Navijin

NJS-7248M

Datasheet
L3 Managed Switch

48× 2.5G RJ45, 4× 10G SFP+ and 2× 40G QSFP+ L3 Managed Switch

Highlights



- Support 48× 2.5G RJ45, 4× 10G SFP+ and 2× 40G QSFP+
- Support dual hot-swap power slots for 1+1 redundancy
- Support L3 routing: static, RIP, OSPF, BGP, VRRP, PBR
- Support full IPv6: OSPFv3, BGP4+, RIPng, DHCPv6
- Support Navijin Virtual Stacking (NVS) and ERPS ring (<50ms)
- Supports 802.1X, DHCP Snooping, DAI and IP Source Guard

Specifications

Model	NJS-7248M
Hardware Specification	
Power Supply	Dual hot-swap power slots, 1x AC 100~240V 50/60Hz PSU included (DC 36~72V optional) Power consumption: <100W
Interfaces	48× 100M/1G/2.5G RJ45 ports 4× 10Gbps SFP+ ports (1G/10G) 2× 40Gbps QSFP+ ports 1x Console port (RJ45)
Network Protocol	IEEE 802.3 Ethernet MAC Protocol, IEEE 802.3x Flow Control IEEE 802.3bz 2.5GBASE-T, IEEE 802.3ab 1000BASE-T, IEEE 802.3ae 10G Ethernet IEEE 802.3ba 40G 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	2.5GBASE-T / 1000BASE-T via RJ45 (Cat5e or better) 1000BASE-SX/LX via SFP; 10GBASE-SR/LR via SFP+; 10G DAC 40GBASE-SR4/LR4 via QSFP+
LED Indicator	System, power, fan and alarm indicators; port Link/Act indicators
Dimensions	440mm x 300mm x 44mm (1U, 19" rack mount)
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 / Noise: 55dBA at 25°C
Performance	
Switching Capacity	480Gbps
Packet Forwarding Rate	360Mpps
Routing Table	IPv4 16K / IPv6 8K; ARP 16K / ND 8K
MAC Address	64K
Jumbo Frame	16KBytes
VLANs	VLAN Range 1-4094, with a maximum active VLAN of 4K; 1K SVIs

NJS-7248M

48× 2.5G RJ45, 4× 10G SFP+ and 2× 40G QSFP+ L3 Managed Switch

Specifications

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 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 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)

NJS-7248M

48× 2.5G RJ45, 4× 10G SFP+ and 2× 40G QSFP+ L3 Managed Switch

Specifications

Software Function	
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

NJS-7248M

48× 2.5G RJ45, 4× 10G SFP+ and 2× 40G QSFP+ L3 Managed Switch

Specifications

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 power redundancy (hot-swap slots) NVS Virtual Stacking ERPS / EAPS ring protection Graceful Restart Continuous Forwarding ISSU

