



## Control and Configure Beyond Plug-and-Play



NETGEAR Plus Switches with PoE meets business networks growing need by providing fundamental network features such as simplified VLANs, QoS set-up and IGMP Snooping that will help optimize the performance of business networks. Plus Switches are the perfect upgrade from the plugand-play unmanaged switch, delivering essential networking features at a very affordable price. These models support Power-Over-Ethernet (PoE) and can power devices such as VOIP phones, surveillance IP cameras, wireless access points and many other applications. These new PoE+ Gigabit Ethernet Plus switches models include uninterruptable PoE to help optimize the performance and troubleshooting of business networks. The new and improved business-friendly GUI allows easy management and simple configuration. With the growing deployment of applications and an all-inone solution, providing management and power to these applications would be ideal.

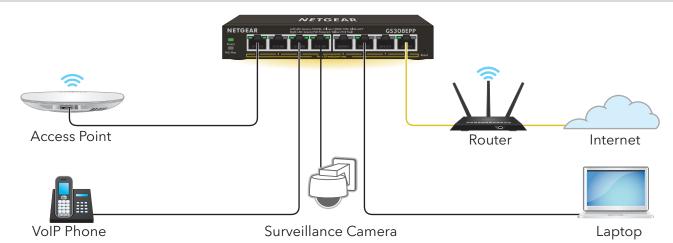
#### Highlights

- Enable network configuration and management at the price point of unmanaged switches
- Simple, yet useful network set-up on top of plug-and-play connectivity
- Business-friendly and easy-to-use web browser-based management GUI
- VLAN support for traffic segmentation

- Quality of Service (QoS) for traffic prioritization
- Auto "denial-of-service" (DoS) prevention
- Troubleshoot connection issues via cable test
- Loop prevention<sup>1</sup>, loop detection<sup>2</sup>, and broadcast storm controls
- Rate limiting for better bandwidth allocation
- Port mirroring for network monitoring

- Jumbo frame support
- Advanced features such as per port PoE controls
- Uninterrupted PoE keeps PoE power on even when the switch is updating firmware or performing software reboot.
- 802.3at standard offering 30W/port
- Fanless and versatile mounting option (desktop and wall-mountable)

#### Small Office/Home Office Network Diagram



<sup>&</sup>lt;sup>1</sup>Applies to GS316EP, GS316EPP



# **Technical Specifications**

Features	GS305EP	GS305EPP	GS308EP	GS308EPP	GS316EP	GS316EPP		
10/100/1000 RJ45 Copper Ports (Auto Uplink)	5	5	8	8	16	16		
Enclosure	Metal	Metal	Metal	Metal	Metal	Metal		
Connector Type	Metal	Metal	Metal	Metal	Metal	Metal		
PoE								
# of PoE ports	4	4	8	8	15	15		
# PoE+ 802.3at Ports	4	4	8	8	15	15		
SFP ports	0	0	0	0	1	1		
Total PoE/PoE+ Budget	63W	120W	62W	123W	180W	231W		
Advanced PoE Controls	Yes	Yes	Yes	Yes	Yes	Yes		
PoE Scheduling	No	No	No	No	Yes	Yes		
Uninterrupted PoE	Yes	Yes	Yes	Yes	Yes	Yes		
Performance Specification								
Forwarding modes	Store-and-forward							
Bandwidth	10Gbps	10Gbps	16Gbps	16Gbps	32Gbps	32Gbps		
Max MAC entries	4K	4K	4K	4K	4K	4K		
Buffer Size	192KB	192KB	192KB	192KB	192KB	192KB		
Energy Efficient Ethernet (IEEE 802.3az) compliant	Yes	Yes	Yes	Yes	Yes	Yes		
Priority queuing	WRR	WRR	WRR	WRR	WRR	WRR		
Jumbo frame support	9,216 bytes	9,216 bytes	9,216 bytes	9,216 bytes	10,000 bytes	10,000 byt		
Acoustic noise level @ 25° C (dBA) (ANSI-S10.12)	0	0	0	0	0	0		
Mean Time Between Failures (MTBF) @ 25° C	1,164,104 hrs	853,770 hrs	859,126 hrs	842,428 hrs	784,742 hrs	570,435 h		
L2 Services - VLANS								
VLAN (# Supported)	64	64	64	64	64	64		
IEEE 802.1Q VLAN Tagging	Yes	Yes	Yes	Yes	Yes	Yes		
Port-based VLANs	Yes	Yes	Yes	Yes	Yes	Yes		
L2 Services - Availability								
Link Aggregation/Port Trunking	Yes	Yes	Yes	Yes	Yes	Yes		
Number of Static Manual LAGs and # of members	2/4	2/4	2/4	2/4	8/8	8/8		
L2 Services - Multicast Filtering								
IGMP snooping (v1, v2, and v3)	Yes	Yes	Yes	Yes	Yes	Yes		
Block unknown multicast	Yes	Yes	Yes	Yes	Yes	Yes		
Supported Multicast groups	128	128	128	128	128	128		
L3 Services - DHCP								
DHCP client	Yes	Yes	Yes	Yes	Yes	Yes		
Quality of Service								
Rate Limiting	Yes	Yes	Yes	Yes	Yes	Yes		
DSCP	Yes	Yes	Yes	Yes	Yes	Yes		
IEEE 802.1p COS	Yes	Yes	Yes	Yes	Yes	Yes		
Port-based VLAN	Yes	Yes	Yes	Yes	Yes	Yes		
TOS	Yes	Yes	Yes	Yes	Yes	Yes		
WRR (Weighted Round Robin)	Yes	Yes	Yes	Yes	Yes	Yes		
Strict Priority queue technology	No	No	No	No	No	No		



# **Technical Specifications**

IEEE Network Protocols	GS305EP	GS305EPP	GS308EP	GS308EPP	GS316EP	GS316EPP		
<ul> <li>IEEE 802.3 Ethernet</li> <li>IEEE 802.3ab 1000BASE-T</li> <li>IEEE 802.3u 100BASE-T</li> <li>EEE 802.1p Class of Service</li> </ul>	<ul> <li>IEEE 802.1Q VLAN Tagging</li> <li>IEEE 802.3x Full-duplex Flow Control</li> <li>IEEE 802.3af PoE</li> <li>IEEE 802.3at PoE+</li> </ul>							
Management								
System Password	Yes	Yes	Yes	Yes	Yes	Yes		
Web browserbased management GUI	Yes	Yes	Yes	Yes	Yes	Yes		
PC Utility	No	No	No	No	No	No		
Port Mirroring	Yes	Yes	Yes	Yes	Yes	Yes		
Max number of source ports allowed (one-to-one port mirroring)	1	1	1	1	1	1		
Many-to-one Port Mirroring	Yes	Yes	Yes	Yes	Yes	Yes		
Cable Test Utility	Yes	Yes	Yes	Yes	Yes	Yes		
FW Upgrade Thru Plus Utility (TFTP)	No	No	No	No	No	No		
Config download (to Switch) thru Plus Utility	No	No	No	No	No	No		
Config upload (to server)	Yes	Yes	Yes	Yes	Yes	Yes		
LEDs								
Per port	Speed, Link, Activity, PoE							
Per device			Power, Syste	em, PoE Max				
Physical Specifications								
Dimensions (W x D x H)	158 x 101 x 27 mm (6.2 x 4.0 x 1.1 in)	158 x 101 x 27 mm (6.2 x 4.0 x 1.1 in)	158 x 101 x 27 mm (6.2 x 4.0 x 1.1 in)	158 x 101 x 27 mm (6.2 x 4.0 x 1.1 in)	286 x 102 x 27 mm (11.26 x 4.02 x 1.06 in)	286 x 102 x 27 mm (11.26 x 4.02 x 1.06 in)		
Weight	0.39 kg (0.86 lb)	0.40 kg (0.88 lb)	0.49 kg (1.08 lb)	0.49 kg (1.08 lb)	0.883 kg (1.95 lb)	0.883 kg (1.95 lb)		
Environmental Specifications								
Operating								
Operating temperature	32° to 104°F (0° to 40°C)							
Humidity (relative)	90% maximum relative humidity (RH), non-condensing							
Altitude	10,000 ft (3,000 m) maximum							
Storage								
Storage temperature	- 4° to 158°F (-20° to 70°C)							
Humidity (relative)	95% maximum relative humidity (RH), non-condensing							
Altitude	10,000 ft (3,000 m) maximum							



### **Technical Specifications**

Electromagnetic Emissions and Immunity	GS305EP	GS305EPP	GS308EP	GS308EPP	GS316EP	GS316EPP		
Certifications	CE mark, commercial FCC Part 15 class B CE/EN55032/24 VCCI ACMA CSA safety KC BSMI							
Warranty and Support								
Hardware Warranty (All Except China/India)	5-year warranty							
China/India	1-year warranty							
External Power Adapter Warranty	2-year warranty							
Technical Support (online, phone)	90 days free of Technical Support with registration							
ProSUPPORT OnCall 24x7 Service Plans	Category S1 PMB0S11- 10000S PMB0S31- 10000S PMB0S51- 10000S	Category S1 PMB0S11- 10000S PMB0S31- 10000S PMB0S51- 10000S	Category S1 PMB0S11- 10000S PMB0S31- 10000S PMB0S51- 10000S	Category S1 PMB0S11- 10000S PMB0S31- 10000S PMB0S51- 10000S	Category 1 PMB0311- 10000S PMB0331- 10000S PMB0351- 10000S	Category 1 PMB0311- 10000S PMB0331- 10000S PMB0351- 10000S		
Package Contents								
All Models	NETGEAR Plus Switch Power adapter (power cable varies by region) Wall installation kit Rubber feet Installation guide							
Optional Modules, Software Licenses and Accessorie	es (For GS316EP	and GS316EPP or	ıly)					
AGM731F	FP Transceiver 1000BASE-SX (Short range, multimode)							
AGM732F	SFP Transceiver 1000BASE-LX (Long range, single mode)							
AGM734-10000S	SFP Transceiver 1000BASE-T Copper RJ45 GBIC							

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NETGEAR, Inc. 350 E. Plumeria Drive, San Jose, CA 95134-1911 USA, 1-888-NETGEAR (638-4327), E-mail: info@NETGEAR.com, www.NETGEAR.com

<sup>&#</sup>x27;This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller, and covers unmodified hardware, fans and internal power supplies -not software or external power supplies, and requires product registration at https://www.netgear.com/business/registration within 90 days of purchase; see https://www.netgear.com/about/warranty for details. Intended for indoor use only.

<sup>†</sup> NETGEAR #1 in US Market Share according to NPD data for Unmanaged and Smart Switches, September 2019. NETGEAR #1 in Europe Market Share according to Context data for Unmanaged and Smart Switches, September 2019.

 $The use of the proper type of cable is required for optimum performance. \ Please consult this Knowledge Base article for more information: www.netgear.com/cables article for more informati$