Navijin

NJS-9448X

Datasheet
L3 Managed Switch

48× 10G SFP+, 2× 40G QSFP+ and 4× 100G QSFP28 L3 Stackable Switch

Highlights



- Support 48× 10G SFP+, 2× 40G QSFP+ and 4× 100G QSFP28
- Support full L3 routing: OSPF, BGP, VRRP, PBR, ECMP
- Support full IPv6: OSPFv3, BGP4+, RIPng, DHCPv6
- Support Navijin Virtual Stacking (NVS), ERPS ring network, ISSU
- Supports 802.1X, DHCP Snooping, DAI and IP Source Guard
- Support dual hot-swap power supplies and 4 redundant fans

Specifications

Model	NJS-9448X
Hardware Specification	
Power Supply	2x hot-swap AC 100~240V 50/60Hz, 1+1 redundant (dual PSU included) Power consumption: typical 102W, max 147W
Interfaces	48× 10Gbps SFP+ ports (1G/10G) 2× 40Gbps QSFP+ ports 4× 100Gbps QSFP28 ports (40G/100G) 1x Out-of-band MGMT port 1x Console port
Network Protocol	IEEE 802.3 Ethernet MAC Protocol, IEEE 802.3x Flow Control IEEE 802.3z 1000BASE-X, IEEE 802.3ae 10G Ethernet IEEE 802.3ba 40G/100G Ethernet, IEEE 802.3bm 100G Ethernet IEEE 802.3ad Link Aggregation (LACP), IEEE 802.1ab LLDP IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP IEEE 802.1Q VLAN, IEEE 802.1ad QinQ, IEEE 802.1p CoS IEEE 802.1X Port-based Access Control IEEE 802.3ah / 802.1ag Ethernet OAM, ITU-T Y.1731
Network Medium	1000BASE-SX/LX via SFP; 10GBASE-SR/LR/ER via SFP+; 10G DAC/AOC 40GBASE-SR4/LR4 via QSFP+; 100GBASE-SR4/LR4 via QSFP28
LED Indicator	System, power, fan and alarm indicators; port Link/Act indicators
Dimensions	442mm x 404mm x 44mm (1U, 19" rack mount); weight 8.8Kg (empty); 4 hot-swap fans, front-to-back airflow
Working Environment	Working Temperature: 0~50°C / Working Humidity: 10%~90%, non-condensing Storage Temperature: -20~70°C / Storage Humidity: 5%~95%, non-condensing MTBF: >200,000 hours
Performance	
Switching Capacity	1.92Tbps
Packet Forwarding Rate	1440Mpps
Routing Table	IPv4 16K / IPv6 8K; ARP 16K / ND 2K
MAC Address	64K
Jumbo Frame	16KBytes
VLANs	VLAN Range 1-4094, with a maximum active VLAN of 4K; 1K SVIs

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Software Function	
L3 Switching Features	Static Routing - IPv4/IPv6 RIP v1/v2, RIPng OSPF, OSPFv3 BGP, BGP4+ Policy-Based Routing (PBR) Equal-Cost Multi-Path (ECMP) VRRP BFD for OSPF and BGP Multi-VRF Address Resolution Protocol (ARP)
L2 Switching Features	64K MAC Address Table 16K Jumbo Frame Flow Control 802.3x Spanning Tree IEEE 802.1D (STP) IEEE 802.1w (RSTP) IEEE 802.1s (MSTP) BPDU Guard, Root Guard, Loopback Guard ERPS, EAPS ring protection Link Aggregation Static and IEEE 802.3ad LACP Interface Backup NVS Virtual Stacking
VLAN	4K active VLANs IEEE 802.1Q Tagged-based QinQ and Selective QinQ GARP VLAN Registration Protocol (GVRP) Private VLAN
Multicast	PIM-SM PIM-DM IGMP v1/v2/v3 IGMP Snooping IGMP Fast Leave IGMP Filter Multicast VLAN Registration (MVR) MLD Snooping
Quality of Service (QoS)	CAR HQoS Classification by MAC/IP/TCP/UDP/VLAN/CoS/DSCP/ToS 802.1p / DSCP re-marking Queue Scheduling SP, WRR, SP+WRR Tail-drop, WRED Traffic Shaping Flow Monitoring
Access Control List (ACL)	ACL Type - L2/L3/L4 IPv4 ACL IPv6 ACL (ACLv6)

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Security	AAA Authentication RADIUS TACACS+ IEEE 802.1X Port Security, MAC Sticky Port Isolation IP + MAC + Port Binding DHCP Snooping (with Option 82) Dynamic ARP Inspection (DAI) IP Source Guard PPPoE+ Anti-DDoS: SYN Flood, UDP Flood Storm Control uRPF SSH, HTTPS MD5, SHA-256, RSA-1024, AES-256
IPv6	IPv6 Static Routing RIPng OSPFv3 BGP4+ ICMPv6 DHCPv6 ACLv6 IPv6 Neighbor Discovery (ND) Path MTU Discovery Telnet over IPv6 IPv6 Tunnels Manual, ISATAP, 6to4

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Software Function	
Management	CLI Console Telnet SSH v1/v2 WebUI HTTP/HTTPS SNMP (v1, v2c, v3) RMON File Management TFTP, FTP, SFTP Firmware Upgrade In-Service Software Upgrade (ISSU) Time Management NTP
Discovery	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
Diagnostics	Port Mirroring - SPAN Remote Mirroring - RSPAN Ethernet OAM IEEE 802.3ah Connectivity Fault Management IEEE 802.1ag ITU-T Y.1731 BFD
Reliability	1+1 hot-swap power supplies Redundant hot-swap fans NVS Virtual Stacking ERPS / EAPS ring protection Graceful Restart Continuous Forwarding ISSU

