

# PRODUCT DATASHEET

Gigabit Switch

NSG-8816

NSG-8816 is 16-port 10/100/1000 Gigabit desktop switch designed for fast backbone and connects servers or power users, delivering huge amounts of multimedia, image, and video information. Its browser-based user interface provides the simple Smart Switch management, which keeps you informed of switch performance, VLANs, and traffic prioritization.



Features	Benefits
Full duplex operation up to 2000Mbps	High speed network speed to fulfill heavy-loading task like data center, server farm connectivity
Combined switching capacity of up to 10Gbps, non-blocking switching architecture	No bottleneck caused by switch fabric
Per-Port color LEDs	Clear indication of system status hence easy diagnostics
Excellent switching architecture by combining dynamic memory allocation with store-and-forward switching	Minimize the possibility of packet loss
Allowing two or more units to be cascaded together	Scalable, capacity expansion
802.3x Flow Control	Minimize dropped packets
Jumbo Frames (up to 9.216K)	Maximize efficiency of transmission for giant packets
802.1P priority queuing	Prioritize critical traffics (VoIP, Video) based on user expectation
Auto MDI/MDI-X crossover	Save up-link port/cross cable, also reduce user confusion
Auto-negotiation	Optimize performance without management hassle

## Technical Specifications

### Network speed

Web smart 16-Port 10/100/1000Mbps Switch

### MAC Address Table Size

8K

### Switch Fabric

48Gbps Forwarding Capacity

### Transmission Method

Store-and-forward

### Diagnostic LEDs

Power  
LAN: link, activity, speed, duplex

### Forwarding Rate

- 10Mbps-14,880pps
- 100Mbps-148,809pps
- 1000Mbps -1,488,095pps
- Network latency: Less than 20  $\mu$ s for 64-byte frames in store-and-forward mode for 100 Mbps to 100 Mbps transmission

### Address Aging Timer

Automatic Update

### Max Power Consumption

29/32 Watts

### Jumbo Frames

9.216KB

### QoS

802.1p (4 Queues)

### Interface Options

- RJ-45
- 10BASE-T, 100BASE-TX, 1000BASE-T Universal UTP Cable Recognition for Straight-Through or Crossover Cables (MDI/MDI-X)

### Network Protocol and Standards

- IEEE802.3 Ethernet, 802.3u Fast Ethernet, 802.3ab Gigabit Ethernet
- 802.3x Flow Control
- 802.1P priority queuing
- IEEE 802.1D Spanning Tree Protocol

### Regulatory Requirement

FCC Class B, CE Class B, CSA International

### Power Supply

30W Internal power supply

### Environmental

#### Temperature

Operating: 0° ~ 40° C (32° to 104° F)  
Storage: -10° ~ 70° C (14° to 158° F)

#### Humidity

Operating: 10% - 95% RH, Non-condensing  
Storage: 5% - 95% RH, Non-condensing

### Physical Specifications

Dimensions (H x W x D): 1.7 x 17.3 x 8.1 in. (43 x 440 x 205 mm)

### Weight

5.9 lbs. (2.7 kg)/6.5lbs (2.99KG)

### Warranty and Support Information

1-Years (Excluding Power Supply)

### Related Product(s)

5 port Gigabit Switch  
NSG-8805  
11a/b/g High-power Wireless USB Adapter  
NUB-362/362 EXT (802.11b/g)  
NUB-862 (802.11a/b/g)  
NUB-8301 (802.11a/b/g)  
Indoor AP-Client  
NCB-3220 (802.11b/g)  
NCB-8610 (802.11a/b/g)  
Outdoor AP-Client  
NOC-3220 Series (802.11b/g)  
NOC-8610 Series (802.11a/b/g)