NETGEAR®
BUSINESS

Data Sheet | **300 Series**

SOHO Gigabit PoE Unmanaged Switches





Expanding Wired Connectivity for SOHO Networks needing PoE

NETGEAR 300 Series Gigabit Ethernet Unmanaged switches with PoE provide easy, reliable, and affordable network connectivity for home and small offices. With these unmanaged plug-and-play switches, you can expand your network connections to multiple devices instantly.

The unmanaged switches provides power and data from a single Ethernet (CAT-5e) cable to devices such as IP cameras, VoIP/ Internet-based phones, wireless access points, etc. The majority of these models also support PoE power auto-balance and allocation feature.

NETGEAR's unique PoE technology automatically balances the PoE power based on the device needs independent of PoE class detected. These switches deliver the power the device needs, at the most granular level.

Outstanding power flexibility with NETGEAR's exclusive FlexPoE

The SOHO Gigabit PoE unmanaged switches support NETGEAR's exclusive FlexPoE upgradeable PoE power feature. Powered by the industry's first flexible PoE+ integrated technology, you can increase or decrease the PoE budget by simply purchasing a new NETGEAR. FlexPoE power supply, effectively futureproofing small business networks and budgets. With NETGEAR's exclusive FlexPoE, these two switches help businesses cost effectively increase their power budget to expand their network as needed.

All ports support PoE/PoE+ up to 30W per port, which makes them the perfect switches 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.

The SOHO Gigabit PoE unmanaged switches have copper Gigabit Ethernet PoE+ ports featuring NETGEAR FlexPoE power. The GS308PP ships with 83W§ of PoE budget, GS316P ships with 115W§, and the GS316PP features an astounding 183W§ of PoE power budget.

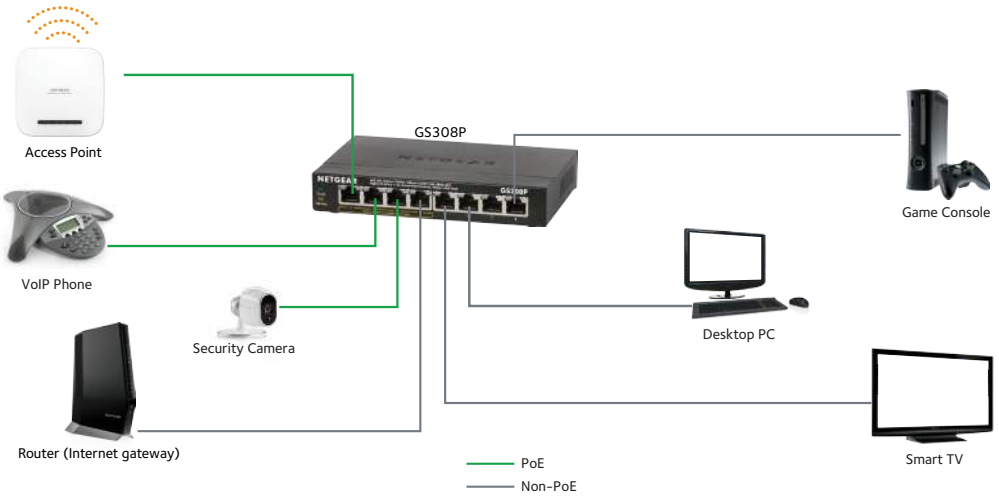
Should you need more power in the future, rather than replacing the entire switch, with NETGEAR FlexPoE, you can just purchase the optional NETGEAR FlexPoE EPS130W power adapter, which will boost the PoE budget of your GS308PP and with the EPS200W Power adapter, which will boost the PoE budget of your GS316P.

Highlights

- Auto-MDI/MDIX eliminates the need for crossover cables
- LED indicators for ease of use
- Energy-efficient technology for power savings
- Fanless design for silent operation
- Auto-negotiation for automatic connection at the highest common speed between switch and an end device
- Non-blocking switching architecture for maximum throughput at wire speed
- Plug-and-play; no setup required
- Durable and rugged metal case
- Desktop or wall-mountable (based on specific model)
- Ideal for small office and home networks
- Standards-based technology ensures interoperability with any standards-based devices in the existing network
- 802.3af and 802.3at Power over Ethernet (PoE and /PoE+, depending on specific model) for IP cameras, VoIP/ Internet-based phones, wireless access points

Small Office/Home Office Network Diagram

SMALL OFFICE/HOME OFFICE NETWORK DIAGRAM



Expanding Wired Connectivity for SOHO Networks

Increase or decrease your PoE budget anytime by simply upgrading your switch power supply, without having to purchase a new switch. Future-proof your PoE budget with GS308PP or GS316P. And if you have power-hungry devices and directly need a high power PoE switch, buy G316PP. This unique combination from NETGEAR Business makes these switches the most adaptive in the market.

The following table describes the accessory power adapters which are sold separately:

Switch Model	Power Adapter Model	Power Adapter Wattage	PoE+ Power Wattage
GS308PP (Comes w/90W PA)	EPS90W	90W	83W
	EPS130W	130W	123W
GS316P (Comes w/130W PA)	EPS90W	90W	76W
	EPS130W	130W	115W
	EPS200W	200W	183W
GS316PP (Comes w/200W PA)	EPS90W	90W	76W
	EPS130W	130W	115W
	EPS200W	200W	183W

Features	GS305Pv3	GS305PPv3	GS308PP	GS316P	GS316PP	GS324P	GS324PP	GS348PP
10/100/1000Mbps Ports (Auto Uplink)	5	5	8	16	16	24	24	48
Enclosure	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal
Connector Type	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal
Form Factor	Desktop or wall-mountable					Rack mount/ Desktop	Rack mount/ Desktop	Rack mount/ Desktop
Power On/Off Switch	No	No	No	No	No	NA	NA	NA
PoE Configuration								
802.3af PoE Ports	4	4	8	16	16			
802.3at PoE+ Ports	4	4	8	16	16	16	24	24
PoE Max Power Per Port	Up to 30W	Up to 30W	Up to 30W	Up to 30W	Up to 30W	30W	30W	30W
Total PoE Power Budget**	up to 63W	up to 83W	83W (FlexPoE upgradeable to 123W using 130W power adapter)	115W§	183W§	190W	380W	380W
PoE auto-balance	Yes	Yes	Yes	Yes	Yes			
Power Consumption								
DC Input/Power In	54V, 1.25A	54V, 1.66A	54V/1.66A (FlexPoE 130W power adapter: 54V/2.4A)	54V, 2.4A	54V, 3.7A	Internal (100-240VAC, 50/60Hz, 3A max)	Internal (100-240VAC, 50/60Hz, 8A max)	Internal (AC: 110-240V, 50/60Hz, 8A max)
Power Consumption (Max and Standby)	66.78W/ 1.02W	85.77W/ 1.01W	90W/3.86W	127.9W/ 2.68W	195.9 W/ 2.67W	210W/ 10W	400W/ 10W	410W/ 10W
Heat Dissipation (Max and Standby) (BTU/Hr)	228.38 BTU/ 3.24 BTU	293.33 BTU/ 3.078 BTU	300.6 BTU/ 3.69 BTU	437.42BTU/ 9.18BTU	669.9BTU/ 9.14BTU	718.2BTU/ 34.2BTU	1368BTU/ 34.2BTU	1402.2BTU/ 34.2BTU
Performance Specification								
Bandwidth (Non-Blocking)	10 Gbps	10 Gbps	16 Gbps	32 Gbps	32 Gbps	48 Gbps	48 Gbps	96Gbps
Packet Buffer Memory (Dynamically shared across only used ports)	128 KB	128 KB	192 KB	1MB	1MB	192 KB	192 KB	1.5MB
Jumbo Frame Support	9,216 bytes	9,216 bytes	9,216 bytes	9,216 bytes	9,216 bytes	10000 bytes	10000 bytes	12288 bytes
Queue WRR (Weighted Round Robin) Ratio	1:2:4:8	1:2:4:8		1:3:5:7:8:10:12:15		1:2:4:8	1:2:4:8	1:3:5:7:8: 10:12:15
Forwarding Rate (using 64-byte packets) 1000Mbps Port	1,448,000 pps	1,448,000 pps	1,448,000 pps	1,448,000 pps	1,448,000 pps	1,448,000 pps	1,448,000 pps	1,448,000 pps
Latency (using 64-byte packets) - 1000Mbps Port (average)	< 2.4 µsec	2.4 µsec	< 3.0 µsec	< 3.7 µsec	< 3.7 µsec	< 4 µsec	< 4 µsec	< 4 µsec
MAC Address Table Size	2K	2K	4K	4K	4K	8K	8K	8K
Auto MDI/MDI-X Cable Detection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Auto-sensing Half/Full Duplex Switched Ports	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean Time Between Failures (MTBF) @ 25° C	4,113,947 hours	4,113,947 hours	2,752,476 hours	2,362,192 hours	2,362,192 hours	1,193,574 hours	667,762 hours	570,972 hours

LEDs	GS305Pv3	GS305PPv3	GS308PP	GS316P	GS316PP	GS324P	GS324PP	GS348PP
Per port	Speed, Link/ Activity (Left), Ports 1-4: PoE (Right)	Speed, Link/ Activity (Left), Ports 1-4: PoE (Right)	Speed, Link/ Activity (Left), Ports 1-8: PoE (Right)	Speed, Link/ Activity (Left), PoE (Right)	Speed, Link/ Activity (Left), PoE (Right)	Speed, Link/ Activity, PoE	Speed, Link/ Activity, PoE	Speed, Link/ Activity, PoE
Per device	Power, PoE Max	Power, PoE Max	Power, PoE Max	Power, PoE Max	Power, PoE Max	Power, PoE Max, Fan	Power, PoE Max, Fan	Power, PoE Max, Fan
Quality of Service (QoS)								
802.1P Based (CoS) Supported	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Honors DSCP (DiffServ) Tags	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Energy Efficiency								
Energy Efficient Ethernet (EEE) IEEE 802.3az compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Auto Power Down	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Short Cable Detection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fan/Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	1 Fan	2 Fans	2 Fans
Physical Specifications								
Dimensions (W x D x H)	158 x 101 x 29 mm (6.2 x 4.0 x 1.1 in)	158 x 101 x 29 mm (6.2 x 4.0 x 1.1 in)	236 x 102 x 27 mm (9.3 x 4 x 1.1 in)	286 x 102 x 27 mm (11.3 x 4 x 1.1 in)	286 x 102 x 27 mm (11.3 x 4 x 1.1 in)	330 x 206 x 43 mm (13 x 8.1 x 1.7 in.)	440 x 204 x 43 mm (17.3 x 8 x 1.7 in)	440 x 310 x 43 mm (17.3 x 12.2 x 1.7 in.)
Weight	0.40 kg (0.88 lb)	0.40 kg (0.88 lb)	0.6 kg (1.32 lb)	0.88 kg (1.94 lb)	0.88 kg (1.94 lb)	2.44 kg (5.38 lb)	3.30 kg (7.3 lb)	4.56 kg (10.05 lb)
Environmental Specifications								
Operating Temperature	0° to 40°C (32° to 104°F)					0° to 45°C (32° to 113°F)	0° to 45°C (32° to 113°F)	0° to 45°C (32° to 113°F)
Humidity	90% maximum relative humidity (RH), non-condensing					10%–90% relative humidity, noncondensing		
Altitude	10,000 ft (3,000 m) maximum					3000 M	3000 M	3000 M
Storage Temperature	-20° to 70°C (- 4° to 158°F)							
Humidity (relative)	95% maximum relative humidity (RH), non-condensing					10%~95%, non-condensing		
Electromagnetic Emissions and Immunity								
Certifications	CE Mark, FCC Part 15 Class B, IC Class B, RCM, VCCI, KC	CE Mark, FCC Part 15 Class B, IC Class B, RCM, VCCI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, VCCI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, VCCI, BSMI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, VCCI, BSMI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, VCCI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, VCCI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, VCCI, KC
Safety Certifications	CB, CE LVD	CB, CE LVD	CB, CE LVD	CB, CE LVD	CB, CE LVD	CB, CE LVD, UL	CB, CE LVD, UL	CB, CE LVD, UL
IEEE Network Protocols								

- IEEE 802.3ab 1000BASE-T Gigabit Ethernet
- IEEE 802.3u 100BASE-TX Fast Ethernet
- IEEE 802.3i 10BASE-T Ethernet
- IEEE 802.3x Flow Control
- IEEE 802.1p Priority QoS (GS305Pv3, GS305PPv3, GS308PP, GS316P, GS316PP)
- IEEE 802.3 CSMA/CD
- 802.3az Energy Efficient Ethernet

Warranty and Support *	GS305Pv3	GS305PPv3	GS308PP	GS316P	GS316PP	GS324P	GS324PP	GS348PP
All Except China	3-year Warranty							
China	1-year Warranty							
Power Adapter Warranty	2-years							
Technical Support (online, phone)	90 days free from date of purchase							
ProSUPPORT Category	Category S1	Category S1	Category S1	Category S2	Category S2	Category 2	Category 2	Category 2
ProSUPPORT OnCall 24x7 Service Plan	PMB0S11-10000S (1 yr) PMB0S31-10000S (3 yrs) PMB0S51-10000S (5 yrs)	PMB0S11-10000S (1 yr) PMB0S31-10000S (3 yrs) PMB0S51-10000S (5 yrs)	PMB0S12-10000S (1 yr) PMB0S32-10000S (3 yrs) PMB0S52-10000S (5 yrs)	PMB0S12-10000S (1 yr) PMB0S32-10000S (3 yrs) PMB0S52-10000S (5 yrs)	PMB0S12-10000S (1 yr) PMB0S32-10000S (3 yrs) PMB0S52-10000S (5 yrs)	PMB0312-10000S (1 yr) PMB0332-10000S (3 yrs) PMB0352-10000S (5 yrs)	PMB0312-10000S (1 yr) PMB0332-10000S (3 yrs) PMB0352-10000S (5 yrs)	PMB0312-10000S (1 yr) PMB0332-10000S (3 yrs) PMB0352-10000S (5 yrs)
Package Contents								
All Models	Unmanaged PoE Gigabit Ethernet switch Power adapter/cord (localized to the country of sale) Rubber footpads for desktop installation Wall mount kit Installation guide					Unmanaged Gigabit Ethernet PoE+ switch Power cord (localized to country of sale) Rack mount kit Desktop rubber feet Installation guide		

Ordering Information	
GS305P	
GS305P-300AUS	Australia
GS305P-300EUS	Europe, including United Kingdom
GS305P-300INS	India
GS305P-300JPS	Japan
GS305P-300KOS	Korea
GS305P-300NAS	North America
GS305P-300PES	Middle East
GS305P-300PRS	China
GS305P-300TWS	Taiwan
GS305P-300UKS	Hong Kong
GS305PP	
GS305PP-300AUS	Australia
GS305PP-300EUS	Europe, including United Kingdom
GS305PP-300INS	India
GS305PP-300JPS	Japan
GS305PP-300KOS	Korea
GS305PP-300NAS	North America
GS305PP-300PES	Middle East
GS305PP-300PRS	China
GS305PP-300TWS	Taiwan
GS305PP-300UKS	Hong Kong
GS308PP	
GS308PP-100AJS	Japan and Australia
GS308PP-100EUS	Europe, including United Kingdom
GS308PP-100NAS	North America

GS316P	
GS316P-100AJS	Australia and Japan
GS316P-100EUS	Europe and United Kingdom
GS316P-100NAS	North America
GS316PP	
GS316PP-100AJS	Australia and Japan
GS316PP-100EUS	Europe and United Kingdom
GS316PP-100NAS	North America
GS324P	
GS324P-100AJS	Australia and Japan
GS324P-100EUS	Europe and United Kingdom
GS324P-100NAS	North America and Asia Pacific
GS324PP	
GS324PP-100AJS	Australia and Japan
GS324PP-100EUS	Europe and United Kingdom
GS324PP-100NAS	North America and Asia Pacific
GS348PP	
GS348PP-100AJS	Australia and Japan
GS348PP-100EUS	Europe and United Kingdom
GS348PP-100NAS	North America and Asia Pacific

Optional Modules and Accessories	
EPS90W	90W External Power Adapter
EPS130W	130W External Power Adapter
EPS200W	200W External Power Adapter

Technical Specifications for Accessory Power Adapters	
Power Adapter Warranty	2-years
Technical Support	90 days of free technical spoort
ProSUPPORT Contract Option	No
Auto-applied contracts	No

§ NETGEAR FlexPoE power - interchangable external power adapter allows for increasing or decreasing your PoE budget at any time with optional NETGEAR FlexPoE power adapters.

Actual SKU availability may vary per region. Please check the local website for product availability.

*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; see http://www.netgear.com/about/warranty/ for details. 24/7 basic technical support provided for 90 days from purchase date when purchased from a NETGEAR authorized reseller.

** Maximum PoE power supplied is 15.4W per port, but not to exceed 53W total power supplied across all PoE connected devices.

† 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.

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