# NSR7300X-08 All-by-China Aggregation Router Datasheet

### **Overview**

The hardware of Maipu new-generation all-by-China router NSR7300X-08 adopts the domestic 16-core CPU, domestic Ethernet interface chip, and domestic high-speed memory. The software adopts Maipu all-by-China operation system. It realizes the all-by-China from the hardware to the software, and adopts the advanced architecture of separating control and forwarding, ensuring that the service data is not interrupted when switching the master. It supports redundant control, redundant power, redundant bootstrap program, and the card supports hot-swap.

The performance of NSR7300X-08 reaches the level of the same-grade commercial device in China. It can be applied in the party and government, finance, large and medium-sized enterprises, and other scenarios.



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### **Key Features**

#### • All-by-China, domestic core components

- Adopt the domestic 16-core CPU, domestic Ethernet interface chip, and domestic memory, making the network device realize the chip-class all-by-China and preventing that the foreign CPU has the potential threat of "backdoor".
- NSR all-by-China router successfully put forward the concurrent data forwarding plane software, adapting the SMP architecture of the domestic multi-core processor.
- The configuration file is completely encrypted, and the log file is encrypted strongly, controlling the hidden danger from the source.

#### • High reliability

- The control and forwarding planes are separated. The master switching and data forwarding have no lost packet. The device stability is high.
- Redundant master, redundant power; the card supports hot-swap.
- Redundant bootstrap program; during the upgrade, power failure occurs, and the device starts from the standby drive.
- ♦ BFD and FRR are optimized comprehensively; only need 3ms to detect when link failure occurs.

#### • Replacing the non-all-by-China device without perception

- ♦ The performance reaches the level of the same-grade non-all-by-China product at home and abroad.
- Support E1/CE1, 155M POS/CPOS, 622M POS, Gigabit Ethernet optical and electric ports, 10G optical port and so on, meeting the networking requirements of different scenarios.
- Inherit the unified command style of Maipu commercial router without changing the using and configuration habits of the user

# **Product Specifications**

Product Model	NSR7300X-08
Hardware specification	
Slots of master board	2
Slots of service module	8
SPU slots	1
Console port	1
Memory	4G
Flash	1Gb
MTBF	100,000 hours
Fan	1
Dimension (W×D×H)	440×436×176mm, the height is about 4U
Power consumption	≤250W
Power supply	Input voltage (AC): 100-240V, 50-60Hz
Temperature	Work temperature: 0°C-40°C Storage temperature: -20°C-50°C
Humidity	Work humidity: 10-90%, no-condensing Storage humidity: 5-95%, no-condensing
Software specification	
Link-layer protocol	Frame_Relay, HDLC, PPP, PPPoE, bridging, virtual Ethernet, QinQ, LACP
Routing protocol	Static route, RIP, RIPng, OSPFv2, OSPFv3, BGP, BGP4+, IS-IS, IS-ISv6, compatible EIGRP, IRMP
IPv4/IPv6	Support IPv4 and IPv6 dual protocol stack, support IPv4-to-IPv6 transition technology, including: IPv6 manual tunnel, 6to4 tunnel, GRE tunnel
Security	Support ACL security filtering, NAT, PPP encryption, L2TP, GRE, policy routing, AAA, SSH, IPSec VPN
MPLS	MPLS, LDP, L2VPN, L3VPN, MPLS TE, MPLS OAM
QoS	FIFO, PQ, FQ, WFQ, CBWFQ, LLQ, RSVP, CAR, HQoS, traffic shaping
Multicast	IGMP, MLD, PIM-SM/DM, PIM-SMv6, MSDP, MVPN multicast routing protocol

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## **Order Information**

Product Model	Description
NSR7300X-08-MF	NSR7300X-08-MF router host frame contains two control card slots, one business card slots, eight line card slots, one fan card slot, and two power module slots.
Fan	
FAN-4B-01	Modular fan, used by NSR7300X-08
Power supply	
AD250-1S005E-B	AC power supply, swappable power supply, input voltage 100- 240V, output voltage: 12V/42A, isolation, current sharing, 250W
Control card	
NRM3-MPU	One CON/AUX port, one management Ethernet port, one CMM interfaces, inbuilt flash, NSR7300X-08 control card.
Service engine	
NRM3-SPU05	NRM3-SPU05, router, NSR7300X-08 service processing card
NRM4 module	
NRM4-H-8GET	8-port Gigabit Ethernet electric interfaces
NRM4-H-8GEF	8-port Gigabit Ethernet optical interfaces
NRM4-H-1XGEF	One-port 10G interface card
NRM4-H-1POS-OC3	One-port 155M POS interface
NRM4-H-4POS-OC3	4-port 155M POS interface
NRM4-H-1POS-OC12	One-port 622M POS interface
NRM4-H-8E1	8-port non-channelized interface card
NRM4-H-8CE1	8-port channelized interface card
NRM4-H-1CPOS-OC3	One-port 155M CPOS interface
NRM4-H-2CPOS-OC3	2-port155M CPOS interface
Encryption module	
NRM4-H-SM1	SM1 encryption module
NRM4-H-SM4	SM4 encryption module

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