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.
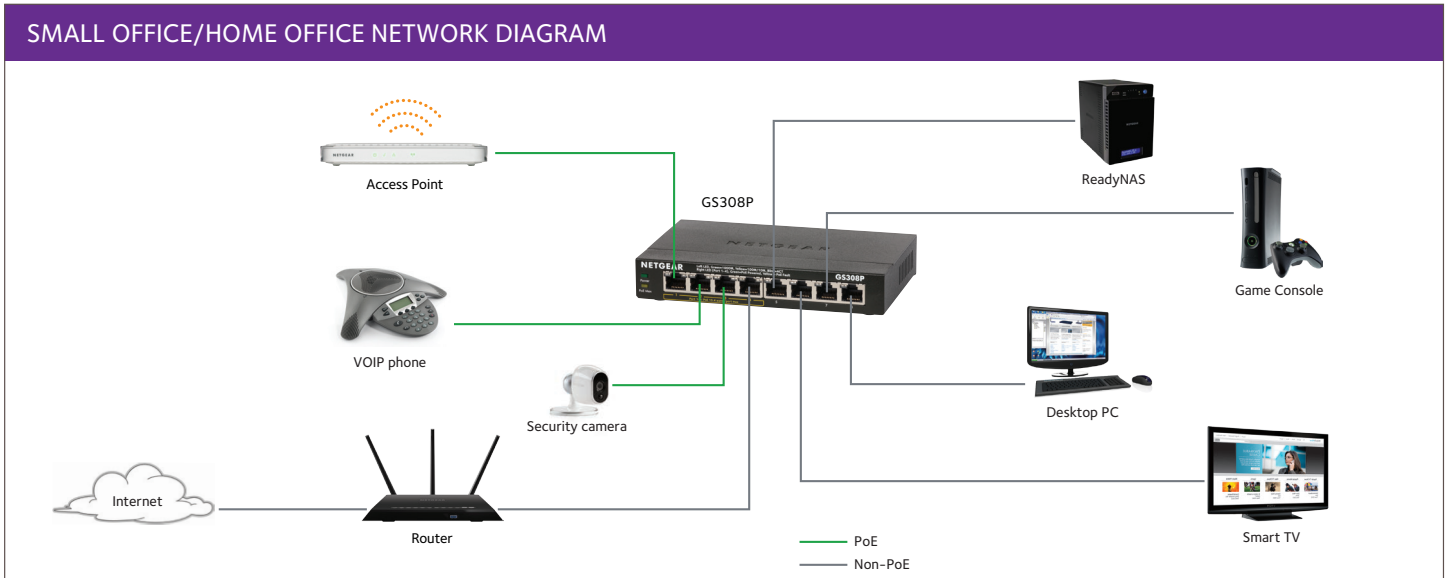
The GS305P/GS305PP and GS308P with Power-over-Ethernet (PoE) provides power and data from a single Ethernet (CAT-5) cable to devices such as IP cameras, VoIP/Internet-based phones, wireless access points, etc.

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.

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

- 802.1p QoS for traffic/frame prioritization

- Plug-and-play; no setup required

- Durable and rugged metal case

- Desktop or wall-mountable (5, 8, 16-port models); GS324 is desktop, wall-mountable, and rack-mountable (rack-mount kit included); GS348 is 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 (GS305P/GS305PP and GS308P only)

- 802.3af Power Over Ethernet (PoE) for IP cameras, VoIP/Internet-based phones, wireless access points (GS308P only)

Example Application

SMALL OFFICE/HOME OFFICE NETWORK DIAGRAM

Access Point

GS308P

ReadyNAS

VOIP phone

Game Console

Security camera

Desktop PC

Internet

Router

Smart TV

PoE
Non-PoE

Features	GS305	GS308	GS305P	GS305PP	GS308P	GS316	GS324	GS348
10/100/1000Mbps Ports (Auto Uplink)	5	8	5	5	8	16	24	48
Enclosure	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal
Connector Type	Metal	Metal	Metal	Metal	Metal	Metal	Plastic	Metal
Form Factor	Desktop or wall-mountable	Desktop or wall-mountable	Desktop or wall-mountable	Desktop or wall-mountable	Desktop or wall-mountable	Desktop or wall-mountable	Desktop, wall-mountable, rack-mountable	Desktop, rack-mountable
Power On/Off Switch	No	Yes	No	No	No	No	No	No

Performance Specifications

	GS305	GS308	GS305P	GS305PP	GS308P	GS316	GS324	GS348
Bandwidth (Non-Blocking)	10 Gbps	16 Gbps	10 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	128 KB	192 KB	768 KB	512 KB	1.5MB
Jumbo Frame Support	9,216 bytes	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	1:3:5:7:8:10:12:15	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	1,448,000 pps
Latency (using 64-byte packets) - 1000Mbps Port (average)	< 2.6 µsec	< 2.6 µsec	< 2.4 µsec	< 2.4 µsec	< 3.0 µsec	< 3.9 µsec	< 4.7 µsec	< 4 µsec
MAC Address Table Size	2K	8K	2K	2K	4K	16K	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	3,831,422 hours	3,711,898 hours	3,222,482 hours	6,189,896 hours	2,244,211 hours	9,041,798 hours	620,798 hours	1,094,297 hours

LEDs

	GS305	GS308	GS305P	GS305PP	GS308P	GS316	GS324	GS348
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 (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, PoE Max	Power	Power	Power

Quality Of Service (QOS)

	GS305	GS308	GS305P	GS305PP	GS308P	GS316	GS324	GS348
Energy Efficient Ethernet (IEEE 802.3az)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Auto Power Down	Yes	Yes	No	No	No	No	Yes	Yes

POE Configuration

	GS305	GS308	GS305P	GS305PP	GS308P	GS316	GS324	GS348
802.3af PoE Ports	n/a	n/a	Ports 1-4	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 30W	up to 15.4W	n/a	n/a	n/a
Total PoE Power Budget**	n/a	n/a	up to 55.5W	Up to 83W	up to 53W	n/a	n/a	n/a

Power/Consumption

	GS305	GS308	GS305P	GS305PP	GS308P	GS316	GS324	GS348
DC Input/Power In	5V / 0.7A	12V / 0.5A	48V / 1.25A	54V / 1.66A	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	2.89W/88.89W	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	304BTU/ 5.3BTU	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	GS305	GS308	GS305P	GS305PP	GS308P	GS316	GS324	GS348
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	No
Fan/Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless

Physical Specifications

	GS305	GS308	GS305P	GS305PP	GS308P	GS316	GS324	GS348
Width x Depth x Height	101 x 94 x 29 mm (4.0 x 3.7 x 1.1 in)	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)	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)	286 x 101 x 26 mm (11.3 x 4.0 x 1.0 in)	252 x 180 x 44 mm (9.9 x 7.1 x 1.7 in)	440 x 202 x 43 mm (17.3 x 8 x 1.7 in)
Weight	0.25 kg (0.55 lb)	0.39 kg (0.86 lb)	0.41 kg (0.90 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

	GS305	GS308	GS305P	GS305PP	GS308P	GS316	GS324	GS348
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 B, IC Class A, RCM, CCC, VCCI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, CCC, VCCI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, CCC, VCCI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, CCC, VCCI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, CCC, VCCI, KC

Safety Certifications

	GS305	GS308	GS305P	GS305PP	GS308P	GS316	GS324	GS348
Certifications	CB, CE LVD	CB, CE LVD, CCC	CB, CE LVD, CCC	CB, CE LVD, CCC	CB, CE LVD, CCC	CB, CE LVD, CCC	CB, CE LVD, CCC	CB, CE LVD, CCC

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 Category	Category S1	Category S1	Category S1	Category S1	Category S1	Category S2	Category S2	Category S2
ProSUPPORT OnCall 24x7 Service Plans								
1 yr	PMB0311-10000S	PMB0311-10000S	PMB0311-10000S	PMB0311-10000S	PMB0311-10000S	PMB0S12-10000S	PMB0S12-10000S	PMB0S12-10000S
3 yrs	PMB0331-10000S	PMB0331-10000S	PMB0331-10000S	PMB0331-10000S	PMB0331-10000S	PMB0S32-10000S	PMB0S32-10000S	PMB0S32-10000S
5 yrs	PMB0351-10000S	PMB0351-10000S	PMB0351-10000S	PMB0351-10000S	PMB0351-10000S	PMB0S52-20000S	PMB0S52-20000S	PMB0S52-20000S

Package Content

All Models	Unmanaged Gigabit Ethernet Switch
	Power cord (localized to country of sale)
	Rack mount kit (depending on model)
	Rubber footpads (depending on model)
	Installation Guide

Ordering Information

GS305-300JPS	Japan
GS305-300PAS	North America
GS305-300PES	Europe
GS305-300UKS	United Kingdom
GS308-300JPS	Japan
GS308-300PAS	North America
GS308-300PES	Europe
GS308-300UKS	United Kingdom
GS308-300PRS	China
GS305P-100AUS	Australia & Asia
GS305P-100INS	India
GS305P-100JPS	Japan
GS305P-100NAS	North America
GS305P-100PES	Europe
GS305P-100UKS	United Kingdom & Asia
GS305PP-100NAS	North America
GS305PP-100PES	Europe & Korea
GS305PP-100UKS	United Kingdom
GS305PP-100AUS	Australia
GS305PP-100JPS	Japan
GS308P-100AUS	Australia
GS308P-100INS	India
GS308P-100JPS	Japan
GS308P-100NAS	North America
GS308P-100PES	Europe
GS308P-100PRS	China
GS308P-100UKS	United Kingdom
GS316-100AUS	Australia & New Zealand
GS316-100INS	India
GS316-100JPS	Japan
GS316-100NAS	North America

Ordering Information

GS316-100PES	Europe
GS316-100PRS	China
GS316-100UKS	United Kingdom
GS324-100AUS	Australia
GS324-100EUS	Europe and United Kingdom
GS324-100INS	India
GS324-100JPS	Japan
GS324-100NAS	North America
GS324-100PRS	China
GS348-100AJS	Asia Pacific Region and New Zealand
GS348-100EUS	Europe
GS348-100NAS	North America

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