

NGS3912E

12x 10G SFP+ + 8x 10/100/1000T Layer 3 Managed Switch
with Dual 100~240V AC Redundant Power

Highlights

- 12x 10G SFP+ & 8 Gigabit RJ45 Ports with L3 Routing
- 176Gbps Switching Capacity with 132Mpps Throughput
- Advanced IPv4/IPv6, OSPF, RIP & Static Routing Support
- Robust Network Security with ACL, 802.1X & DoS Protection
- Redundant 100~240V AC Power & Fan Cooling System



Specifications

Model	NGS3912E
Hardware Specifications	
Ethernet Ports	8 1000BASE-T RJ45 auto-MDI/MDI-X ports
SFP+ Slots	12 10GBASE-SR/LR SFP+ interface, Compatible with 1000BASE-SX/LX/BX SFP transceiver
Console	1 x RJ45-to-DB9 serial port (9600, 8, N, 1)
Reset Button	Reset to factory default
Switch Architecture	Store-and-forward
Switch Fabric	176Gbps/non-blocking
Switch Throughput	132Mpps
Address Table	32K MAC address table with auto learning function
Shared Data Buffer	3MB
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex
Jumbo Frame	9KB
LED	System: PWR, SYS, Ports: 10/100/1000T RJ45 Port: LNK/ACT, 1/10G SFP+ Slot: LNK/ACT
Dimensions (W x D x H)	440 x 279.8 x 44 mm, 1U height
Weight	4178g
Power Consumption	55 watts/187.66 BTU (maximum)
Switch Fabric	176Gbps/non-blocking
Switch Throughput	132Mpps
Power Requirements	AC 100~240V, 50/60Hz
Fan	2
Management Function	
System Configuration	Console, Telnet, SSH, Web browser, SNMP v1, v2c and v3
Management	Supports both IPv4 and IPv6 addressing, Supports the user IP security inspection for IPv4/IPv6 SNMP, Supports MIB and TRAP, Supports IPv4/IPv6 TFTP, Supports IPv4/IPv6 NTP, Supports RMON 1, 2, 3, 9 groups, Supports the RADIUS authentication for IPv4/IPv6 Telnet user name and password, Supports IPv4/IPv6 SSH, The right configuration for users to adopt RADIUS server's shell management, Supports CLI, console, Telnet, Supports SNMPv1, v2c and v3, Supports Security IP safety net management function: avoid unlawful landing at non-restrictive area, Supports Syslog server for IPv4 and IPv6, Supports TACACS+
Layer 3 Functions	
Routing Protocol	Static routing, RIP and OSPF
Routing Table	IPv4: 32K, IPv6: 8K
Multicast Routing Protocol	PIM-DM and PIM-SM, PIM-SSM, MSDP
DHCP	DHCP client, DHCP server, default-route
VRRP	Configure VRRP in interface VLAN; VRRP priority; VRRP standby; VRRP track

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Layer 3 Functions	
Load Balancing	Load Balancing
Layer 2 Function	
Port Configuration	Port disable/enable, Auto-negotiation 10/100/1000Mbps full and half duplex mode selection, Flow control disable/enable, Bandwidth control on each port, Port loopback detect
Port Status	Display each port's speed duplex mode, link status, flow control status and auto negotiation status
VLAN	IEEE 802.1Q tag-based VLAN, up to 4K VLAN entries, IEEE 802.1ad Q-in-Q VLAN stacking/tunneling, GVRP for VLAN management, Private VLAN Edge (PVE) supported, Protocol-based VLAN, MAC-based VLAN, IP subnet VLAN
Bandwidth Control	TX/RX/both
Link Aggregation	IEEE 802.3ad LACP/static trunk, Supports 32 groups with 8 ports per trunk group
QoS	8 priority queues on all switch ports, Supports strict priority and Weighted Round Robin (WRR) CoS policies, Traffic classification: IEEE 802.1p CoS/ToS, IPv4/IPv6 DSCP, Port-based WRR
Multicast	IGMP v1/v2/v3 snooping, Querier mode support, MLD v1/v2 snooping, Querier mode support, Multicast VLAN Register (MVR)
Access Control List	Supports Standard and Expanded ACL, IP-based ACL/MAC-based ACL, Time-based ACL, Up to 1K entries
Bandwidth Control	At least 64Kbps stream
Security	Port isolation, Supports IP + MAC + port binding, Identification and filtering of L2/L3/L4 based ACL, Defend against DOS or TCP attacks, Suppression of broadcast, multicast and unknown unicast packet, DHCP Snooping, DHCP Option 82, Command line authority control based on user levels
Authentication	IEEE 802.1x port-based network access control, AAA authentication: TACACS+ and IPv4/IPv6 over RADIUS
SNMP MIBs	RFC 1213 MIB-II, RFC 1215 Internet Engineering Task Force, RFC 1271 RMON, RFC 1354 IP-Forwarding MIB, RFC 1493 Bridge MIB, RFC 1643 Ether-like MIB, RFC 1907 SNMPv2, RFC 2011 IP/ICMP MIB, RFC 2012 TCP MIB, RFC 2013 UDP MIB, RFC 2096 IP forward MIB, RFC 2233 if MIB, RFC 2452 TCP6 MIB, RFC 2454 UDP6 MIB, RFC 2465 IPv6 MIB, RFC 2466 ICMP6 MIB, RFC 2573 SNMPv3 notification, RFC 2574 SNMPv3 VACM, RFC 2674 Bridge MIB Extensions
Environment	
Operating	Temperature: 0 ~ 50 °C, Relative Humidity: 10 ~ 85% (non-condensing)
Storage	Temperature: -40 ~ 80 °C, Relative Humidity: 5 ~ 95% (non-condensing)