and egress
Port-based QoS	Yes
IEEE 802.1p COS	Yes
IPv4 DSCP	Yes
IPv4 ToS	Yes
TCP/UDP-based	No
Weighted Round Robin (WRR)	Yes
Strict Priority queue technology	No
Voice VLAN	Yes, based on OUI bytes in the phone source MAC address

IEEE NETWORK PROTOCOLS		
• IEEE 802.3 Ethernet	• IEEE 802.1Q VLAN Tagging	• IEEE 802.3af Power-Over-Ethernet (PoE
• IEEE 802.3i 10BASE-T	• IEEE 802.3x Full-Duplex Flow Control	• IEEE 802.3at Power-Over-Ethernet (PoE)
• IEEE 802.3u 100BASE-TX	• IEEE 802.1p Class of Service	• IEEE 802.3ad Port Trunking (Manual LAG)
• IEEE 802.3ab 1000BASE-T	• IEEE 802.3az Energy Efficient Ethernet (EEE)	

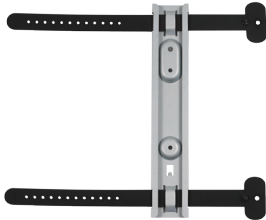| MANAGEMENT	
Password management	Yes
Web browser-based graphical user interface (GUI)	Yes
ProSAFE Plus Configuration Utility (PCU) for multi-switch management	Yes
Firmware upgrade	TFTP (Plus Utility) / HTTP (Web GUI)
Config file transfers (backup, restore)	Plus Utility or Web GUI
Firmware upgrade through Plus Utility (TFTP)	Yes
Config download (to switch) through Plus Utility	Yes
Config upload (to server) through Plus Utility	Yes
Firmware upgrade through web GUI (HTTP)	Yes
Config download (to switch) through web GUI (HTTP)	Yes
Config upload (to server) through web GUI (HTTP)	Yes
Cable test utility	Yes
Port mirroring	Yes
Max number of source ports allowed (one-to-one port mirroring)	1
Mirroring port can still work normally?	Yes

Technical Specifications

LEDs	
Per port	Left port LED: Speed, Link, Activity Right port LED: PoE Status
Per device	Power, PoE Max, Fan
POE CONFIGURATION	
Number of PoE/PoE+ ports	8 PoE+
Total PoE power budget (watts)	124W
PHYSICAL SPECIFICATIONS	
Dimensions (W x D x H)	380 x 100 x 43mm (15.0 x 3.9 x 1.7in)
Weight	1.6kg (3.53lb)
POWER CONSUMPTION	
Power Supply	Fixed internal PSU, 100-240VAC, 50-60Hz, 3A max Power cord localized to country of sale
Max power (worst case, all ports used, line-rate traffic) (Watts)	5.8W (no PoE) 148.0W (with PoE max)
Min power (link-down standby) (Watts)	4.7W
Heat Dissipation (max and min) (BTU/hr)	Max: 505.27 BTU/hr Min: 16.05 BTU/hr
Energy Efficient Ethernet (EEE) IEEE 802.3az	Yes
Short cable power reduction	Yes
Auto power-down	Yes
Fan(s)	1
ENVIRONMENTAL SPECIFICATIONS	
Operating	
Operating Temperature	0° to 50°C (32° to 122°F)
Humidity	90% maximum relative humidity (RH), non-condensing
Altitude	10,000 ft (3,000 m) maximum
Storage	
Storage Temperature	−20° to 70°C (− 4° to 158°F)
Humidity	95% maximum relative humidity (RH), non-condensing
Altitude	10,000 ft (3,000 m) maximum

Technical Specifications

ELECTROMAGNETIC EMISSIONS AND IMMUNITY CERTIFICATIONS	
Certifications	CE mark, commercial
	47 CFR FCC Part 15, SubpartB, ClassA ICES-003:2016 Issue 6, ClassA ANSI C63.4:2014
	EN 55022:2010 + AC:2011, Class A EN 55024:2010 EN 61000-3-2:2014, Class A EN 6100-3-3:2013
	CISPR 22:2008, Class A AS/NZS CISPR 22:2009 + A1:2010, Class A
	VCCI V-3/2015.04, Class A V-4/2012.4
	Russia EAC mark
	Korea KC mark
	CNS 13438
Electromagnetic Compliance (Class A or B)	Class A
SAFETY CERTIFICATIONS	
Certifications	CB mark, commercial IEC 60950-1:2005(ed.2) + A1:2009 + A2:2013
	UL/cUL Listed (UL 60950-1)/CAN/CSA C22.2 No. 60960-1-07
	EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013
	AN/NZS 60950.1:2015
	Russia EAC mark
WARRANTY AND SUPPORT	
	ProSAFE Lifetime Warranty*
	Lifetime Online Technical Support*
	Lifetime Next-Business-Day (NBD) Replacement
ProSUPPORT OnCall 24x7 Service Packs**	Category 1: PMB0311 (1 yr.) PMB0331 (3 yrs.) PMB0351 (5 yrs.)

Ordering Information

PACKAGE CONTENTS	
All models	ProSAFE Easy-Mount Web Managed (Plus) Switch
	Power cord (localized to country of sale)
	Rack-mounting kit
	2 x Rubber belts
	1 x Easy-Mount bracket
	Quick install guide
	ProSAFE Plus Utility software and links to additional online documentation including the Web browser-based management GUI User Manual and datasheet.

19-inch Rack-Mount Kit	Easy-Mount Bracket for Virtually Anywhere Mounting	Rubber Belts for Pole Mounting

ORDERING INFORMATION	
GS408EPP-100NES	North America, Latin America and Europe
GS408EPP-100AJS	Asia Pacific and Australia

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DS-GS408EP-2

Page 9 of 9