

NSR2900X Series Access Router

Datasheet

Overview

NSR2900X series modular access router developed by Maipu is one new-generation of enterprise-class router. It runs Maipu's MyPower operating system and application software, NSR2900X, as an access router, can be deployed in large enterprise branches, small-medium corporate headquarters/branches, for military/government/finance.



NSR2900X-04 fully supports IPv4, IPv6, OSPF, BGP, MPLS and other network protocols; supports security features such as access control, attack detection, and encryption algorithm; supports rich interface types such as 1000M RJ45/SFP Ports, E1/CE1, 155M POS and high-speed serial ports.

NSR2900X series router is the next generation version of NSR2900 series which was widely deployed in many countries. It includes several models which are NSR2900X-04, NSR2900X-14 and NSR2900X-24.

NSR2900X-04 supports one RJ45 console port, one USB interface, four GE Combo WAN ports, four expansion slots, one AC power supply.

NSR2900X-14 supports one RJ45 console port, one USB interface, two GE combo WAN ports, two GE electric copper ports, 24 gigabit LAN ports, four expansion slots, one or two AC power supplies.

NSR2900X-24 supports one RJ45 console port, one USB interface, two GE combo WAN ports, two GE electric copper ports, 48 gigabit LAN ports, four expansion slots, one or two AC power supplies.

 <p>NSR2900X-04</p>	<ul style="list-style-type: none"> ● Fixed WAN: 4*GE combo (RJ45/SFP). ● Extension Slots: 4*NRM2 extension slots. ● Power: 2*AC power (RPS), 100V-240V 50-60Hz. ● 1*RJ45/Micro-USB Console port. ● 1*USB2.0 port. ● Dimension (L*D*H): 442mm*380mm*44.3mm(1U).
	<ul style="list-style-type: none"> ● Fixed WAN: 2*GE combo (RJ45/SFP), 2*GE copper RJ45. ● Fixed LAN: 24*GE copper RJ45 ports. ● Extension Slots: 4*NRM2 extension slots. ● Power: 2*AC power (RPS), 100V-240V 50-60Hz. ● 1*RJ45/Micro-USB Console port. ● 1*USB2.0 ● Dimension (L*D*H): 442mm*380mm*44.3mm(1U).



NSR2900X-14D



NSR2900X-24D

- Fixed WAN: 2*GE combo (RJ45/SFP), 2*GE copper RJ45 ports.
- Fixed LAN: 48*GE copper RJ45 ports.
- Extension Slots: 4*NRM2 extension slots.
- Power: 2*AC power (RPS), 100V-240V 50-60Hz.
- 1*RJ45/Micro-USB Console port.
- 1*USB2.0
- Dimension (L*D*H): 442mm*380mm*44.3mm(1U).

Highlights

Highlights	Benefits
Flexible uplink	NSR2900X integrates fixed WAN and LAN interface, WAN uplink supports various mainstream WAN access link technologies, such as ethernet, 4G, E1/CE1, POS and V.35 serial line.
Extensible modular slots	NSR2900X series aggregation router is modular design which has enough expansion slots. The whole device supports 4 extended slots totally.
High performance	<ul style="list-style-type: none"> ● Multi-core high performance processor. ● 10/100/1000M high-speed ethernet WAN/LAN port. ● Built-in hardware acceleration engine, high encryption performance. ● Maipu Express Forwarding (MEF) technologies, speeding up forwarding and processing of data packets.
Integrated Hardware	NSR2900X series router supports up to 24/48 fixed 1000M switch access ports, providing the IP terminal access capability and meeting the requirement of the user for integrating the routing and switch to construct the access network.
Rich software features	<ul style="list-style-type: none"> ● Support multiple WAN protocol: DDR, PPPoE, EDP, DHCP, Static, 4G/3G ● Support typical TCP/IP services: DHCP, DNS, NAT, GRE, L2TP... ● Support advanced protocol, such as BGP, MPLS, VPLS. ● IPv6 Ready, fully support IPv6 features.
High reliability and business continuity	<ul style="list-style-type: none"> ● Optional redundant power supplies (RPS), support dual AC power. ● Redundant WAN connection for failover protection and load balancing. ● Dynamic failover protocols such as VRRP/VBRP, backup interface, track IP.
Easy O&M	<p>Multiple management methods: standard SNMP monitoring and management, Web-based GUI, SD-WAN based management, traditional command line interface.</p> <p>In-built Embedded Event Platform (EEP), allow the customer to monitor critical event, and automatically execute pre-defined actions.</p>
Hardware Security	The router's CPU, memory stick, Flash, to achieve chip-level Security, put an end to the potential threat of "back door".

Product Specifications

Hardware Specification

Hardware specification	NSR2900X-04	NSR2900X-14D	NSR2900X-24D
CPU	Multi-Core CPU	Multi-Core CPU	Multi-Core CPU
Fixed WAN interfaces	4* GE combo (RJ45/SFP)	2* GE combo (RJ45/SFP), 2*GE copper RJ45	2* GE combo (RJ45/SFP), 2*GE copper RJ45
Fixed LAN interfaces	N/A	24*GET RJ45	48*GET RJ45
WAN Throughput	3Mpps	3Mpps	3Mpps
Extension slots	4*NRM2	4*NRM2	4*NRM2
USB	1	1	1
Console port/AUX	1	1	1
Dimension (L*D*H)	442mm×380mm×44.3mm(1U)	442mm×380mm×44.3mm(1U)	442mm×380mm×44.3mm(1U)
Power supply	NSR2900X-04: 2*AC power (RPS), 100V-240V, 50-60Hz.	NSR2900X-24D: 2*AC power (RPS), 100V-240V 50-60Hz	NSR2900X-24D: 2*AC power (RPS), 100V-240V, 50-60Hz.
Power consumption	≤54W	≤86W	≤100W
Working Temperature	0°C~45°C	0°C~45°C	0°C~45°C
Humidity	Work humidity: 5%-85%/RH	Work humidity: 5%-85%/RH	Work humidity: 5%-85%/RH
Weight	≤4.3KG	≤4.7KG/5.1KG	≤4.9KG/5.3KG

Software Specification

Software features	
WAN Protocol	DDR, NDIS, PPPoE, Bridge Group, HDLC, FR
LAN Protocol	STP/RSTP/MSTP, MAC management, 802.1q VLAN, LACP, Loopback Detection, SPAN, LLDP, Port-isolate, Error-disable, ULFD, Port Security, QinQ, Voice VLAN
TCP/IP Protocol	DHCP, DNS, DDNS, NAT, NAT64, NAT66, NAT ALG, IPIP, GRE, L2TP/L2TPv3
IPv4 Routing protocol	Static, RIP, IRMP, OSPFv2, IS-IS, BGP, Policy Routing
IPv6 Routing Protocol	IPv6 Static, RIPng, OSPFv3, IS-ISv6, BGP4+, IPv6 Policy Routing, SRv6
IPv6 function	IPv4/IPv6 Dual-Stack, IPv6 ND, IPv6 PMTU, IPv6 ACL, ICMPv6, DNSv6, DHCPv6, GREv6
IPv6 Transition Tunneling	IPv6 over IPv4, 6to4, ISATAP
Multicast	IGMP v1/v2/v3, PIM-DM/PIM-SM, SSM, MVPN, NG MVPN, MSDP, MLD, IPv6 PIM, MBGP
VPN	IPSec, PKI, MPLS, VPLS, VPWS, L3VPN, OAM, 6PE, VRF, DVPN
MPLS	LDP, MPLS L3VPN, MPLS L2VPN, MPLST TE, IP FRR, LDP FRR, TE FRR, SR-MPLS
Security	ACL, SSH, CPU protection, AAA, IKE, PKI, 802.1X, URFP
QoS	FIFO, PQ, FQ, WFQ, CBWFQ, LLQ, RSVP, CAR, H-QoS, traffic shaping, Rate Limitation
Reliability	Backup interface, VRRP/VRRPv3, VBRP, IPSLA, Track, BFD/BFDv6
Management & Monitoring	Keepalive, NTP, EEP, RMON, CWMP, CLI, SSH, HTTP/HTTPS, SNMP V1/V2/V3, Telnet, PING, Trace Route, Login, FTP, TFTP, SFTP, TR069, IP-SLA

Extension Modules

Modules	Description
NRM2-1SA	Single high speed V35 serial port module
NRM2-2SA	2-way high speed V35 serial port module
NRM2-1E1	Single channel non-channelized E1 interface module
NRM2-1CE1	Single channelized E1 interface module
NRM2-4E1	4-channel non-channelized E1 interface module
NRM2-4CE1	4-channel channelized E1 interface module
NRM2-1GE	Single Gigabit Combo Interface Module
NRM2-4GET	4-channel Gigabit electrical interface module
NRM2-4GEF	4-channel Gigabit optical interface module
NRM2-1POS-OC3	Single 155M POS interface module

Order Information

Host model	Description
NSR2900X-04-AC	One RJ45 console port, one micro-USB console port, one USB interface, four 10M/100M/1000M WAN ports (four Combo port), four NRM2 slots, fixed one AC power.
NSR2900X-14D-AC	One RJ45 console port, one micro-USB console port, one USB interface, four 10M/100M/1000M WAN ports (two Combo port), 24 GE LAN ports, four NRM2 slots, fixed dual AC power (RPS).
NSR2900X-24D-AC	One RJ45 console port, one micro-USB console port, one USB interface, four 10M/100M/1000M WAN ports (two Combo port), 48 GE LAN ports, four NRM2 slots, fixed dual AC power (RPS).

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