Nighthawk[®] S8000 Gaming & Streaming Switch

Data Sheet

Advanced 8-Port Gigabit Ethernet

GS808E





Wire Up for the Best Gaming and Streaming Experience

- Industry-first "cool-touch" premium zinc-alloy housing for durability and looks, with soft-touch no-slip base
- Ideal for multi-user online/VR gaming and 4K HD video/media streaming
- · Low latency for ultimate gaming experience
- User-friendly preconfigured one-click optimized settings for gaming, media steaming, and standard networking, plus two customizable user-defined configurations
- Offload high-bandwidth applications/stress from your wireless network ensuring best performance and experience for gaming, media steaming, etc.
- Three levels of network traffic prioritization and Quality of Service (QoS) management for ultra-high performance
- · IGMP snooping support for multicast operation
- Link Aggregation/port trunking provides up to 4Gbps connection to link aggregation-enabled devices such as ReadyNAS®
- Connect with Nighthawk routers for the best performing home network anywhere
- Industry-leading 3 year warranty







Gaming

With preconfigured and optimized QoS settings that prioritize your gaming activity on the network, you'll have the advantage when taking on your gaming foes.

Organize LAN gaming parties with rapid installation and configuration for all-night gaming with friends.

Streaming

The Nighthawk S8000 provides seamless, simultaneous HD streaming to multiple devices. Preconfigured and optimized QoS helps to reduce buffering and jittery video.

Just relax and enjoy your favorite movie!

Multi-Device Connection for the Home

The Nighthawk S8000 switch connects high-bandwidth demanding wired devices, allowing you to offload this bandwidth intense traffic from your wireless network for a better user experience in the home. The Nighthawk S8000 switch comes with an easy-to-use setup and configuration user interface, with preconfigured one-touch settings for gaming, media streaming, standard networking and two additional customizable user-defined configurations. And with port aggregation, you can double, triple, or quadruple the connection speed to link-aggregation enabled devices such as ReadyNAS for the fastest file transfers, backups, or gaming, while also providing a redundant connection for fail-over.

Connect to a NETGEAR Nighthawk router to for the ultimate home network and the coolest switch on the market!

| Nighthawk [®] S8000 Gaming & Streaming Switch | | Data Sheet |
|---|--|------------------|
| Advanced 8-Port Gigabit Ethernet | | GS808E |
| Ultimate Performance | | |
| Ultra-high performance for high demanding multi-player, online, or VR gaming and 4K UHD media streaming for the home. | GIGABIT WIRED – 8-port Gigabit Ethernet LAN ports | |
| Offload high-bandwidth applications/stress | LINK AGGREGATION – Ability to aggregate up to four G | igabit LAN ports |

Offload high-bandwidth applications/stress from your wireless network ensuring the best performance and experience on your home network.

LOW LATENCY - QoS management for ultra-high performance



GLITCH-FREE STREAMING - 4K UHD streaming with Multicasting support

Easy to Configure - One-Click Setup

Fast set up and configuration. Choose between low latency gaming, high priority media streaming, standard LAN networking, port aggregation or your own customizable user-defined modes.

Pre-optimized settings for gaming and streaming



Mobile-optimized Graphical User Interface (GUI)



One-click user-defined configurations



3 Levels of traffic prioritization



Port rate-limiting

Sleek Design

Industry-first "cool-touch" premium zinc-alloy housing for durability and looks, with soft-touch no-slip base.



"Cool-touch" premium zinc-alloy housing



Soft-touch no slip-base

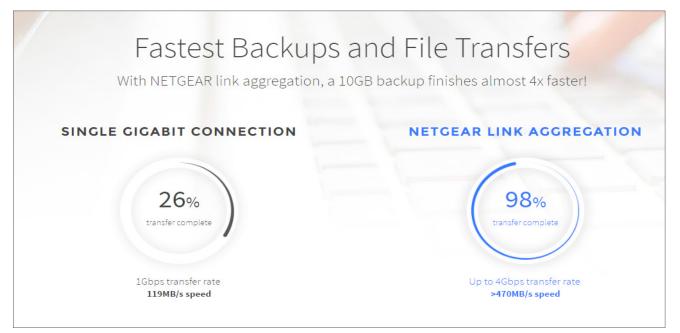


Port activity LED On/Off

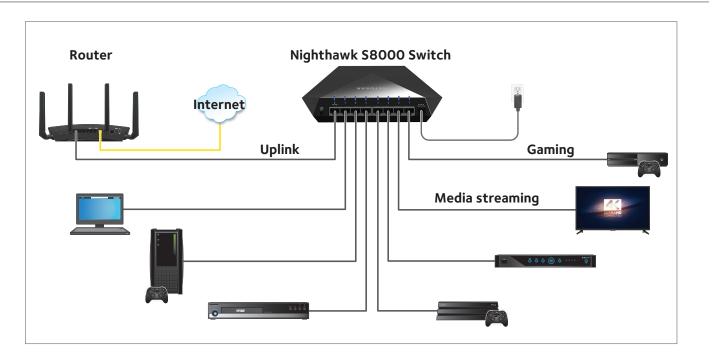
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|------------|
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| |

Fastest Backups and File Transfers

With NETGEAR link aggregation (port trunking), a 10GB backup finishes almost 4x faster.



Connection Diagram



Nighthawk[®] S8000 Gaming & Streaming Switch

Data Sheet GS808E

Advanced 8-Port Gigabit Ethernet

Technical Specifications

| Product | GS808E |
|--|--|
| | NETGEAR |
| Gigabit ports | 8 |
| Port LED on/off | Yes |
| PERFORMANCE SPECIFICATION | |
| Packet buffer memory (Dynamically shared across only used ports) | 192 КВ |
| Forwarding modes | Store-and-forward |
| Latency Non-Congested Network | Nighthwak Switch : 2.7µs Standard Gigabit Switch : 3.7µs |
| Latency Congested Network | Nighthwak Switch : 4.7µs Standard Gigabit Switch : 451 µs |
| Bandwidth (Full Duplex Fabric) | 16Gbps |
| Priority queues | 3 |
| Priority queuing | Weighted Round Robin (WRR) |
| MAC address database size (48-bit MAC addresses) | 4К |
| Multicast groups | 128 |
| Packet forwarding rate (64 byte packet size) (Mfps or Mpps) | 11.9 Mfps |
| Speed/Latency | 1000Mbps: <3.2µs 100Mbps: <9.6µs 10Mbps: <76.9µs |
| IEEE STANDARDS SUPPORTED | |
| IEEE 802.3 Ethernet IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T | IEEE 802.3x Full-Duplex Flow Control IEEE 802.1p Class of Service IEEE 802.3az Energy Efficient Ethernet (EEE) |
| MANAGEMENT | |
| Password management | Yes |
| Web browser-based graphical user interface (GUI) | Yes |
| Mobile-optimized GUI | Yes |
| Firmware upgrade | HTTP (Web GUI) |
| Configuration/switch settings (backup, restore) | Web GUI |
| One-click optimized setup | Yes |
| Preset modes | Default/Customized |



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Technical Specifications

| Default preset modes | Gaming (Optimizes Port 1 for a gaming device and Port 8 for Uplink) Media Streaming (Optimizes Port 2 for a media streaming device and Port 8 for Uplink) Networking Preset (All ports have equal prioritization) |
|--|---|
| Customizable preset modes | 2 |
| Firmware upgrade through web GUI (HTTP) | Yes |
| Config download (to switch) through web GUI (HTTP) | Yes |
| Config upload (to server) through web GUI (HTTP) | Yes |
| Loop detection | Yes (port LEDs rapid blink on affected ports) |
| Cable test utility | Yes |
| QUALITY OF SERVICE (QOS) | |
| Port-based rate limiting | Ingress and egress |
| Port-based QoS | Yes |
| IEEE 802.1p CoS (Class of Service) | Yes |
| IPv4 DSCP | Yes |
| Per port rate limiting rates | 512 Kbit/s 1/2/5/8/16/32/64/128/256/512 Mbit/s |
| Predefined port priority queues | High/Medium/Low |
| Weighted Round Robin (WRR) | Yes |
| L2 SERVICES - MULTICAST FILTERING | |
| IGMP snooping (v1, v2 and v3) | Yes |
| IGMP snooping querier | No |
| Block unknown multicast | Yes |
| Static multicast router port | Yes |
| L3 SERVICES - DHCP | |
| DHCP Client | Yes |
| LINK AGGREGATION | |
| Static Manual LAGs (Port Trunking) | Yes |
| # of Static LAGs/# of members in each LAG | 2 LAGs with max 4 members in each LAG |
| LEDs | |
| Per port | Link/Activity |
| Per device | Power |
| PHYSICAL SPECIFICATIONS | |
| Dimensions (W x D x H) | 195 x 149 x 40 mm (7.7 x 5.9 x 1.6 in) |
| Weight | 0.74 kg (1.63 lbs) |
| POWER CONSUMPTION | |
| Power Supply | External PSU, 12VDC, 1A max Power supply localized to country of sale |



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Technical Specifications

| May power (waret esca all parts used line, rate traffic) (Matta) | 2.014/ | |
|---|--|--|
| Max power (worst case, all ports used, line-rate traffic) (Watts) | 3.8W | |
| Min power (link-down standby) (Watts) | 0.8W | |
| Heat Dissipation (max and min) (BTU/hr) | Max: 13.1 BTU/hr Min: 2.9 BTU/hr | |
| Energy Efficient Ethernet (EEE) IEEE 802.3az | Yes (deactivated by default) | |
| 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 | -40° to 70°C (-40° to 158°F) | |
| Humidity (relative) | 95% maximum relative humidity (RH), non-condensing | |
| Altitude | 10,000 ft (3,000 m) maximum | |
| SAFETY CERTIFICATIONS | | |
| Certifications | UL, CB, CE LVD,EAC | |
| WARRANTY AND SUPPORT | | |
| Limited Warranty | Industry-leading 3 year warranty | |
| Support | 90-day complimentary technical support following purchase from a NETGEAR authorized reseller | |
| PACKAGE CONTENTS | | |
| All Models | Nighthawk S8000 Gaming & Streaming Advanced 8-Port Gigabit Ethernet Switch (GS808E) | |
| | AC power adapter (localized to country of sale) | |
| | Quick Installation Guide | |
| ORDERING INFORMATION | | |
| GS808E-100NAS | North America, Latin America | |
| GS808E-100PES | Europe | |
| GS808E-100UKS | United Kingdom | |
| GS808E-100JPS | Asia Pacific | |
| GS808E-100AUS | Australia | |

* This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller, and modifications to product may void the warranty; covers hardware, fans, and internal power supplies – not software or external power supplies; see http://www.netgear.com/about/warranty/ for details. Technical support includes basic phone support for 90 days from purchase date and online chat support when purchased from a NETGEAR authorized reseller.

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