Huawei NetEngine AR700 Series Enterprise Router

High performance
- ARM-based multi-core processors and non-blocking switching architecture
- Twice the industry average performance, ensuring a low latency for key services

High reliability
- Hot swapping of cards, ensuring service continuity and stability
- Link backup for enterprise services, enhancing service access reliability
- Fault detection and determination in milliseconds, minimizing the service interruption time

Service convergence
- Integration of functions such as routing, switching, VPN, security, and WLAN, enabling diversified enterprise services, saving space, and reducing TCO

Security
- Built-in firewall, IPS, URL filtering, and multiple VPN technologies, providing comprehensive security protection capabilities

Ethernet line
Poe line

Router
NetEngine AR700

Core switch
CloudEngine S310

Access switch
eKitEngine S110
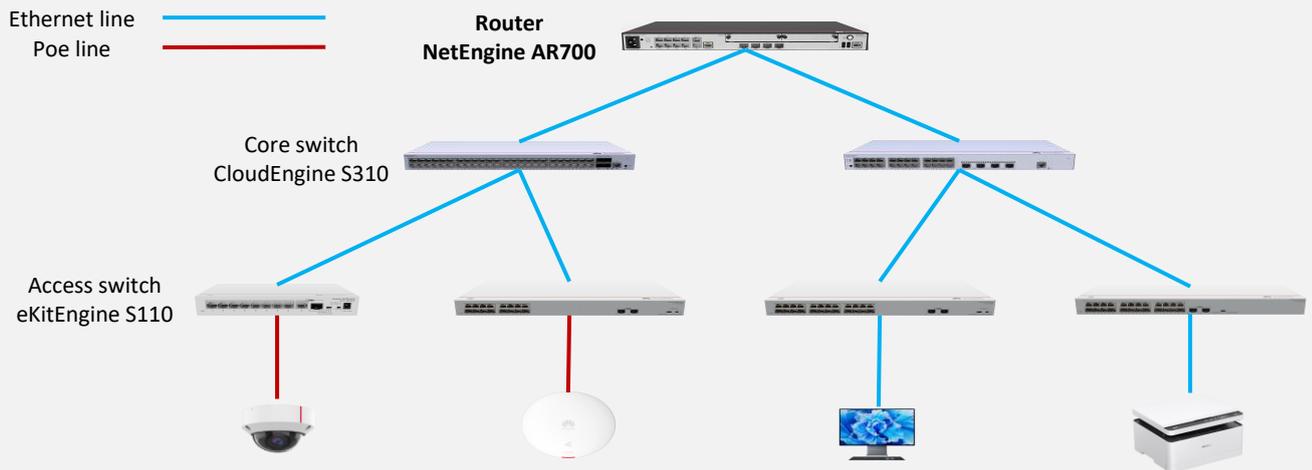
Huawei NetEngine AR700 series routers are next-generation high-performance routers. They use ARM-based multi-core processors and a non-blocking switching architecture, providing twice the industry average performance. Additionally, they integrate diverse functions such as 5G, routing, switching, VPN, security, and MPLS, enabling diversified enterprise services in the cloud era.

Features and Benefits

Architecture Highlights of Huawei NetEngine AR700 Series Routers

Architecture	Benefits
Multi-core processor	High-performance multi-core processor, supporting high-speed WAN connections, providing powerful route computing capabilities, and improving L4–L7 service processing efficiency
Non-blocking switching architecture	Maximum bus bandwidth of a single slot: 10 Gbit/s, eliminating service forwarding bottlenecks
Extensive network ports	• Hot swappable • Diverse flexible LAN, WAN, and LTE interface cards

Product Specifications

Specification	NetEngine AR720	NetEngine AR730
Processor	ARM64 4-core	ARM64 4-core
Forwarding performance	9 Mpps to 25 Mpps	9 Mpps to 25 Mpps
Number of connected terminals	700	1200
Outbound bandwidth	4 Gbit/s	6 Gbit/s
Fixed WAN ports	2*GE combo ports	2 x GE combo ports, 1 x 10GE optical port (compatible with GE optical)
Fixed LAN ports	8 x GE electrical ports (can be switched to WAN ports)	1*GE combo port, 8 x GE electrical ports (can be switched to WAN ports)
SIC slots	2	2
WSIC slot (default/maximum**)	0/1	0/1
Serial auxiliary or console port	1 x RJ45 console serial port	1 x RJ45 console serial port
USB ports	2 x USB ports	2 x USB ports
Memory	4 GB	4 GB
Flash***	1 GB	1 GB
Hot swapping	Supported	Supported
Dimensions excluding the parts protruding from the body (H x W x D)	44.4 mm x 442.0 mm x 220.4 mm	44.4 mm x 442.0 mm x 220.4 mm
Dimensions with the parts protruding from the body (H x W x D)	44.4 mm x 442.0 mm x 225.2 mm	44.4 mm x 442.0 mm x 225.2 mm
Dimensions of the packing box (H x W x D)	90 mm x 570 mm x 390 mm	90 mm x 570 mm x 390 mm
Weight (unconfigured)	3.2 kg	3.2 kg
Rack installation	IEC	IEC

Specification	NetEngine AR720	NetEngine AR730
Required space in a rack	1 U	1 U
Rated input voltage (AC)	100 V to 240 V	100 V to 240 V
Rated input frequency (AC)	50 Hz/60 Hz	50 Hz/60 Hz
Maximum input voltage (AC)	90 V to 264 V	90 V to 264 V
Maximum input current (AC)	2 A	2 A
Maximum output power (AC)	70 W	70 W
Maximum power consumption	33 W	33 W
Fan module	Built-in unpluggable fan module	Built-in unpluggable fan module
Airflow	Left to right	Left to right
Noise	52.3 dB	52.3dB
Operating temperature	0°C to 45°C	0°C to 45°C
Operating humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Operating altitude	< 5000 m	< 5000 m
Storage temperature	−40°C to +70°C	−40°C to +70°C
Storage altitude	< 5000 m	< 5000 m

**The maximum number of slots includes the number of combined slots.

***Although the flash memory is 1 GB, but the size that customers can use is 512 MB.

Software Features and Protocols

Specification	NetEngine AR700 series
Basic functions	DHCP server/client/relay, PPPoE server/client, NAT, and sub-interface management
LAN	IEEE 802.1p, IEEE 802.1Q, IEEE 802.3, VLAN management, VLAN aggregation, MAC address management, STP, etc.
WLAN (AC)	AP management (AC discovery, AP access, and AP management), CAPWAP protocol, WLAN user management, WLAN radio management (802.11a/b/g/n/ac), WLAN QoS (WMM), and WLAN security (WEP/WPA/WPA2/key management)
IPv4 unicast routing	Routing policy, static route, RIP, OSPF, IS-IS, and BGP
IPv6 unicast routing	Static route, routing policy, RIPng, OSPFv3, IS-ISv6, and BGP4+
Basic IPv6 functions	IPv6 ND, IPv6 PMTU, IPv6 FIB, IPv6 ACL, ICMPv6, DNSv6, and DHCPv6
IPv6 tunneling	Manual tunnel, automatic tunnel, GRE tunnel, 6over4 tunnel, 6to4 tunnel, and ISATAP
Multicast	IGMPv1, IGMPv2, IGMPv3, PIM SM, PIM DM, MSDP, MBGP, IPv6 PIM, and MLD
MPLS	LDP, MPLS L3 VPN, VLL, PWE3, static LSP, dynamic LSP, MPLS TE, IP FRR, LDP FRR, and TE FRR

Specification	NetEngine AR700 series
VPN	IPSec VPN, GRE VPN, DSVPN, A2A VPN, L2TP VPN, and L2TPv3 VPN
QoS	DiffServ mode, MPLS QoS, priority mapping, traffic policing (CAR), traffic shaping, congestion avoidance, congestion management, HQoS, MQC (traffic classifier, traffic behavior, and traffic policy), hierarchical QoS, and smart application control (SAC)
WAN optimization	Multi-fed and selective receiving, per-packet load balancing
Security	ACLv4/v6, domain-based stateful firewall, 802.1X authentication, MAC address authentication, Portal authentication, AAA, RADIUS, HWTACACS, PKI, broadcast storm suppression, ARP security, ICMP attack defense, URPF, CPCAR, blacklist, attack source tracing, online behavior management, IPS, and URL filtering
Management and maintenance	Upgrade management, device management, web system, GTL, SNMP (v1/v2c/v3), RMON, NTP, CWMP, Auto-Config, email/USB/DHCP-based deployment, NETCONF/YANG, CLI, NetStream, TWAMP, IP FPM, TCP FPM, IP accounting, and NQA

Safety and Regulatory Standards

Specification	NetEngine AR700 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
Environmental standards	• RoHS • REACH • WEEE
Safety standards	• IEC 60950-1 • EN 60950-1 • UL 60950-1 • CSA C22.2 No 60950-1 • GB 4943.1

More Information

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

- Global service hotline: https://e.huawei.com/en/service-hotline-query

- Logging in to the Huawei Enterprise technical support website: https://support.huawei.com/enterprise/en/index.html

- Sending an email to the customer service mailbox: Support_e@huawei.com

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