







# 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.

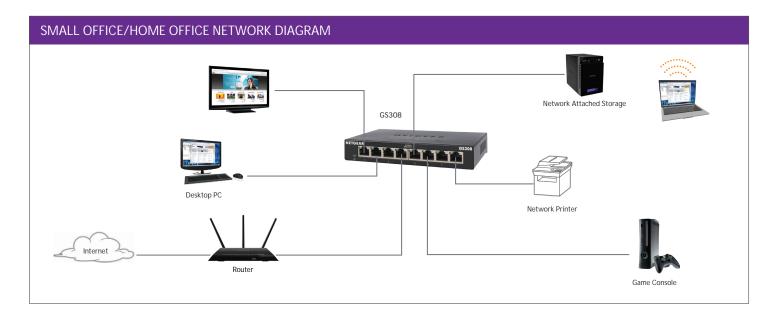
#### Highlights

- 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 standardsbased devices in the existing network



## **Example Application**





| Features   | GS305                     | GS308                     | GS316                     | GS324   | GS348  |
|--|---------------------------|---------------------------|---------------------------|---|--|
| 10/100/1000Mbps Ports<br>(Auto Uplink)                               | 5                         | 8                         | 16                        | 24  | 48   |
| Enclosure  | Metal                     | Metal                     | Metal                     | Metal   | Metal  |
| Connector Type   | Metal                     | Metal                     | Metal                     | Plastic   | Metal  |
| Form Factor  | Desktop or wall-mountable | Desktop or wall-mountable | Desktop or wall-mountable | Desktop,<br>wall-mountable, rack-<br>mountable  | Desktop,<br>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 (Dynamical-<br>y 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<br>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<br>packets) - 1000Mbps Port           | 1,448,000 pps             | 1,448,000 pps             | 1,448,000 pps             | 1,448,000 pps                                   | 1,448,000 pps                                  |
| _atency (using 64-byte packets) -<br>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<br>Switched Ports                      | Yes                       | Yes                       | Yes                       | Yes   | Yes  |
| Mean Time Between Failures<br>(MTBF) @ 25° C                         | 3,831,422 hours           | 3,711,898 hours           | 9,041,798 hours           | 620,798 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<br>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,<br>50/60Hz,<br>1.0A max) | Internal<br>(AC: 110-240V, 50/60H<br>1.0A max) |
| Power Consumption<br>(Max and Standby)                               | 2.15W/0.31W               | 3.04W/0.36W               | 8.4W/1.83W                | 11.1W/8.47W                                     | 23W/8.81W                                      |
| Heat Dissipation (Max and<br>Standby) (BTU/Hr)                       | 7.35 BTU/<br>1.06 BTU     | 10.40 BTU/<br>1.06 BTU    | 28.73 BTU/<br>6.26 BTU    | 37.96 BTU/<br>28.97 BTU                         | 78.66 BTU/<br>30.13 BTU                        |

| Energy Efficiency   | GS305   | GS308  | GS316  | GS324  | GS348  |  |
|---|---|--|--|--|--|--|
| Energy Efficient Ethernet (EEE)<br>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<br>(4.0 x 3.7 x 1.1 in)                        | 158x101x29mm<br>(6.2 x 4.0 x 1.1 in)   | 286x101x26mm<br>(11.3x4.0x1.0in)   | 252x180x44mm<br>(9.9 x 7.1 x 1.7 in)                         | 440 x 202 x 43 mm<br>(17.3 x 8 x 1.7 in)                                       |  |
| Weight  | 0.25 kg<br>(0.55 lb)  | 0.39 kg<br>(0.86 lb)   | 0.84 kg<br>(1.86 lb)   | 1.31 kg<br>(2.90 lb)   | 3.15 kg<br>(6.95 lb)   |  |
| <b>Environmental Specific</b>   | ations  |  |  |  |  |  |
| 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 Emissi  | ons and Immunity  |  |  |  |  |  |
| Certifications  | CE Mark,<br>FCC Part 15 Class B,<br>IC Class B,<br>RCM,<br>VCCI | CE Mark,<br>FCC Part 15 Class B,<br>IC Class B,<br>RCM,<br>CCC,<br>VCCI,<br>KC   | CE Mark,<br>FCC Part 15 Class A,<br>IC Class A,<br>RCM,<br>CCC,<br>VCCI,<br>KC | CE Mark, FCC Part 15 Class A, IC Class A, RCM, CCC, VCCI, KC | CE Mark,<br>FCC Part 15 Class A,<br>IC Class A,<br>RCM,<br>CCC,<br>VCCI,<br>KC |  |
| Safety Certifications   |   |  |  |  |  |  |
| Certifications  | CB,<br>CE LVD   | CB,<br>CE LVD,<br>CCC  | CB,<br>CE LVD,<br>CCC  | CB,<br>CE LVD,<br>CCC  | CB,<br>CE LVD,<br>CCC  |  |
| IEEE Network Protocols  | ;   |  |  |  |  |  |
| IEEE 802.3ab 1000BASE-T Giga     IEEE 802.3u 100BASE-TX Fast E     IEEE 802.3i 10BASE-T Ethernet     IEEE 802.3x Flow Control |   | <ul> <li>IEEE 802.1p Priority QoS (all models)</li> <li>IEEE 802.1p Priority QoS and DSCP (except GS316)</li> <li>IEEE 802.3 CSMA/CD</li> <li>802.3az Energy Efficient Ethernet</li> </ul> |  |  |  |  |
| 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<br>24x7 Service Plans   |   |  |  |  |  |  |
| 1 y   | r PMB0311-10000S  | PMB0311-10000S   | PMB0S12-10000S   | PMB0S12-10000S   | PMB0S12-10000S   |  |
| 3 yr  |   | PMB0331-10000S   | PMB0S32-10000S   | PMB0S32-10000S   | PMB0S32-10000S   |  |
| 5 yr  | s PMB0351-10000S  | PMB0351-10000S   | PMB0S52-20000S   | PMB0S52-20000S   | PMB0S52-20000S   |  |



| Package Content      |   |  |  |
|----------------------|---|--|--|
|                      | Unmanaged Gigabit Ethernet Switch   |  |  |
|                      | Power adapter or power cord (depending on model) localized to country of sale |  |  |
| All Models           | 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   |  |  |
| 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   |  |  |
|                      |   |  |  |

<sup>\*</sup> 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, the NETGEAR logo are trademarks and/or registered trademarks of NETGEAR, Inc. and/or its subsidiaries in the United States and/or other countries. Other brand names mentioned herein are for identification purposes only and may be trademarks of their respective holder(s).

NETGEAR, Inc. 350 E. Plumeria Drive, San Jose, CA 95134-1911 USA, 1-888-NETGEAR (638-4327), E-mail: info@NETGEAR.com, www.NETGEAR.com

 $<sup>\</sup>uparrow \, NETGEAR\, \#1\, in\, US\, Market\, Share\, according\, to\, NPD\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, \#1\, in\, Europe\, Market\, Share\, according\, to\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, M1\, in\, Europe\, M2\, in\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, September\, 2019.\,\, NETGEAR\, M2\, in\, Context\, data\, for\, Unmanaged\, and\, Smart\, Switches,\, Switches,\, Switches,\, Switches,\, Switches,\, Switches,\, Switches,\, Switches,\, Sw$