Navijin

DATASHEET

NETWORK INFRASTRUCTURE / L3 MANAGED SWITCH

NJS-5248F

48x GE SFP and 6x 10G SFP+ L3 Stackable Managed

PRODUCT PAGE

Enterprise | Campus | Hospital | Data Center

NJS-5248F



Overview

The Navijin NJS-5248F is a Layer 3 managed switch for aggregation and core networks – 48x Gigabit SFP + 6x 10G SFP+ L3 Stackable Managed Switch. Key specifications include: 48x Gigabit SFP and 6x 10G SFP+ ports; Layer 3 routing with virtual stacking; dual hot-swap power slots. It provides routing, VLANs, QoS and advanced security for enterprise, campus, hospital and data center networks.

Key Features

- Support 48x Gigabit SFP and 6x 10G SFP+ uplinks
- 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
- Support 2 hot-swap power slots for 1+1 redundancy

Hardware Specification

Power Supply	2 power slots, 1x hot-swap AC 100~240V 50/60Hz PSU included Optional second PSU for 1+1 redundancy Max power consumption: 150W
Interfaces	48x 1000Mbps SFP ports 6x 10Gbps SFP+ ports (1G/10G) 1x Console port (RJ45)
Network Protocol	IEEE 802.3 Ethernet MAC Protocol, IEEE 802.3x Flow Control IEEE 802.3ab 1000BASE-T, IEEE 802.3z 1000BASE-X, IEEE 802.3ae 10G 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/ZX via SFP; 10GBASE-SR/LR/ER via SFP+; 10G DAC
LED Indicator	System, power, fan and alarm indicators; port Link/Act indicators

Dimensions	440mm x 350mm 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: 45dBA at 25°C

Performance

Switching Capacity	216Gbps
Packet Forwarding Rate	162Mpps
Routing Table	IPv4 12K / IPv6 6K; ARP 12K / ND 2K
MAC Address	32K
Jumbo Frame	9KBytes
VLANs	VLAN Range 1-4094, with a maximum active VLAN of 4K; 1K SVIs

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

- 32K MAC Address Table
- 9K 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)

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

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

Warranty & support Local RMA and technical support through our regional hub in Dubai and our authorized partners. Certificates and project pricing on request. **navijin.com · sales@navijin.com**

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