SOHO Gigabit Ethernet Switches

Data Sheet

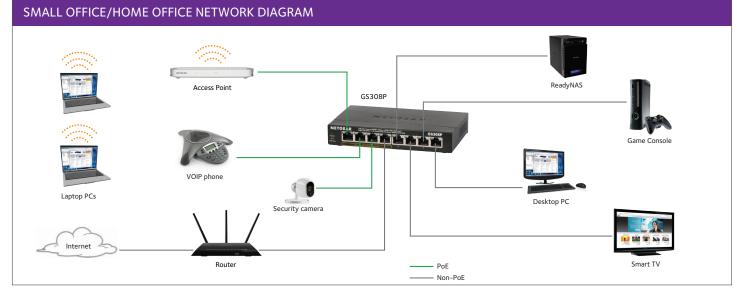


Expanding Wired Connectivity for SOHO Networks

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)



SOHO Gigabit Ethernet Switches

Data Sheet

300 Series

GS300 Series Comparison

| Features | GS305v3 | GS308v3 | GS305P | GS308P | GS316 | GS324 | GS348 |
|--|-------------------------------|-------------------------------|---|---|-------------------------------|---|-----------------------------|
| | NETGEAR #200 G5305 | | | <u>innni</u> | | | |
| 10/100/1000Mbps Ports (Auto Uplink) | 5 | 8 | 5 | 8 | 16 | 24 | 48 |
| Enclosure | Metal | Metal | Metal | Metal | Metal | Metal | Metal |
| Connector Type | 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, wall- mountable, rack- mountable | Desktop, rack- mountable |
| Power On/Off Switch | No | Yes | No | No | No | No | No |
| PERFORMANCE SPECIFICATIONS | | | · | | · | · | |
| 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 | 2К | 8K | 2К | 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 | · | | | | | | |
| 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 |

SOHO Gigabit Ethernet Switches

Data Sheet

300 Series

GS300 Series Comparison

| Features | GS305v3 | GS308v3 | GS305P | GS308P | GS316 | GS324 | GS348 | |
|---|--|---|---|---|---|---|---|--|
| POWER/CONSUMPTION | | | , | 1 | · | 1 | | |
| 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 | | | ' | | ' | ' | | |
| 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 | I | 1 | I | 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 10 | 4°F) | | | |
| Humidity (relative) | | | 90% maximum r | elative 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 | MMUNITY | | | | | | | |
| 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, CE LVD | CB, CE LVD, CCC | |

SOHO Gigabit Ethernet Switches

Data Sheet

300 Series

GS300 Series Comparison

| 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/India | 3-year Warranty | | | | | | | |
| China/India | 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) | PMBOS11- 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) | |

* 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.

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). Information is subject to change without notice. © 2019 NETGEAR, Inc. All rights reserved.

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 D-300GIGSeries-17Jan19