

NSR1800X-55 5G Access Router Datasheet

Overview

NSR1800X-55 access router developed by Maipu is one new-generation enterprise-class 5G access router, applicable to enterprise and government branch offices. It integrates various modern network technologies, such as routing, switching, QoS, security, and 5G to provide flexible access modes and secure and high-efficiency service experience for the users.

NSR1800X-55 access router supports rich WAN and LAN interfaces, providing the high-speed terminal access capability, and meeting the requirement of the user for integrating the routing and switch to construct the access network. NSR1800X-55 5G and Ethernet WAN ports both can serve as the master port. The master/standby switching supports the failover is based on the link status and peer track IP.

NSR1800X-55 access router supports 1*RJ45 console port, 1*USB interface, 1*10GE SFP+ WAN port, 2*GE SFP WAN ports, 2*GE RJ45 WAN ports, 8*GE RJ45 LAN ports, dual SIM slots and single 5G modem, 1*220V AC and 1*12V DC power input.



NSR1800X-55

- Fixed 10G WAN Port: 1*10GE SFP+
- Fixed 1G WAN Ports: 2*GE SFP and 2*GE RJ45
- Fixed LAN Ports: 8*GE RJ45
- 5G Modem: 1 (Compatible with 3G/4G)
- SIM Slots: 2
- 5G NR Band: n1/n28/n41/n77/n78/n79
- 4G LTE Band: B1/B2/B3/B5/B7/B8/B20/B28/B34/B38/B39/B40/B41
- 3G UMTS Band: B1/B5/B8
- Power Supply: 1*220V AC and 1*12V DC
- Dimension (L*D*H): 240mm*169mm*44.2mm

Key Features

Highlights	Benefits
High performance	<ul style="list-style-type: none">● Multi-core high performance processor.● 10G SFP+, 1G SFP and 1G RJ45 high-speed WAN ports.● 10/100/1000M Base-T high-speed LAN ports.
Reliable Hardware	<ul style="list-style-type: none">● Fanless and Fin heat dissipation design.● Metal shell and IP30 protection.
Flexible deployment	<ul style="list-style-type: none">● Support multiple WAN protocols: DDR, PPPoE, EDP, DHCP, Static, 4G/5G● Small Dimension, easy to install and deploy.● Support advanced protocols, such as BGP, MPLS, and VPLS.● IPv6 Ready, fully support IPv6 features.
High reliability	<ul style="list-style-type: none">● Provide multiple link backup to ensure connectivity.● Fault detection in milliseconds, and support auto roll back.
5G NR Access	<ul style="list-style-type: none">● In-built one 5G modems, easy for installation.● Fully compatible with 4G LTE network.
Easy O&M	Multiple management methods: standard SNMP monitoring and management, Web-based GUI, traditional command-line interface.
Service convergence	Integration of functions such as routing, switching, security, firewall, simplifying networking deployment.
Security	Built-in firewall features, Complete VPN access, ACL, NAT...
ZTP	Zero-Touch (USB, DHCP, EDP...), easy for installation and configuration.

Technical Specifications

Hardware specification	NSR1800X-55
CPU	4-Core ARM CPU
Memory	2G
Flash	8G
Fixed 10GE WAN Interface	1*10GE SFP+
Fixed GE WAN Interface	2*GE SFP and 2*GE RJ45
Fixed GE LAN Interface	8*GE RJ45
5G Modem	1
SIM Slots	2
Console Port/USB Port	1*Console and 1*USB
Antenna Interface	4*SMA 5G antennas
AC Power Supply	1*100-240V/50-60HZ AC
DC Power Supply	1*12V DC
IP Security Level	IP30
Working Temperature	0°C-50°C
Working Humidity	10%-90%/RH
Dimension (L*D*H)	145mm*100mm*38mm
Software features	
5G NR / 4G LTE	SIM Lock, SIM Switching, Band lock, Auto-recovery, multi-APN profile
WAN Protocol	DDR, NDIS, PPPoE, Bridge Group, EDP
LAN Protocol	MAC management, 802.1q VLAN, LACP, Loopback Detection, SPAN, LLDP, Port-isolate, Error-disable, Port Security
TCP/IP Protocol	DHCP, DNS, DDNS, NAT, NAT64, NAT66, NAT ALG, IPIP
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 v1/v2/v3, PIM-DM/PIM-SM, SSM, MVPN, NG MVPN, MSDP, MLD, IPv6 PIM, MBGP
VPN	IPSec, MPLS, VPLS, VPWS, 6PE, VRF, DVPN, VxLAN, GRE, L2TPv2, L2TPv3
MPLS	LDP, MPLS L2/L3 VPN, MPLS TE, IP FRR, LDP FRR, TE FRR
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, CWMF, CLI, SSH, HTTP/HTTPS, SNMP V1/V2/V3, Telnet, PING, Trace Route, Login, FTP, TFTP, SFTP, TR069, IP-SLA

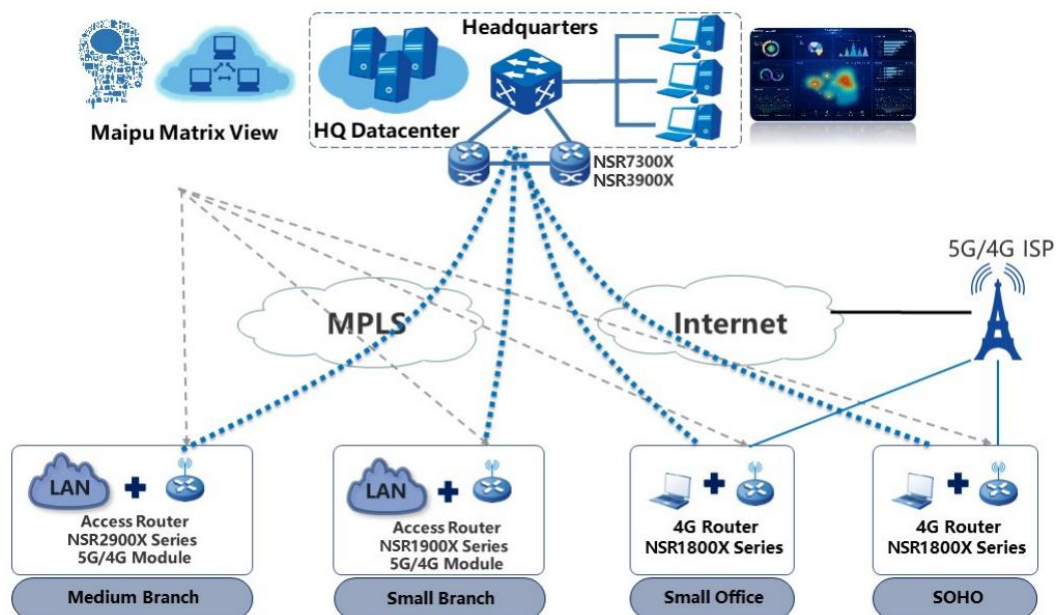
Order Information

Host model	Description
NSR1800X-55	V1 Version: NSR1800X 5G access router, 1*RJ45 console port, 1*USB interface, 1*10GE SFP+ WAN port, 2*GE SFP WAN ports, 2*GE RJ45 WAN ports, 8*GE RJ45 LAN ports, Dual SIM slots and single 5G modem, 1*220V AC and 1*12V DC power input. (Inbuilt standard 5G antennas)
Extension Antenna (Optional)	
ANTK-NQ5F-PS03	S1 Version: 5G Extension Antenna, 0.1 ~ 6GHz, Connector: SMA Male, Length:3.0m
ANTK-NQ5F-PS06	S1 Version: 5G Extension Antenna, 0.1 ~ 6GHz, Connector: SMA Male, Length:6.0m
ANTK-NQ5F-PS09	S1 Version: 5G Extension Antenna, 0.1 ~ 6GHz, Connector: SMA Male, Length:9.0m

Typical Application

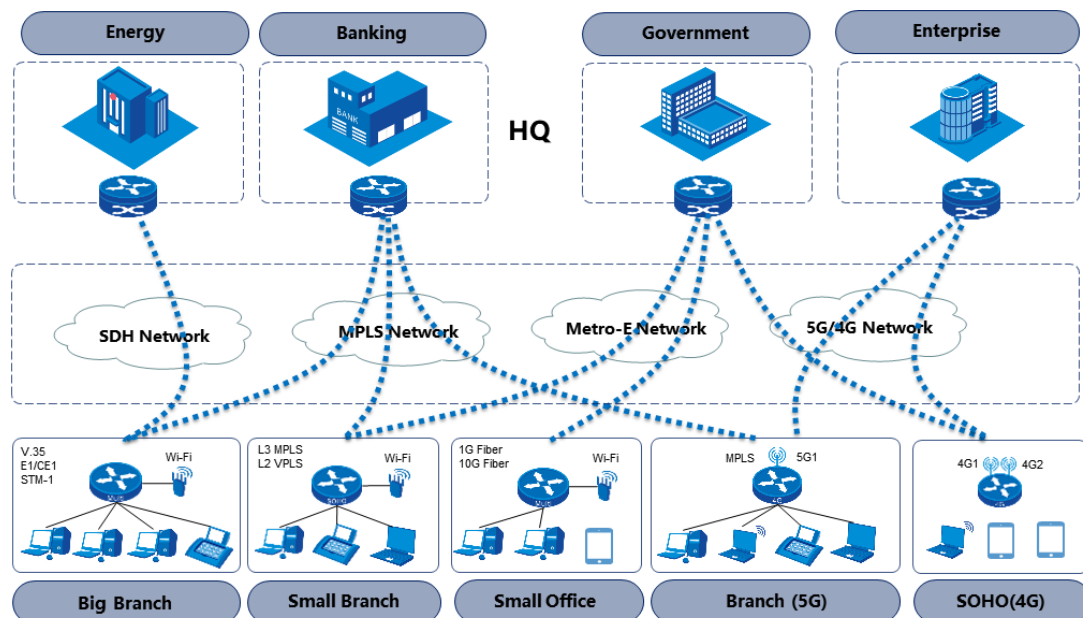
Enterprise WAN Solution

Maipu can provide total solution of enterprise WAN network, NSR1800X/1900X/2900X series access router is working at enterprise branch offices and supporting multiple physical links, such as MPLS links, Internet links, and 5G/4G mobile network links. NSR3900X/NSR7300X/NSR7500X series aggregation router is working at enterprise HQ. Maipu Matrix View is SNMP centralized managed platform.



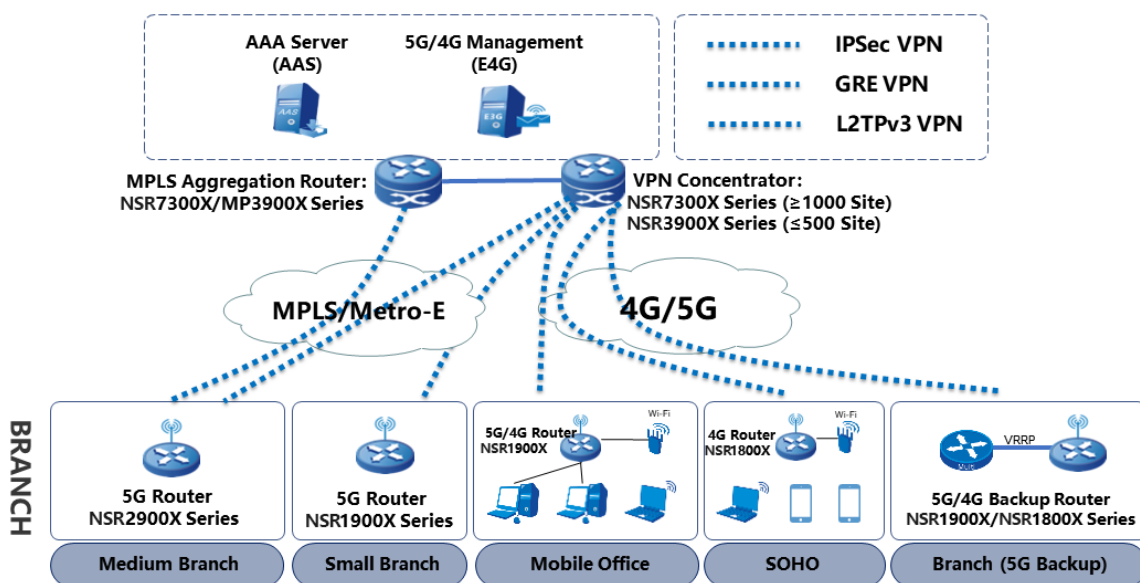
Telecom Managed Service

In this scenario, Maipu NSR1800X/1900X/2900X series routers are used as enterprise branches egresses and provide flexible WAN access, to support SDH, MPLS, Metro-E, and 5G/4G links, helping the customer reduce the OPEX, CAPEX and improve customer's network experience.



Enterprise VPN Solution

Maipu NSR1800X/1900X/2900X series provide various VPN access functions for communication between branches and headquarters over multiple physical links. Secure tunnels such as GRE, L2TP, IPSec, and DVPN tunnels can be set up between the HQ and branches for secure data access and transmission.



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