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.
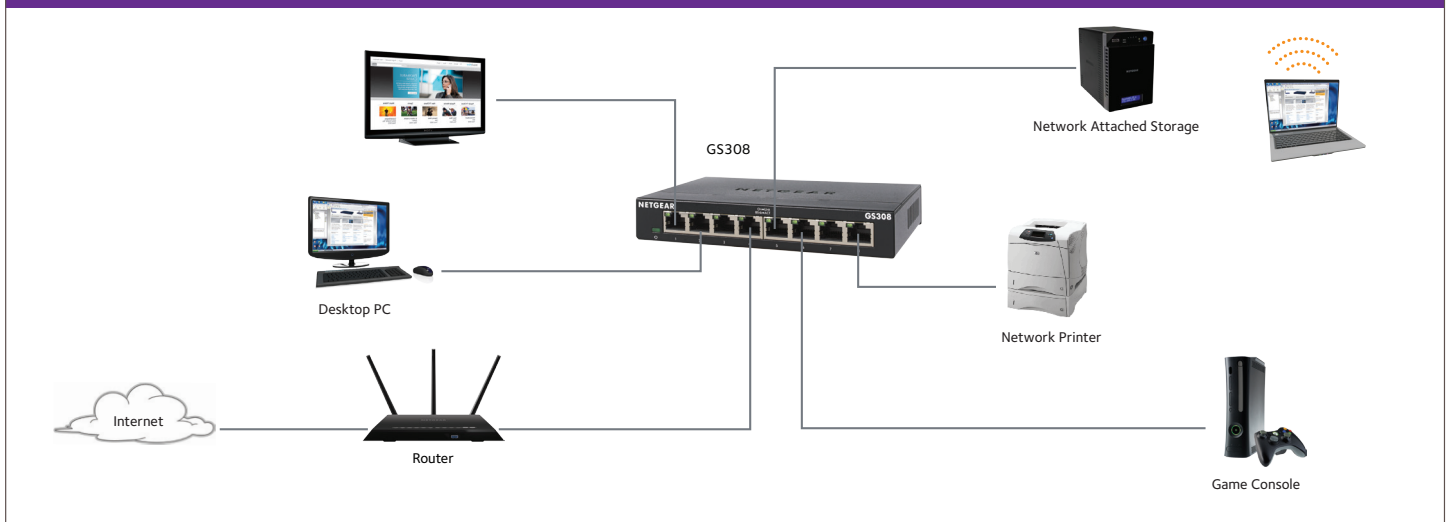
Just step up to GS316, GS324 or GS348 directly to avoid congestion due to stacking up lower port count switches and be ready for future expansion.

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 (except GS348)

- 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

Example Application

SMALL OFFICE/HOME OFFICE NETWORK DIAGRAM

GS308

Network Attached Storage

Desktop PC

Network Printer

Internet

Router

Game Console

Features	GS305v3	GS308v3	GS316	GS324v2	GS348
10/100/1000Mbps Ports (Auto Uplink)	5	8	16	24	48
Enclosure	Metal	Metal	Metal	Metal	Metal
Connector Type	Metal	Metal	Metal	Metal	Metal
Form Factor	Desktop, wall-mountable	Desktop, wall-mountable	Desktop, wall-mountable	Desktop, wall-mountable, rack-mountable	Desktop, rack-mountable
Power On/Off Switch	No	Yes	No	No	No
Performance Specifications					
Bandwidth (Non-Blocking)	10 Gbps	16 Gbps	32 Gbps	48 Gbps	96Gbps
Packet Buffer Memory (Dynamically shared across only used ports)	128 KB	128 KB	768 KB	512 KB	1.5MB
Jumbo Frame Support	9,216 bytes	9,216 bytes	9,216 bytes	9,216 bytes	9,216 bytes
Queue WRR (Weighted Round Robin) Ratio	1:2:4:8	1:2:4:8	1:2:4:8	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
Latency (using 64-byte packets) - 1000Mbps Port (average)	< 2.6 µsec	< 2.6 µsec	< 3.9 µsec	< 4.7 µsec	< 4 µsec
MAC Address Table Size	2K	8K	16K	8K	8K
Auto MDI/MDI-X Cable Detection	Yes	Yes	Yes	Yes	Yes
Auto-sensing Half/Full Duplex Switched Ports	Yes	Yes	Yes	Yes	Yes
Mean Time Between Failures (MTBF) @ 25° C	3,831,422 hours	3,711,898 hours	9,041,798 hours	1,016,877 hours	1,094,297 hours
LEDs					
Per port	Link/Activity	Link/Activity	Speed, Link/Activity	Speed, Link/Activity	Speed, Link/Activity
Per device	Power	Power	Power	Power	Power
Quality Of Service (QOS)					
Energy Efficient Ethernet (IEEE 802.3az)	Yes	Yes	Yes	Yes	Yes
Auto Power Down	Yes	Yes	No	Yes	Yes
POE Configuration					
802.3af PoE Ports	n/a	n/a	n/a	n/a	n/a
PoE Max Power Per Port	n/a	n/a	n/a	n/a	n/a
Total PoE Power Budget**	n/a	n/a	n/a	n/a	n/a
Power/Consumption					
DC Input/Power In	5V / 0.7A	12V / 0.5A	12V / 1.0A	Internal (AC:110-240V, 50/60Hz, 0.7 max)	Internal (AC: 110-240V, 50/60Hz, 1.0A max)
Power Consumption (Max and Standby)	2.15W/0.31W	3.04W/0.36W	8.4W/1.83W	12.1W/4.33W	23W/8.81W
Heat Dissipation (Max and Standby) (BTU/Hr)	7.35 BTU/ 1.06 BTU	10.40 BTU/ 1.23 BTU	28.73 BTU/ 6.26 BTU	41.29 BTU/ 14.79 BTU	78.66 BTU/ 30.13 BTU

NETGEAR®
BUSINESS

Energy Efficiency	GS305v3	GS308v3	GS316	GS324v2	GS348
Energy Efficient Ethernet (EEE) IEEE 802.3az compliant	Yes	Yes	Yes	Yes	Yes
Auto Power Down	Yes	Yes	Yes	Yes	Yes
Short Cable Detection	Yes	Yes	Yes	Yes	No
Fan/Fanless	Fanless	Fanless	Fanless	Fanless	Fanless
Physical Specifications					
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)	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)	0.84 kg (1.86 lb)	1.21 kg (2.67 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 A, IC Class A, RCM, CCC, VCCI, KC	CE Mark, FCC Part 15 Class A, IC Class A, RCM, VCCI	CE Mark, FCC Part 15 Class A, IC Class A, RCM, CCC, VCCI, KC

Safety Certifications

Certifications	CB, CE LVD	CB, CE LVD, CCC	CB, CE LVD, CCC	CB, CE LVD	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 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 S2	Category S2	Category S2
ProSUPPORT OnCall 24x7 Service Plans					
1 yr	PMB0311-10000S	PMB0311-10000S	PMB0S12-10000S	PMB0S12-10000S	PMB0S12-10000S
3 yrs	PMB0331-10000S	PMB0331-10000S	PMB0S32-10000S	PMB0S32-10000S	PMB0S32-10000S
5 yrs	PMB0351-10000S	PMB0351-10000S	PMB0S52-20000S	PMB0S52-20000S	PMB0S52-20000S

Package Content	
All Models	Unmanaged Gigabit Ethernet Switch
	Power adapter or power cord (depending on model) localized to country of sale
	Rack mount kit or Wall 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
GS316-100AUS	Australia & New Zealand
GS316-100INS	India
GS316-100JPS	Japan
GS316-100NAS	North America
GS316-100PES	Europe
GS316-100PRS	China
GS316-100UKS	United Kingdom
GS324-200JPS	Japan
GS324-200NAS	North America
GS324-200EUS	Europe
GS324-200INS	India
GS348-100AJS	Asia Pacific Region and New Zealand
GS348-100EUS	Europe
GS348-100NAS	North America

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