NETGEAR BUSINESS

Expanding Wired Connectivity for Plug-and-play Networks

NETGEAR Unmanaged Essentials Switches offer an array of features that make them the ideal choice for providing easy, reliable, and affordable network connectivity for home and small offices. With the convenience of plug-and-play operation, these unmanaged switches provide seamless connectivity to multiple devices without the need for complex configuration.

The switches are designed to be energy-efficient, ensuring power savings while maintaining optimal network performance.

The NETGEAR Unmanaged Essentials Switches are available in 5, 8, 16, 24, or 48 port models to meet the demands of a growing network. Instead of stacking multiple lower port models and your network
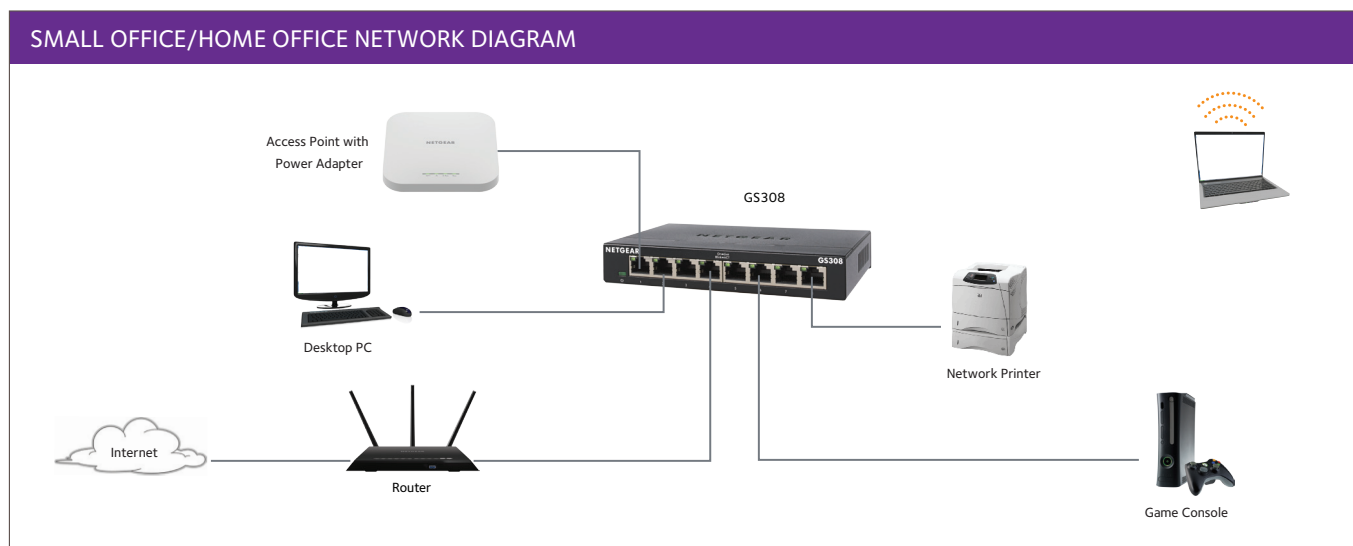
grows, the higher port models ensure maximum scalability by reducing switch congestion.

With their plug-and-play operation, energy-efficient technology, non-blocking switching architecture, and durable metal case, these switches offer a cost-effective and dependable solution for expanding network connectivity for home and small offices.

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

- Select between switches of various form factors: desktop, wall mount or rack mount. Rack-mount kit included with GS324 and GS348 models

- 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

Access Point with
Power Adapter

GS308

Desktop PC

Network Printer

Internet

Router

Game Console

Features	GS305v3	GS308v3	GS316v3	GS324v2	GS348
10/100/1000Mbps Ports (Auto Uplink)	5	8	16	24	48
Enclosure	Metal	Metal	Metal	Metal	Metal
Form Factor	Desktop or wall-mountable	Desktop or wall-mountable	Desktop, wall-mountable	Desktop, 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	96 Gbps
Packet Buffer Memory (Dynamically shared across only used ports)	128 KB	192 KB	4.1MB	4.1 MB	1.5 MB
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	1:3:5:7:8:10:12:15	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	< 3.2 μsec	< 4.7 μsec	< 4 μsec
MAC Address Table Size	2K	8K	8K	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	4,160,957 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
Honors DSCP (DiffServ) Tags	Yes	Yes	Yes	Yes	Yes
Power/Consumption					
DC Input/Power In	5V / 0.7A	12V / 0.5A	12V / 1.5A	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	8.10W/2.60W	12W/4.3W	23W/8.81W
Heat Dissipation (Max and Standby) (BTU/Hr)	7.35 BTU/ 1.06 BTU	10.40 BTU/ 1.06 BTU	27.7 BTU/hr / 8.89 BTU/hr	41.04 BTU/ 14.77BTU	78.66 BTU/ 30.13 BTU

Energy Efficiency	GS305v3	GS308v3	GS316v3	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 102 x 27 mm (11.3 x 4.0 x 1.1 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)	0.89 kg (1.96 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, 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, BSMI	CE Mark, FCC Part 15 Class A, IC Class A, RCM, VCCI, KC, BSMI	CE Mark, FCC Part 15 Class A, IC Class A, RCM, VCCI, KC, BSMI
Safety Certifications					
Certifications	CB, CE LVD, RCM	CB, CE LVD, RCM	CB, CE LVD, RCM, BSMI	CB, CE LVD, RCM, BSMI	CB, CE LVD, RCM, BSMI

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
- IEEE 802.3 CSMA/CD
- 802.3az Energy Efficient Ethernet

NETGEAR®
BUSINESS

Warranty and Support*		GS305v3	GS308v3	GS316V3	GS324v2	GS348
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	PMB0S11-10000S	PMB0S11-10000S	PMB0S12-10000S	PMB0S12-10000S	PMB0S12-10000S
	3 yrs	PMB0S31-10000S	PMB0S31-10000S	PMB0S32-10000S	PMB0S32-10000S	PMB0S32-10000S
	5 yrs	PMB0S51-10000S	PMB0S51-10000S	PMB0S52-10000S	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)
	Wall mount kit (depending on model)
	Rubber footpads (depending on model)
	Installation guide

Ordering Information

GS305

GS305-300AUS	Australia
GS305-300JPS	Japan
GS305-300PAS	North America
GS305-300PES	Europe and Korea
GS305-300UKS	United Kingdom

GS308

GS308-300JPS	Japan
GS308-300PAS	North America
GS308-300PES	Europe
GS308-300PRS	China
GS308-300UKS	United Kingdom

GS316

GS316-300AUS	Australia
GS316-300EUS	Europe
GS316-300JPS	Japan
GS316-300NAS	North America

GS324	
GS324-100AUS	Australia
GS324-100EUS	Europe, including United Kingdom
GS324-100INS	India
GS324-100JPS	Japan
GS324-100NAS	North America
GS324-100PRS	China
GS348	
GS348-100AJS	Japan and Australia
GS348-100EUS	Europe, including United Kingdom
GS348-100NAS	North America

* 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.

† NETGEAR #1 in US Market Share according to NPD data for Unmanaged and Smart Switches, January 2019. NETGEAR #1 in Europe Market Share according to Context data for Unmanaged and Smart Switches, January 2019.

The use of the proper type of cable is required for optimum performance. Please consult this Knowledge Base article for more information: www.netgear.com/cables

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