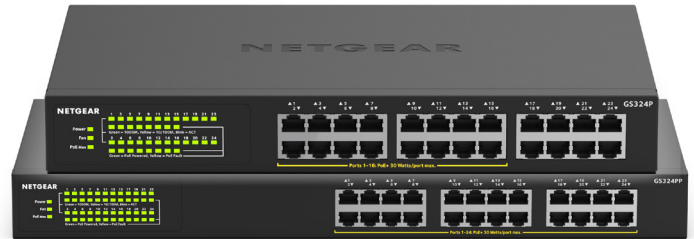


Gigabit Unmanaged Essentials PoE Switches



Expanding Wired Connectivity for Small Business Networks needing PoE

NETGEAR Gigabit Unmanaged Essentials 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 Gigabit Unmanaged Essentials PoE 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 Gigabit Unmanaged Essentials PoE switches have copper Gigabit Ethernet PoE+ ports featuring NETGEAR FlexPoE power. The GS305P with 63W, GS305PP with 83W, GS308PP ships with 83W^s of PoE budget, GS316P ships with 115W^s, and the GS316PP features an astounding 183W^s of PoE power budget.

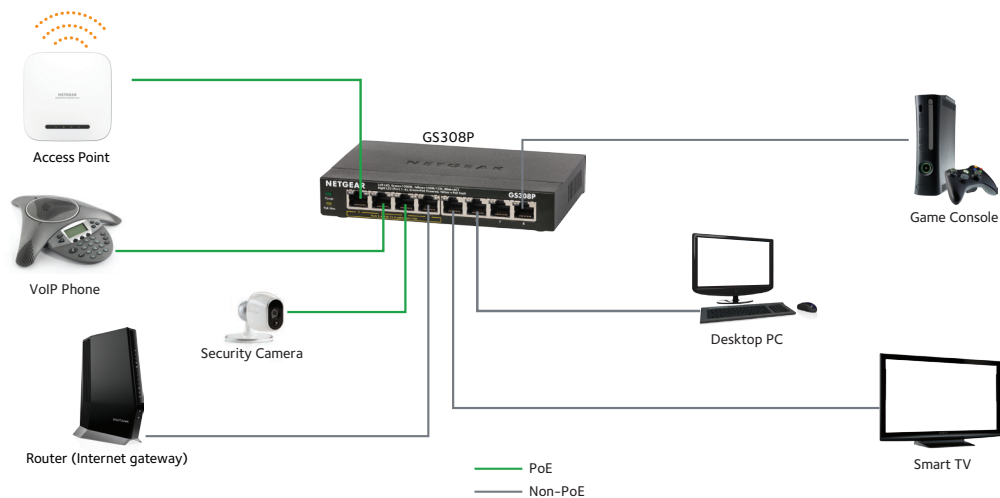
Should you need more power in the future, rather than replacing the entire switch, with NETGEAR FlexPoE, you can just purchase the optional NETGEAR FlexPoE EPS130W power adapter, which will boost the PoE budget of your GS308PP and with the EPS200W Power adapter, which will boost the PoE budget of your 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, wall-mount or rack-mount (depends 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 Small Business 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 GS316PP. 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

Gigabit Unmanaged Essentials PoE Switches

Features	GS305Pv3	GS305PPv3	GS308LP	GS308PP	GS316P	GS316PP	GS324P	GS324PP	GS348PP
10/100/1000Mbps Ports (Auto Uplink)	5	5	8	8	16	16	24	24	48
Enclosure	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal
Connector Type	Metal	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	No	NA	NA	NA
PoE Configuration									
802.3af PoE Ports	4	4	8	8	16	16			
802.3at PoE+ Ports	4	4	8	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	Up to 30W	30W	30W	30W
Total PoE Power Budget**	up to 63W	83W	Up to 60W	83W (FlexPoE upgradeable to 123W using 130W power adapter)	115W\$ (FlexPoE upgradeable to 183W using 2000W power adapter)	183W\$	190W	380W	380W
PoE auto-balance	Yes	Yes	Yes	Yes	Yes	Yes			
Power Consumption									
DC Input/Power In	54V, 1.25A	54V, 1.66A	54V, 1.25A	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	67.5W/ 1.23W	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	230.85 BTU/ 3.69 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	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	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	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	1:3:5:7:8:10:12:15	1:3:5:7:8:10:12:15	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	1,488,000 pps	1,488,000 pps	1,488,000 pps	1,488,000 pps	1,488,000 pps	1,488,000 pps	1,488,000 pps	1,488,000 pps	1,488,000 pps
Latency (using 64-byte packets) - 1000Mbps Port (average)	< 2.4 µsec	< 2.4 µsec	< 2.6 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	4K	8K	8K	8K
Auto MDI/MDI-X Cable Detection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Auto-sensing Half/Full Duplex Switched Ports	Yes	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	2,752,476 hours	2,362,192 hours	2,362,192 hours	1,193,574 hours	667,762 hours	570,972 hours

Gigabit Unmanaged Essentials PoE Switches

LEDs	GS305Pv3	GS305PPv3	GS308LP	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), 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	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	Yes
Honors DSCP (DiffServ) Tags	Yes	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	Yes
Auto Power Down	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Short Cable Detection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fan/Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	1 Fan	2 Fans	2 Fans
Physical Specifications									
Dimensions (W x D x H)	158x101 x27mm	158x101 x27mm	236 x102 x 27 mm	236 x102 x 27 mm	286 x 102 x 27 mm	286 x 102 x 27 mm	330 x 206 x 43 mm	440 x 204 x 43 mm	440 x 310 x 43 mm
	(6.2 x 4.0 x 1.1 in)	(6.2 x 4.0 x 1.1 in)	(9.3 x 4 x 1.1 in)	(9.3 x 4 x 1.1 in)	(11.3 x 4 x 1.1 in)	(11.3 x 4 x 1.1 in)	(13 x 8.1 x 1.7 in.)	(17.3 x 8 x 1.7 in)	(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)	0.6 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,	CE Mark,	CE Mark,	CE Mark,	CE Mark,	CE Mark,	CE Mark,	CE Mark,	CE Mark,
	FCC Part 15	FCC Part 15	FCC Part 15	FCC Part 15	FCC Part 15	FCC Part 15	FCC Part 15	FCC Part 15	FCC Part 15
	Class B,	Class B,	Class A,	Class A,	Class A,	Class A,	Class A,	Class A,	Class A,
	IC Class B,	IC Class B,	IC Class A,	IC Class A,	IC Class A,	IC Class A,	IC Class A,	IC Class A,	IC Class A,
	RCM,	RCM,	RCM,	RCM,	RCM,	RCM,	RCM,	RCM,	RCM,
	VCCI,	VCCI,	VCCI,	VCCI,	VCCI,	VCCI,	VCCI,	VCCI,	VCCI,
	KC	KC	KC	KC	BSMI,	BSMI,	KC	KC	KC
Safety Certifications	CB, CE LVD	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

Gigabit Unmanaged Essentials PoE Switches

Warranty and Support *	GS305Pv3	GS305PPv3	GS308LP	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 S1	Category S2	Category S2	Category 2	Category 2	Category 2
ProSUPPORT OnCall 24x7 Service Plan	PMB0S11-10000S (1 yr)	PMB0S11-10000S (1 yr)	PMB0S12-10000S (1 yr)	PMB0S12-10000S (1 yr)	PMB0S12-10000S (1 yr)	PMB0S12-10000S (1 yr)	PMB0312-10000S (1 yr)	PMB0312-10000S (1 yr)	PMB0312-10000S (1 yr)
	PMB0S31-10000S (3 yrs)	PMB0S31-10000S (3 yrs)	PMB0S32-10000S (3 yrs)	PMB0S32-10000S (3 yrs)	PMB0S32-10000S (3 yrs)	PMB0S32-10000S (3 yrs)	PMB0332-10000S (3 yrs)	PMB0332-10000S (3 yrs)	PMB0332-10000S (3 yrs)
	PMB0S51-10000S (5 yrs)	PMB0S51-10000S (5 yrs)	PMB0S52-10000S (5 yrs)	PMB0S52-10000S (5 yrs)	PMB0S52-10000S (5 yrs)	PMB0S52-10000S (5 yrs)	PMB0352-10000S (5 yrs)	PMB0352-10000S (5 yrs)	PMB0352-10000S (5 yrs)
Package Contents									
	Gigabit Unmanaged Essentials PoE switch	Gigabit Unmanaged Essentials PoE switch	Gigabit Unmanaged Essentials PoE switch	Gigabit Unmanaged Essentials PoE switch	Unmanaged PoE Gigabit Ethernet switch	Unmanaged PoE++ Gigabit Ethernet switch	Unmanaged PoE Gigabit Ethernet switch	Unmanaged PoE++ Gigabit Ethernet switch	Unmanaged PoE++ Gigabit Ethernet switch
	Power adapter localized to the country of sale	Power adapter localized to the country of sale	Power adapter localized to the country of sale	Power adapter localized to the country of sale	Power adapter localized to the country of sale	Power adapter localized to the country of sale	Power cord localized to the country of sale	Power cord localized to the country of sale	Power cord localized to the country of sale
	Wall mount kit	Wall mount kit	Wall mount kit	Wall mount kit	Wall mount kit	Wall mount kit	Rack mount kit	Rack mount kit	Rack mount kit
	Rubber footpads for desktop installation	Rubber footpads for desktop installation	Rubber footpads for desktop installation	Rubber footpads for desktop installation	Rubber footpads for desktop installation	Rubber footpads for desktop installation	Rubber footpads for desktop installation	Rubber footpads for desktop installation	Rubber footpads for desktop installation
	Installation guide	Installation guide	Installation guide	Installation guide	Installation guide	Installation guide	Installation guide	Installation guide	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							

Gigabit Unmanaged Essentials PoE Switches

GS308LP

GS308LP-100NAS	North America and Latin America
GS308LP-100EUS	Europe and United Kingdom

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 support
ProSUPPORT Contract Option	No
Auto-applied contracts	No

§ NETGEAR FlexPoE power - interchangeable 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.

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