Huawei NetEngine AR6710 Series Enterprise Router Data Sheet

NetEngine AR6710 series enterprise routers are fixed-form-factor routers developed by Huawei for headquarters of enterprises as well as branches of enterprises to deliver high performance required by enterprise customers.

Overview

Huawei's next-generation NetEngine AR6710 series enterprise routers use high-performance multi-core processors and a non-blocking switching structure, helping to deliver higher forwarding performance than the industry average. The NetEngine AR6710 series consists of models such as NetEngine AR6710-L8T3TS1X2, NetEngine AR6710-L8T3TS1X2-T， NetEngine AR6710-L14T2X4， NetEngine AR6710-L26T2X4, NetEngine AR6710-L26T2X4-T, NetEngine AR6710-L50T2X4, NetEngine AR6710-L50T2X4-T and NetEngine AR6710-H4T4X2Y7 which can meet networking requirements of enterprises of different scales.

NetEngine AR6710-L8T3TS1X2 NetEngine AR6710-L8T3TS1X2-T	• Fixed WAN ports：2*GE Combo，1*10GE optical (All WAN ports can be configured as LAN) • Fixed LAN ports：1*GE Combo，8*GE electrical (All LAN ports can be configured as WAN) • Dimensions (H x W x D)：44.4mm × 442mm × 220.4mm
NetEngine AR6710-L14T2X4	• Fixed WAN ports：2*GE electrical，2*10GE optical (All WAN ports can be configured as LAN) • Fixed LAN ports：4*GE Combo，8*GE electrical (All LAN ports can be configured as WAN) • Dimensions (H x W x D)：43.9mm × 442mm × 420.0mm
NetEngine AR6710-L26T2X4 NetEngine AR6710-L26T2X4-T	• Fixed WAN ports: 2 x GE electrical, 2 x 10GE optical (All WAN ports can be configured as LAN) • Fixed LAN ports: 24 x GE electrical (All LAN ports can be configured as WAN) • Dimensions (H x W x D): 44.4 mm x 442.0 mm x 420.0 mm
NetEngine AR6710-L50T2X4 NetEngine AR6710-L50T2X4-T	• Fixed WAN ports: 2 x GE electrical, 2 x 10GE optical (All WAN ports can be configured as LAN) • Fixed LAN ports: 48 x GE electrical (All LAN ports can be configured as WAN) • Dimensions (H x W x D): 44.4 mm x 442.0 mm x 420.0 mm

NetEngine AR6710-H4T4X2Y7	• Fixed WAN ports： 2*25GE optical ， 4*10GE optical, 4*GE electrical (All WAN ports can be configured as LAN)
	• Dimensions (H x W x D)： 43.9mm ✕ 442mm ✕ 420.0mm

Note: 10GE optical ports of all models are compatible with GE optical ports, and 25GE optical ports are compatible with 10GE optical ports.

Features and Highlights

Features and Highlights of NetEngine AR6710

Service Requirement	Features and Highlights
High performance	• ARM multi-core processor and non-blocking switching architecture • Industry-leading performance, providing low latency required by key services
High reliability	• Link backup for enterprise services, improving reliability • Fault detection and locating within milliseconds, reducing service downtime
Easy O&M	• Multiple management modes such as management through iMaster NCE-WAN and SNMP, simplifying network deployment and reducing OPEX
SD-WAN	• Built-in SD-WAN solution, building cost-effective and business-friendly connections over the Internet • ZTP (Email-, USB-, DHCP-based and Registration Query Center deployment), minimizing skill requirements and provisioning devices in minutes • Application identification and link quality-based intelligent traffic steering, ensuring key application experience • Multi-link traffic steering and Dual-gateway sites flexible networking • End-to-end IPsec encryption, ensuring secure service transmission

Architecture Highlights of Huawei NetEngine AR6710

Highlight	Benefits
Multi-core processor	High-speed WAN connections and powerful routing and computing capabilities, improving L4-L7 service processing efficiency

Product Specifications

Specifications	NetEngine AR6710-L26T2X4 / NetEngine AR6710-L26T2X4-T	NetEngine AR6710-L50T2X4 / NetEngine AR6710-L50T2X4-T	NetEngine AR6710-L8T3TS1X2 / NetEngine AR6710-L8T3TS1X2-T	NetEngine AR6710-L14T2X4	NetEngine AR6710-H4T4X2Y7
System parameters					
Forwarding Performance (LAN - > WAN + WAN - > LAN, NAT + ACL + QoS, IMIX, Default)	2 Gbps	2 Gbps	2 Gbps	4 Gbps	13 Gbps
IPsec performance (IMIX)	1.6 Gbps	1.6 Gbps	1.6 Gbps	2.5 Gbps	10 Gbps
IPsec performance (1420 bytes)	5 Gbps	5 Gbps	5 Gbps	6.5 Gbps	28 Gbps
SD-WAN service performance[1] （IMIX）	1.2 Gbps	1.2 Gbps	1.2 Gbps	2.5 Gbps	8 Gbps
SD-WAN service performance[1] (1400 Bytes)	3 Gbps	3 Gbps	3 Gbps	8 Gbps	25 Gbps
Fixed WAN ports	2 x 10GE optical, 2 x GE electrical (All WAN ports can be configured as LAN)		1 x 10GE optical, 2 x GE Combo (All WAN ports can be configured as LAN)	2 x 10GE optical, 2 x GE electrical (All WAN ports can be configured as LAN)	2 x 25GE optical, 4 x 10GE optical, 4 x GE electrical (All WAN ports can be configured as LAN)
Fixed LAN ports	24 x GE electrical (All LAN ports can be configured as WAN)	48 x GE electrical (All LAN ports can be configured as WAN)	1 x GE Combo，8 x GE electrical (All LAN ports can be configured as WAN)	4 x GE Combo，8 x GE electrical (All LAN ports can be configured as WAN)	
SIC slots	4		2	4	6
WSIC slots (default/maximum[2])	0/2		0/1	0/2	1/4
Auxiliary or console port	1 x RJ45 console port				
USB port	1 x USB		2 x USB	1 x USB	1 x USB
Memory	4 GB		4 GB	4 GB	8 GB
Flash	2 GB		2 GB	2 GB	8 GB
TPM	Only NetEngine AR6710-L26T2X4-T Supported	Only NetEngine AR6710-L50T2X4-T Supported	Only NetEngine AR6710-L8T3TS1X2-T Supported	Not Support	Not Support
Hot swapping	Supported				
Dimensions and Weight					

Specifications	NetEngine AR6710-L26T2X4 NetEngine AR6710-L26T2X4-T	NetEngine AR6710-L50T2X4 NetEngine AR6710-L50T2X4-T	NetEngine AR6710-L8T3TS1X2 NetEngine AR6710-L8T3TS1X2-T	NetEngine AR6710-L14T2X4	NetEngine AR6710-H4T4X2Y7
Dimensions without mounting brackets (H x W x D)	44.4 mm x 442.0 mm x 420.0 mm		44.4mm × 442.0mm × 220.4mm	43.9mm × 442mm × 420.0mm	43.9mm × 442mm × 420.0mm
Dimensions with mounting brackets (H x W x D)	44.4 mm x 442.0 mm x 470.0 mm		44.4mm × 442.0mm × 225.2mm	43.9mm × 442mm × 420.0mm	43.9mm × 442mm × 420.0mm
Packaging dimensions (H x W x D)	175.0 mm x 550.0 mm x 650.0 mm		390.0mm × 570.0mm × 390.0mm	175.0 mm x 550.0 mm x 650.0 mm	175.0 mm x 550.0 mm x 650.0 mm
Rack	IEC		IEC	IEC	IEC
Occupied rack space	1U		1U	1U	1U
Power specifications, power consumption, and heat dissipation					
Rated input voltage (AC)	100 V to 240 V		100 V to 240 V	100 V to 240 V	100 V to 240 V
Rated input frequency (AC)	50 Hz/60 Hz		50 Hz/60 Hz	50 Hz/60 Hz	50 Hz/60 Hz
Maximum input voltage (AC)	90 V to 264 V		90 V to 264 V	90 V to 264 V	90 V to 264 V
Maximum input current (AC)	5.5 A		2 A	5.5 A	5 A
Power supply redundancy	Dual power modules, hot swap		NA	Dual power modules, not hot swap	Dual power modules, hot swap
Fan modules	Built-in unpluggable fan modules		Built-in unpluggable fan modules	Built-in unpluggable fan modules	Dual fan modules, hot swap
Airflow	Left to right		Left to right	Left to right	Left and front to rear
Noise	57.2dB	57.6dB	49.6dB	57.2dB	66.1dB
Environmental specifications					
Operating temperature	0°C to 45°C				
Operating humidity	5% to 95% (non-condensing)				
Operating altitude	< 5000 m				
Storage temperature	–40°C to + 70°C				
Storage altitude	< 5000 m				

1: The SD-WAN performance model is EVPN + IPsec + QoS, with the performance data being the sum of bidirectional flows.

2: The maximum number of slots includes the number of combined slots.

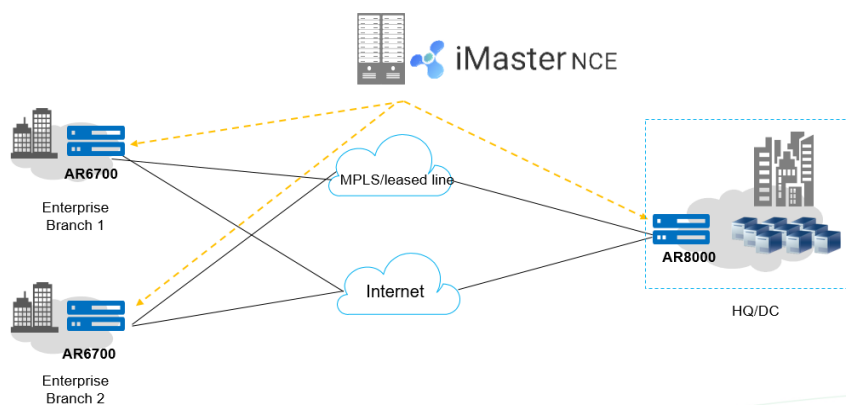| Item	NetEngine AR6710 Series
Basic function	DHCP server/client/relay, NAT and sub-interface management
LAN	IEEE 802.1P, IEEE 802.1Q, IEEE 802.3, VLAN management, MAC management, STP/RSTP/MSTP
IPv4 unicast routing	Routing policies, static routes, RIP, OSPF, IS-IS, BGP, IP FRR
IPv6 unicast routing	Static routes, routing policies, RIPng, OSPFv3, IS-ISv6, BGP4+
Basic IPv6 function	IPv6 ND, IPv6 PMTU, IPv6 FIB, IPv6 ACL, ICMPv6, DNSv6, DHCPv6
Tunneling	GRE tunnel, Eth over GRE, NAT STUN, IPsec, IPv6 Transition Technology
VPN	GRE VPN, SD-WAN EVPN, SRv6
WAN optimization	A-FEC, Data Redundancy Elimination (DRE)
Multicast	IGMP V1/V2/V3, PIM SM, PIM DM, MSDP
MPLS	LDP, MPLS L3 VPN, Dynamic LSP, IP FRR, LDP FRR, MPLS 6VPE, MPLS 6PE
QoS	Priority mapping, traffic policing (CAR), traffic shaping, congestion avoidance, congestion management, MQC (traffic classifier, traffic behavior, and traffic policy), hierarchical QoS, Smart Application Control (SAC), SPR, SaaS route selection
Security	ACL (v4/v6), NGFW, AAA authentication, RADIUS authentication, HWTACACS authentication, NAC, PKI, broadcast storm suppression, ARP security, ICMP attack defense, URPF, CPCAR, attack source tracing, AV, IPS, URL filtering
Management and maintenance	Upgrade management, device management, GTL, SNMP (v1/v2c/v3), RMON, NTP, Auto-Config, USB-based/DHCP deployment, email deployment, NETCONF/YANG, CLI, TCP FPM, NQA, iFIT, NetStream

Safety and Regulatory Standards

Item	NetEngine AR6710 Series
EMC standards compliance	•CISPR32 Class A •EN 55032 Class A •CISPR24 •EN 55024 •ETSI EN 300 386 •AS/NZS CISPR32 Class A •FCC Part 15 Subpart B Class A •ICES 003 Class A •IEC 61000-3-2 •EN 61000-3-2 •IEC 61000-3-3 •EN 61000-3-3 •GB 9254 •VCCI-CISPR32 Class A

Item	NetEngine AR6710 Series
Environmental standards compliance	•RoHS •REACH •WEEE
Security standards compliance	•IEC 60950-1 •EN 60950-1 •UL 60950-1 •CSA C22.2 No 60950-1 •GB 4943.1

Application Scenarios

In the SD-WAN solution, the AR6710 functions as the gateway of the enterprise headquarters or branch and supports extensive physical links, such as MPLS and Internet links. iMaster NCE-WAN provides visualized management for the AR6710. The AR6710 integrates a wide range of SD-WAN features such as intelligent application identification and intelligent traffic steering, delivering better service experience to enterprises. For details about Huawei SD-WAN Solution, visit https://e.huawei.com/eu/solutions/enterprise-network/campus-network/sd-wan.

SD-WAN networking

Ordering Information

The configuration of the NetEngine AR6710 series includes host selection and software configuration.

- Host

Select the device model according to the uplink interface type and service requirements.

- Software

The basic software and licensed software are available. The basic software provides basic functions, such as routing, switching, voice, and security. The licensed software provides additional functions, such as AC.

Host	Ordering Information
NetEngine AR6710-L8T3TS1X2	AR6710-L8T3TS1X2, 2*GE combo WAN, 1*10GE(SFP+) WAN, 8*GE LAN, 1*GE combo LAN, 2*USB 2.0, 2*SIC
NetEngine AR6710-L8T3TS1X2-T	AR6710-L8T3TS1X2-T, 2*GE combo WAN, 1*10GE(SFP+) WAN, 8*GE LAN, 1*GE combo LAN, 2*USB 2.0, 2*SIC
NetEngine AR6710-L14T2X4	AR6710-L14T2X4, 2*10GE SFP+ WAN,2*GE Copper WAN,4*GE Combo LAN,8*GE Copper LAN,1*USB2.0
NetEngine AR6710-L26T2X4	AR6710-L26T2X4, 2*10GE(SFP+), 26*GE Copper,1*USB3.0,4*SIC
NetEngine AR6710-L26T2X4-T	AR6710-L26T2X4-T, 2*10GE(SFP+), 26*GE Copper,1*USB3.0,4*SIC
NetEngine AR6710-L50T2X4	AR6710-L50T2X4, 2*10GE(SFP+), 50*GE Copper,1*USB3.0,4*SIC
NetEngine AR6710-L50T2X4-T	AR6710-L50T2X4-T, 2*10GE(SFP+), 50*GE Copper,1*USB3.0,4*SIC
NetEngine AR6710-H4T4X2Y7	Assembling Components, AR6710-H4T4X2Y7 assembly chassis
SRU-700S	AR6710-H4T4X2Y7 Service and Router Unit (SRU-700S), 2*25GE SFP28, 4*10GE SFP+, 4*GE RJ45, 1*USB3.0

Power supply unit	Ordering Information
PAC180S12-CN	180W AC Power Module
PAC350S12-CR	350W AC Power Module
PAC300S12-CL	AC-DC Power, -40degC,65degC,90V,290V,12V/25A
PDC260S12-CL	DC PSU, PDC260S12-CL,260W DC Power Module

License	Ordering Information
N1-AR67-L-F	N1 AR6700-L CloudCampus Foundation (include SD-WAN)
N1-AR67-L-A	N1 AR6700-L CloudCampus Advanced (include SD-WAN)
N1-AR67-L-FToA	N1 AR6700-L CloudCampus Upgrade Foundation to Advanced (include SD-WAN)
N1-AR67-L-SRv6	N1 AR6700-L CloudCampus Add-On, SRv6
N1-AR67-L-APP	N1 AR6700-L CloudCampus Add-On, Intelligent Application Analysis

N1-AR67-L-E-IFIT	N1 AR6700-L CloudCampus Add-On, Enhance IFIT
LAR0TP1301	Threat Protection Service Subscribe 1 Year (Applies to AR6700)
LAR0TP1302	Threat Protection Service Subscribe 2 Year (Applies to AR6700)
LAR0TP1303	Threat Protection Service Subscribe 3 Year (Applies to AR6700)
LAR0TP1304	Threat Protection Service Subscribe 4 Year (Applies to AR6700)
LAR0TP1305	Threat Protection Service Subscribe 5 Year (Applies to AR6700)
AR67-L-LIC-Basic-IFIT	AR6700-L Value-added Basic IFIT Package
AR67-L-LIC-Enhance-IFIT	AR6700-L Value-added Enhanced IFIT Package
AR67-L-LIC-Enh-WANOP	AR6700-L Value-added Enhanced WAN-Optimize Package

More Information

For more information, visit https://e.huawei.com/en/ or contact us in the following ways:

- Global service hotline: http://e.huawei.com/en/service-hotline
- Logging in to the Huawei Enterprise technical support website: http://support.huawei.com/enterprise/
- Sending an email to the customer service mailbox: support_e@huawei.com

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