

NSR1900X Series Access Router

Datasheet



Overview

NSR1900X series access router developed by Maipu is one new-generation enterprise-class access router. The network operating system and application software independently developed by Maipu run on Maipu MyPower operating system. It is positioned as a new generation of independent controllable access router for military, government, finance, small and medium-sized enterprise branches, headquarters and branches of small and medium-sized enterprises.

NSR1900X router fully supports network protocols such as IPv4, IPv6, OSPF, BGP, MPLS, etc.; it supports security features, such as access control, attack detection, and algorithm; it supports rich interface types, such as gigabit optical/electrical, E1/CE1, 155M POS, high-speed serial port; it adopts the advanced multi-core forwarding technology, and achieves the level of the same-grade devices in the world in terms of performance and function.

NSR1900X-04-AC supports One RJ45 Console port, one USB interface, Four Gigabit Combo WAN port (Copper or SFP), four expansion slots, one 100V-240V AC power input.

NSR1900X-04D-AC supports One RJ45 Console port, one USB interface, Four Gigabit Combo WAN port (Copper or SFP), four expansion slots, two 100V-240V AC power input.

| | |
|---|--|
|  <p>NSR1900X-04-AC</p> | <ul style="list-style-type: none"> ● Fixed Interface: 4*GE Combo Ports (RJ45/SFP). ● Extension Slots: 4*NRM2 extension slots. ● Power: 1*AC power, 100V-240V 50Hz-60Hz ● Dimension (L*D*H): 442mm*380mm*44.2mm(1U) |
|  <p>NSR1900X-04D-AC</p> | <ul style="list-style-type: none"> ● Fixed Interface: 4*GE Combo Ports (RJ45/SFP). ● Extension Slots: 4*NRM2 extension slots. ● Power: 2*AC power (RPS), 100V-240V 50Hz-60Hz ● Dimension (L*D*H): 442mm*380mm*44.2mm(1U) |

Highlights

| Highlights | Benefits |
|--|---|
| Flexible uplink | NSR1900X integrates fixed 4*Giga Combo WAN interfaces, WAN uplink supports various mainstream WAN access link technologies, such as ethernet, E1/CE1, POS and V.35 serial link. |
| Extensible modular slots | NSR1900X 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 port. ● Built-in hardware acceleration engine, high encryption performance. ● Maipu Express Forwarding (MEF) technologies, speeding up forwarding and processing of data packets. |
| Rich software features | <ul style="list-style-type: none"> ● Support multiple WAN protocol: DDR, PPPoE, 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"> ● Redundant power supply design, ensuring business security and stability. ● Dual boot file, dual operating system auto backup. ● 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, traditional command line interface.</p> <p>In-built Embedded Event Platform (EEP), allow the customer to monitor critical event, and automatic execute pre-defined action.</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 | NSR1900X-04-AC | NSR1900X-04D-AC |
|------------------------|----------------------------------|--|
| CPU | Multi-core processor | Multi-core processor |
| Dual IOS | Yes | Yes |
| Fixed interface | 4*GE Combo Ports (RJ45/SFP) | 4*GE Combo Ports (RJ45/SFP) |
| WAN Throughput | 800Kpps | 800Kpps |
| Extension slots | 4*NRM2 | 4*NRM2 |
| USB | 1 | 1 |
| Console port/AUX | 1 | 1 |
| Dimension (L*D*H) | 442mm*380mm*44.2mm(1U) | 442mm*380mm*44.2mm(1U) |
| Power supply | 1*AC power, 100V-240V, 50Hz-60Hz | 2*AC power (RPS), 100V-240V, 50Hz-60Hz |
| Power consumption | ≤20W | ≤20W |
| Working Temperature | 0°C ~ 45°C | 0°C ~ 45°C |
| Humidity | Work humidity: 5%-85%/RH | Work humidity: 5%-85%/RH |
| Weight | ≤3KG | ≤3KG |

Software Specification

| Software features | |
|---------------------------|--|
| WAN Protocol | Frame Relay, HDLC, PPP, PPPoE, bridging, virtual Ethernet, QinQ, LACP |
| TCP/IP Protocol | DHCP, DNS, DDNS, NAT, NAT64, NAT66, NAT ALG, IPIP, GRE, L2TP/L2TPv3, VxLAN |
| IPv4 Routing protocol | Static, RIP, OSPFv2, IS-IS, BGP, Policy Routing |
| IPv6 Routing Protocol | IPv6 Static, RIPng, OSPFv3, IS-ISv6, BGP4+, IPv6 Policy Routing |
| 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, MLD, PIM-SM/DM, PIM-SMv6, MSDP, MVPN, NG-MVPN, multicast routing protocol |
| VPN | IPSec, PKI, MPLS, VPLS, VPWS, L3VPN, OAM, 6PE, VRF. |
| MPLS | MPLS, LDP, L2VPN, L3VPN, MPLS TE, MPLS OAM, SR-MPLS |
| Security | Support ACL security filtering, NAT, PPP encryption, L2TP, GRE, policy routing, AAA, SSH, IPSec VPN |
| QoS | FIFO, PQ, FQ, WFQ, CBWFQ, LLQ, RSVP, CAR, H-QoS, traffic shaping |
| Reliability | Backup interface, VRRP/VRRPv3, VBRP, IPSLA, Track, BFD/BFDv6 |
| Management & Monitoring | SHELL, WEB, SNMP V1/V2/V3, Telnet, Rlogin, FTP, TFTP, support TR069, support IPFIX traffic monitoring function |

Extension Modules

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

Order Information

| Host model | Description |
|-----------------|---|
| NSR1900X-04-AC | One RJ45 console port, one Micro USB console port, 4*GE combo Ethernet interfaces fixed on the panel, four NRM2 slots, single AC power supply model |
| NSR1900X-04D-AC | One RJ45 console port, one Micro USB console port, 4*GE combo Ethernet interfaces fixed on the panel, four NRM2 slots, dual AC power supply model |

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Maipu Communication Technology Co., Ltd

Maipu Mansion, No.16, Jiuxing Avenue

Hi-Tech Zone

Chengdu, Sichuan Province

P. R. China

610041

Tel: (86) 28-65544850,

Fax: (86) 28-65544948,

URL: [http:// www.maipu.com](http://www.maipu.com)

Email: overseas@maipu.com

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