SOHO Gigabit Ethernet Switches

Data Sheet

300 Series



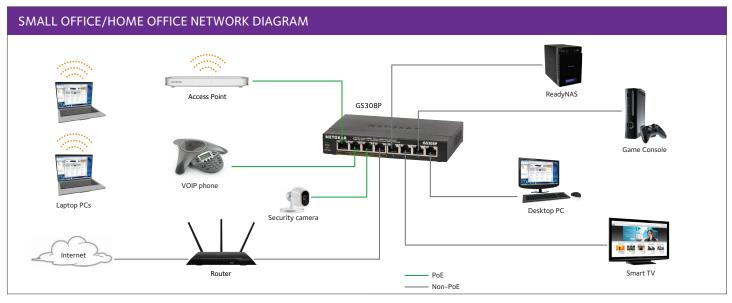


Expanding Wired Connectivity for SOHO Networks

NETGEAR 300 Series Gigabit Ethernet Unmanaged Switches 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 GS305P and GS308P with Power-over-Ethernet (PoE) provides power and data from a single Ethernet (CAT-5) cable to devices such as IP cameras, VoIP/Internet-based phones, wireless access points, etc. With these unmanaged plug-and-play switches, you can expand your network connections to multiple devices instantly. Just step up to GS316, GS324 or GS348 directly to avoid congestion due to stacking up lower port count switches and be ready for future expansion.

- 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
- 802.1p QoS for traffic/frame prioritization
- · Plug-and-play; no setup required

- Durable and rugged metal case
- Desktop or wall-mountable; GS324 is also rack-mountable (rack-mount kit included)
- Ideal for small office and home networks
- Standards-based technology ensures interoperability with any standards-based devices in the existing network
- Power up to 4 PoE-capable devices (15.4W per device up to 53W total PoE power) (GS308P only)
- 802.3af Power Over Ethernet (PoE) for IP cameras, VoIP/ Internet-based phones, wireless access points (GS308P only)



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GS300 Series Comparison

Features	GS305v3	GS308v3	GS305P	GS308P	GS316	GS324	GS348
	NETGEAR G5305	ATTOLIN COM			[1111111111111]		
10/100/1000Mbps Ports	5	8	5	8	16	24	48
(Auto Uplink) Enclosure	Metal	Metal	Metal	Metal	Metal	Metal	Metal
Connector Type	Metal		Metal				
Form Factor	Desktop or wall- mountable	Metal Desktop or wall- mountable	Desktop or wall- mountable	Metal Desktop or wall- mountable	Metal Desktop or wall- mountable	Plastic Desktop, wall- mountable, rack- mountable	Metal Desktop, rack- mountable
Power On/Off Switch	No	Yes	No	No	No	No	No
PERFORMANCE SPECIFICATIONS				1	1		1
Bandwidth (Non-Blocking)	10 Gbps	16 Gbps	10 Gbps	16 Gbps	32 Gbps	48 Gbps	96Gbps
Packet Buffer Memory (Dynamically shared across only used ports)	128 KB	128 KB	128 KB	192 KB	768 KB	512 KB	1.5MB
Jumbo Frame Support	9,216 bytes	9,216 bytes	9,216 bytes	9,720 bytes	9,216 bytes	9,216 bytes	9,216 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	1:2:4:8	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
Latency (using 64-byte packets) - 1000Mbps Port (average)	< 2.6 µsec	< 2.6 μsec	< 2.4 μsec	< 3.0 μsec	< 3.9 μsec	< 4.7 μsec	< 4 μsec
MAC Address Table Size	2K	8K	2K	4K	16K	8K	8K
Auto MDI/MDI-X Cable Detection	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Auto-sensing Half/Full Duplex Switched Ports	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean Time Between Failures (MTBF) @ 25° C	3,831,422 hours	3,711,898 hours	3,222,482 hours	2,244,211 hours	9,041,798 hours	620,798 hours	1,094,297 hrs
LEDS							1
Per port	Link/Activity	Link/Activity	Speed, Link/ Activity (Left), Ports 1-4: PoE (Right)	Speed, Link/ Activity (Left), Ports 1-4: PoE (Right)	Speed, Link/ Activity	Speed, Link/ Activity	Speed, Link/ Activity
Per device	Power	Power	Power, PoE Max	Power, PoE Max	Power	Power	Power
QUALITY OF SERVICE (QOS)							
Energy Efficient Ethernet (IEEE 802.3az)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Auto Power Down	Yes	Yes	No	No	No	Yes	Yes
POE CONFIGURATION							
802.3af PoE Ports	n/a	n/a	Ports 1-4	Ports 1-4	n/a	n/a	n/a
PoE Max Power Per Port	n/a	n/a	up to 15.4W	up to 15.4W	n/a	n/a	n/a
Total PoE Power Budget**	n/a	n/a	up to 55.5W	up to 53W	n/a	n/a	n/a

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POWER/CONSUMPTION	1	ı		ı	J			
DC Input/Power In	5V / 0.7A	12V / 0.5A	48V / 1.25A	48V / 1.25A	12V / 1.0A	Internal (AC: 110-240V, 50/60Hz, 1.0A max)	Internal (AC: 110- 240V, 50/60Hz, 1.0A max)	
Power Consumption (Max and Standby)	2.15W/0.31W	3.04W/0.36W	60W/0.96W	60.0W/0.28W	8.4W/1.83W	11.1W/8.47W	23W/8.81W	
Heat Dissipation (Max and Standby) (BTU/Hr)	7.35 BTU/ 1.06 BTU	10.40 BTU/ 1.06 BTU	205.2 BTU/ 3.28 BTU	205.20 BTU/ 0.96 BTU	28.73 BTU/ 6.26 BTU	37.96 BTU/ 28.97 BTU	78.66 BTU/ 30.13 BTU	
ENERGY EFFICIENCY						<u>'</u>		
Energy Efficient Ethernet (EEE) IEEE 802.3az compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Auto Power Down	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Short Cable Detection	Yes	Yes	Yes	Yes	Yes	Yes	No	
Fan/Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	
PHYSICAL SPECIFICATIONS	1		1	J	1		1	
Width x Depth x Height	101 x 94 x 29 mm	158 x 101 x 29 mm	158 x 101 x 29 mm	158 x 101 x 29 mm	286 x 101 x 26 mm	252 x 180 x 44 mm	440 x 202.3 x 43.2 mm	
	(4.0 x 3.7 x 1.1 in)	(6.2 x 4.0 x 1.1 in)	(6.2 x 4.0 x 1.1 in)	(6.2 x 4.0 x 1.1 in)	(11.3 x 4.0 x 1.0 in)	(9.9 x 7.1 x 1.7 in)	(17.3 in. x 8 in. x 1.7 in.)	
Weight	0.25 kg (0.55 lb)	0.39 kg (0.86 lb)	0.41 kg (0.90 lb)	0.46 kg (1.02 lb)	0.84 kg (1.86 lb)	1.31 kg (2.90 lb)	3.15 kg (6.95 lb)	
ENVIRONMENTAL SPECIFICATIONS								
Operating								
Operating temperature	0° to 40°C (32° to 104°F)							
Humidity (relative)	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 (relative)	95% maximum relative humidity (RH), non-condensing							
ELECTROMAGNETIC EMISSIONS AND	IMMUNITY							
Certifications	CE Mark, FCC Part 15 Class B, IC Class B, RCM, VCCI	CE Mark, FCC Part 15 Class B, IC Class B, RCM, CCC, VCCI, KC	CE Mark, FCC Part 15 Class B, IC Class A, RCM, CCC, VCCI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, CCC, VCCI, KC				
SAFETY								
Certifications	CB,	CB, CE LVD, CCC						
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Features	GS305v3	GS308v3	GS305P	GS308P	GS316	GS324	GS348	
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 (all models) IEEE 802.1p Priority QoS and DSCP (except GS308P, GS316) IEEE 802.3 CSMA/CD 802.3az Energy Efficient Ethernet						
WARRANTY AND SUPPORT*								
All Except China	3-year Warranty							
China	1-year Warranty							
Technical Support (online, phone)	90 days free from date of purchase*							
ProSUPPORT OnCall 24x7 Service Plans	PMB0311- 10000S (1 yr)	PMB0311- 10000S (1 yr)	PMB0S11- 10000S (1 yr)	PMB0S11- 10000S (1 yr)	PMB0S12- 10000S (1 yr)	PMB0S12- 10000S (1 yr)	PMB0S12- 10000S (1 yr)	
	PMB0331- 10000S (3 yrs)	PMB0331- 10000S (3 yrs)	PMB0S31- 10000S (3 yrs)	PMB0S31- 10000S (3 yrs)	PMB0S32- 10000S (3yrs)	PMB0S32- 10000S (3yrs)	PMB0S32- 10000S (3yrs)	
	PMB0351- 10000S (5 yrs)	PMB0351- 10000S (5 yrs)	PMB0S51- 10000S (5 yrs)	PMB0S51- 10000S (5 yrs)	PMB0S52- 20000S (5 yrs)	PMB0S52- 20000S (5 yrs)	PMB0S52- 20000S (5 yrs)	

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^{*} 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.

^{**} 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 Web/Smart Switches, August 2018. NETGEAR #1 in Europe Market Share according to Context data for Unmanaged and Web/Smart Switches, June 2018.