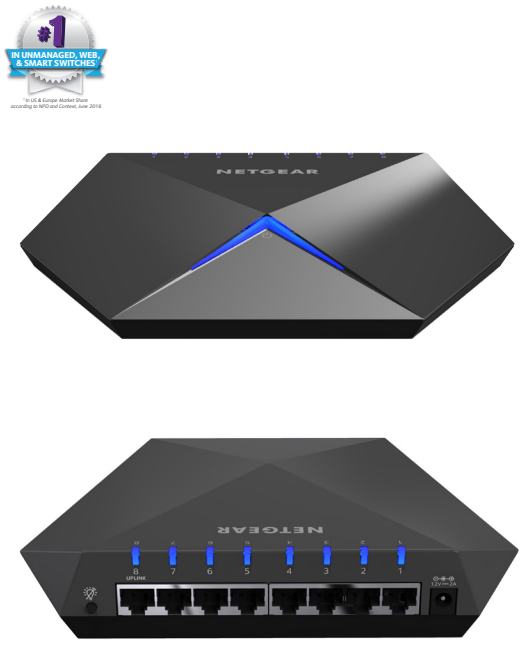
NETGEAR®

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.
- Four 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
- Multi-language GUI support (English, German, Japanese)
- 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!

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Ultimate Performance

Ultra-high performance for high demanding multi-player, online, or VR gaming and 4K UHD media streaming for the home.

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

- GIGABIT WIRED - 8-port Gigabit Ethernet LAN ports
- LINK AGGREGATION - Ability to aggregate up to four Gigabit LAN ports
- 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)
- Multi-language GUI support
- One-click user-defined configurations
- 4 Levels of traffic prioritization
- Port rate-limiting

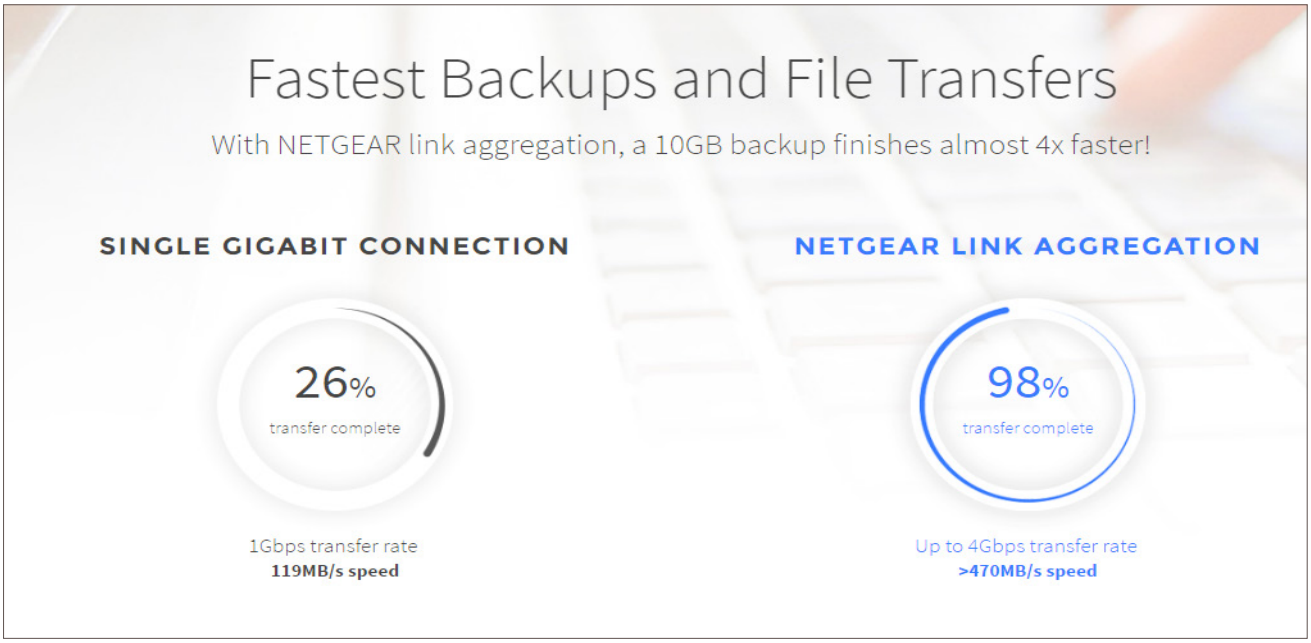
Sleek Design

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

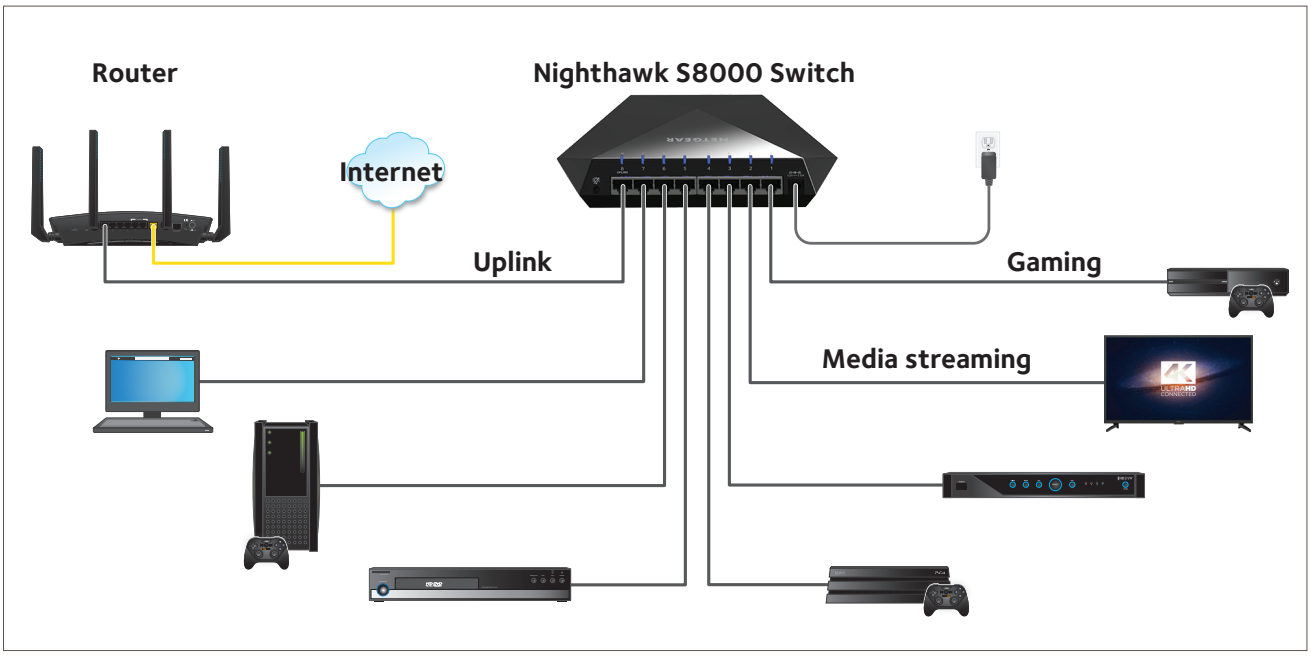
- "Cool-touch" premium zinc-alloy housing
- Soft-touch no slip-base
- Port activity LED On/Off

Fastest Backups and File Transfers

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



Connection Diagram



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Technical Specifications

PRODUCT SPECIFICATIONS	
Product	**GS808E**
Gigabit ports	8
LED on/off (Port and Power)	Yes
PERFORMANCE SPECIFICATION	
Packet buffer memory (Dynamically shared across only used ports)	192 KB
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	4
Priority queuing	Weighted Round Robin (WRR)
MAC address database size (48-bit MAC addresses)	4K
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)	• IEEE 802.1Q VLAN tagging
MANAGEMENT	
Password management	Yes
Web browser-based graphical user interface (GUI)	Yes
Mobile-optimized GUI	Yes
Multi-language GUI support	English, German, Japanese
Firmware upgrade	HTTP (Web GUI)
Configuration/switch settings (backup, restore)	Web GUI
One-click optimized setup	Yes

Technical Specifications

Preset modes	Default/Customized
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
L2 SERVICES - VLANS	
VLAN Supported	64
Port-based VLANs (physical)	Yes
IEEE 802.1Q VLAN Tagging	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	Critical/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

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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
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
ProSUPPORT OnCall 24x7 Service Plans	PMB0S12 (1 yr) PMB0S32 (3 yrs) PMB0S52 (5 yrs)
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

ORDERING INFORMATION	
GS808E-100NAS	North America, Latin America
GS808E-100PES	Europe
GS808E-100UKS	United Kingdom
GS808E-100JPS	Asia Pacific
GS808E-100AUS	Australia
GS808E -100PRS	China

* 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.

† NETGEAR #1 in US Market Share according to NPD data for Unmanaged and Web/Smart Switches, June 2018. NETGEAR #1 in Europe Market Share according to Context data for Unmanaged and Web/Smart Switches, June 2018.

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