

**Product Introduction & Benefits**

The **NSH-580** is a high performance managed SNMP Layer 3 switch that provides users with 24 x 10/100Mbps Ethernet and 4 Gigabit Combo ports. The Web/SNMP management provides remote control capability that gives flexible network management and monitoring options. Whether managed through "in-band" SNMP management station, internet web browser, or through "out-of-band" RS-232 console port, the **NSH-580** facilitates network operational control and diagnosis.

For increased bandwidth application, **NSH-580** can accommodate up to 32 trunk groups with LACP link aggregation. Moreover, these trunk ports are with fair-over function to provide redundant back up if one or more of ports are malfunctioning. It also supports both 802.1Q VLAN and GVRP VLAN Registration thereby simplifying network traffic segmentation, broadcast domain extension and other associated benefits of constructing VLANs. The abundance of features translates into increased efficiency and performance in network administration.

**Main Features:****Standards:**

- IEEE: 802.3, 802.3u, 802.3z, 802.3x, 802.3ad, 802.1d, 802.1w, 802.1s, 802.1q, 802.1p

**Interface:**

- Twenty four 10/100Base-TX RJ-45 ports
- Four Gigabit SFP/RJ-45
- RS-232 Console (RJ-45)

**Networking:**

- Spanning Tree Protocol/ Rapid Spanning Tree Protocol/ Multiple Spanning Tree
- Automatic learning of up to 16K MAC addresses
- DHCP Relay
- IGMP Snooping for multicast filtering
- Ingress/Egress Rate limitation
- Access Control List L2/L3/L4/L7
- 8 Priority Queues
- Full VLAN (802.1q) with double tagging (Q in Q)
- LACP Link Aggregation
- GVRP VLAN Registration Protocol

**Routing:**

- Static route
- RIPv1/v2
- OSPF
- DVMRP
- PIM-DM
- VRRP

**Management:**

- Web-based GUI
- SNMP
- RMON
- Telnet/Console
- Command Line
- IEEE 802.1x Network Access Control
- Port configuration, status, statistics, security
- Loss of link management on fiber ports
- Port mirroring

**Power:**

- 100 ~ 240VAC auto-ranging power input
- -48VDC power option available
- Redundant power option available

**Mechanical & Environmental:**

- Desktop and rack-mountable unit
- Operating temperature: 0°C~50°C

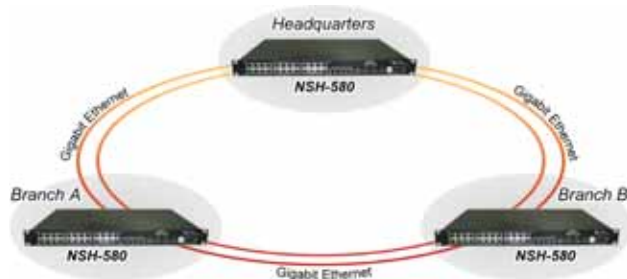


### Specifications:

<b>Standards:</b>	IEEE 802.3u 100Base-TX/FX	<b>VLAN:</b>	Port-based and Tag-based (4KVIDs)
	IEEE 802.3z 1000Base-SX/LX/LHX	<b>QoS:</b>	Port-based, IEEE 802.1p tag, IPv4 ToS/DiffServ, IPv6 Traffic Class, source/destination MAC address
	IEEE 802.3ad Port Trunking	<b>Wavelength:</b>	Depend on SFP module
	IEEE 802.3 10Base-T	<b>Max Distances:</b>	10/100Base-TX: 100m RS-232: 15m Fiber Optic: Up to 110km
	IEEE 802.1d Spanning Tree Protocol	<b>Power:</b>	Power Input: 100 ~ 240VAC -48VDC with Redundant Power options
	IEEE 802.1w Rapid Spanning Tree Protocol	<b>Temperature:</b>	Operating: 0°C to 50°C Storage: -20°C to 70°C
	IEEE 802.1s Multiple Spanning Tree Protocol	<b>Humidity:</b>	Operating: 10% to 80% RH Storage: 5% to 90% RH
	IEEE 802.3x Flow Control	<b>Emissions:</b>	FCC Part 15 of Class A & CE Approved
	IEEE 802.1p Priority Queues	<b>Safety:</b>	EN 60950
	IEEE 802.1q VLAN Tagging	<b>Dimensions:</b>	180 x 440 x 44 mm (D x W x H)
<b>Ports:</b>	24 x 10/100Base-TX (RJ-45) 4 x SFP 4 x 10/100/100Base-T (RJ-45) 1 x RS-232 Console (RJ-45)	<b>Weight:</b>	4kg
<b>Throughputs:</b>	14,880/148,800/1,488,000 packets per second (pps) to 10/100/1000 Mbps ports		
<b>MAC Table:</b>	Up to 16K addresses		

### Applications:

Designed for FTTx applications. The diagram on the right illustrates a typical MTU/MDU triple-play application for the NSH-580 series. The actual distances will depend on several factors, including the quality of cables used and the terminal equipment employed.



### Ordering Information:

**NSH-580:**

Managed 24-port + 4G Combo L3 Switch

**NSH-580D:**

Managed 24-port + 4G Combo L3 Switch with DC-48V power supply

**NSH-580R:**

Managed 24-port + 4G Combo L3 Switch with redundant AC power inputs

**NSH-580DR:**

Managed 24-port + 4G Combo L3 Switch with redundant DC-48V power supply