Huawei NetEngine AR5710-S Series Enterprise Router Data Sheet

NetEngine AR5710-S series enterprise routers are fixed routers designed by Huawei for small and medium-sized enterprise branches. These routers offer a wide range of service features such as SD-WAN, routing, switching, WLAN and security, and come equipped with various interface types such as Ethernet, Wi-Fi 7, LTE/5G, E1, POS, and GPON/xGSPON, which allows them to deliver high performance and diversified services to meet the needs of different enterprises.

Product Overview

Huawei next-generation NetEngine AR5710-S series enterprise routers are fitted with ARM multi-core processors and a non-blocking switching structure, delivering superior performance particularly when dealing with diverse and cloud-based services.

Huawei NetEngine AR5710-S series enterprise routers are ideal for small and mid-sized enterprise branches and can be deployed at the network egress as needed. This series consists of models such as AR5710-S8T2S, AR5710-S8T2X, AR5710-S8P2X, AR5710-S8T2X-LTE4EA, AR5710-S10T1X2, AR5710-S8T2XE, AR5710-S8T2XE-LTE4EA-T, AR5710-S28T2S2XE4, AR5710-S52T2XE4, AR5710-S8T2XE-NRGL, AR5710-S8P2XE-NRGL, AR5710-S8T1XWE, AR5710-S8T1XWE-NRGL, AR5710-S8TWDSE-LTE4EA, AR5710-S8P1XDSE-2LTE4EA, which can meet networking requirements of enterprises of different scales. In addition, they offer a variety of interface cards*, such as 5G, E1, and POS, to help extend enterprise services.

- **Rich access capability**: Ethernet, LTE(Built-in LTE)/5G (5G service line cards, built-in 5G and 5G RUs), Wi-Fi 7, E1, POS, GPON/xGSPON, and 90 W PoE++
- **High-quality SD-WAN**: fast ZTP, all-scenario networking architecture, application quality-based intelligent traffic steering, and WAN optimization, helping deliver ultimate service experience
- **Superior performance**: 2.5G electrical ports and bandwidth acceleration on the live network; high-speed access of 5G RUs, built-in 5G All-in-one gateway and service cards; Wi-Fi 7 with a maximum air interface rate at 3.57 Gbps (690 Mbps @ 2.4 GHz, 2.88 Gbps @ 5 GHz); built-in WAC capable of unified management of Wi-Fi 5/6/7 devices; seamless roaming between the AR itself and its connected APs
- **AI**: bandwidth planning, network orchestration, policy recommendation, in-band flow measurement, and automatic fault locating
- **Security protection**: integrates NGFW capabilities, offering multi-dimensional security policies, ASPF, application recognition and control, IPS**, URL filtering**, Antivirus**, signature database and antivirus database update**, and interconnection with third-party SSE security clouds.
- **Reliability**: carrier-class hardware reliability, network-level high reliability, and fast service fault recovery
- **Easy O&M and management**: single-site ZTP within 10 minutes, batch site replication, SD-Branch LAN/WAN converged management, 5G RU and switch RU plug-and-play, digital map, visualized application quality and

bandwidth, rights- and domain-based management, diversified alarm and log management methods, and report generation

*: Supported only by the AR5710-S10/S28/S52 models.

**: Supported only by the AR5710-SE series routers with 4 GB memory.

 NetEngine AR5710-S8T2S	• Fixed WAN ports*: 2 x GE SFP • Fixed LAN ports*: 8 x GE electrical • Memory: 2 GB • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)
 NetEngine AR5710-S8T2X***	• Fixed WAN ports*: 2 x 10GE SFP+/2.5GE electrical combo • Fixed LAN ports*: 4 x GE electrical, 4 x GE combo • Memory: 2 GB • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)
 NetEngine AR5710-S8P2X***	• Fixed WAN ports*: 2 x 10GE SFP+/2.5GE electrical combo • Fixed LAN ports*: 4 x GE electrical (4 x PoE++), 4 x GE combo • Memory: 2 GB • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)
 NetEngine AR5710-S8T2X-LTE4EA***	• Fixed WAN ports*: 2 x 10GE SFP+/2.5GE electrical combo, 1 x LTE4EA • Fixed LAN ports*: 4 x GE electrical, 4 x GE combo • Memory: 2 GB • 2 x SIM cards (active/standby) • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)
 NetEngine AR5710-S10T1X2***	• Fixed WAN ports*: 1 x 10GE SFP+/2.5GE electrical combo, 2 x GE electrical • Fixed LAN ports*: 4 x GE electrical, 4 x GE combo • 2 x SIC Card, support 5G, POS, E1 service line card • Memory: 2 GB • Dimensions (H x W x D)**: 43.6 mm x 442 mm x 220 mm • One built-in power module (AC)
	• Fixed WAN ports*: 2 x 10GE SFP+/2.5GE electrical combo • Fixed LAN ports*: 4 x GE electrical, 4 x GE combo • Memory: 4 GB

NetEngine AR5710-S8T2XE***	• Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)
 NetEngine AR5710-S8T2XE-LTE4EA-T***	• Fixed WAN ports*: 2 x 10GE SFP+/2.5GE electrical combo, 1 x LTE4EA • Fixed LAN ports*: 4 x GE electrical, 4 x GE combo • Memory: 4 GB • 2 x SIM cards(active/standby) • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC) • TPM
 NetEngine AR5710-S28T2S2XE4	• Fixed WAN ports*: 2 x 10GE SFP+, 2 x GE optical, 2 x GE electrical • Fixed LAN ports*: 24 x GE electrical • 4 x SIC Card, support 5G, POS, E1 service line card • Memory: 4 GB • Dimensions (H x W x D)**: 43.6 mm x 442 mm x 420 mm • Built-in dual power modules (AC)
 NetEngine AR5710-S52T2XE4	• Fixed WAN ports*: 2 x 10GE SFP+, 2 x GE optical, 2 x GE electrical • Fixed LAN ports*: 48 x GE electrical • 4 x SIC Card, support 5G, POS, E1 service line card • Memory**: 4 GB • Dimensions (H x W x D)**: 43.6 mm x 442 mm x 420 mm • Built-in dual power modules (AC)
 NetEngine AR5710-S8T2XE-NRGL***	• Fixed WAN ports*: 2 x 10GE SFP+/2.5GE electrical combo, 5G SA/NSA • Fixed LAN ports*: 8 x GE electrical • Memory: 4 GB • 2 x SIM cards (active/standby) • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)
 NetEngine AR5710-S8P2XE-NRGL***	• Fixed WAN ports*: 2 x 10GE SFP+/2.5GE electrical combo, 5G SA/NSA • Fixed LAN ports*: 8 x GE electrical LAN (4 x PoE++) • Memory: 4 GB • 2 x SIM cards (active/standby) • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)
	• Fixed WAN ports*: 1 x 10GE SFP+/2.5GE electrical combo

 NetEngine AR5710-S8T1XWE***	• Fixed LAN ports*: 8 x GE electrical • Wi-Fi 7: 802.11 a/b/g/n/ac/ax/be (2.4G + 5G) • Memory: 4 GB • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)
 NetEngine AR5710-S8T1XWE-NRGL***	• Fixed WAN ports*: 1 x 10GE SFP+/2.5GE electrical combo, 5G SA/NSA • Fixed LAN ports*: 8 x GE electrical • Wi-Fi 7: 802.11 a/b/g/n/ac/ax/be (2.4G + 5G) • Memory: 4 GB • 2 x SIM cards (active/standby) • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)
 NetEngine AR5710-S8TWDSE-LTE4EA***	• Fixed WAN ports*: 2 x GE combo, 1 x LTE4EA, 1 x VDSL2 • Fixed LAN ports*: 6 x GE electrical • Wi-Fi 7: 802.11 a/b/g/n/ac/ax/be (2.4G + 5G) • Memory: 4 GB • 2 x SIM cards (active/standby) • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)
 NetEngine AR5710-S8P1XDSE-2LTE4EA***	• Fixed WAN ports*: 1 x 10GE SFP+, 1 x GE combo, 2 x LTE4EA, 1 x VDSL2 • Fixed LAN ports*: 7 x GE electrical (4 x PoE+, 2 x PoE++) • Memory: 4 GB • 4 x SIM cards (Dual LTE modules with QS-DADS) • Dimensions (H x W x D)**: 43.6 mm x 321 mm x 210 mm • One built-in power module (AC)

*: Supported by all models: All fixed ports are LAN/WAN interchangeable.

**: Dimensions without packaging (H x W x D), Basic dimensions (excluding the parts protruding from the body)

***: In the SD-WAN scenario, a MultiGE interface on the device of this model goes online at the rate of 2.5 Gbps. The interface cannot be deployed in ZTP mode at the rate of 10 Gbps, and cannot be switched to a 10GE interface online

Features and Highlights

Features and Highlights of NetEngine AR5710-S

Service Requirement	Features and Highlights
High performance	• Integrates the ARM multi-core processor, LSW switching chip, and hardware encryption/decryption engine, based on the self-developed SOC chip architecture. • Offers industry-leading performance, ensuring a low latency for mission-critical services.
High reliability	• Provides backup links for enterprise services, enhancing service access reliability. • Detects link faults and completes route convergence in milliseconds, greatly shortening the service interruption time.
Easy O&M	• Supports on-premises and cloud-based management by iMaster NCE-Campus using various protocols, such as NETCONF and SNMP, and high-performance data collection through telemetry. These help simplify network deployment, visualize O&M, and reduce OPEX.
SD-WAN	• Is ideal for the SD-WAN solution to build cost-effective and business-friendly connections over the Internet. • Supports application identification and link quality-based intelligent traffic steering, guaranteeing the experience of key applications. • Supports multi-link routing; end-to-end IPsec encryption plus reliable devices, ensuring secure service transmission.
Multi-core processor	• Comes equipped with a high-performance multi-core processor that supports high-speed WAN connections and powerful route computing, improving L4–L7 service processing efficiency.
Architecture innovation	• Built-in Wi-Fi 7 + WAC, unified management of Wi-Fi 5/6/7 devices, seamless roaming between the AR itself and its connected APs. • PoE extension: The PoE output is not limited when the local power supply is used, but the maximum power is limited when the AR5710-S supplies power through PoE. • On-demand LAN port extension: The network structure is simplified from three layers to two layers. Switch RUs can be managed as logical ports of ARs on iMaster NCE or through the CLI. • 5G RU: 5G RUs are managed by the AR as cellular interfaces, and can be monitored and managed on iMaster NCE.

Product Specifications

Features and Values of Huawei NetEngine AR5710-S Series

Specifications	NetEngine AR5710-S8T2S	NetEngine AR5710-S8T2X	NetEngine AR5710-S8P2X	NetEngine AR5710-S8T2X-LTE4EA	NetEngine AR5710-S10T1X2
Forwarding performance (NAT + ACL + QoS, IMIX)	1.3 Gbps	1.3 Gbps	1.3 Gbps	1.3 Gbps	1.3 Gbps
IPsec performance (IMIX)	800 Mbps	800 Mbps	800 Mbps	800 Mbps	800 Mbps
SD-WAN IPsec performance* (IMIX)	1 Gbps	1 Gbps	1 Gbps	1 Gbps	1 Gbps
SD-WAN IPsec performance*(1400 bytes)	2.5 Gbps	2.5 Gbps	2.5 Gbps	2.5 Gbps	2.5 Gbps
SD-WAN service performance** (IMIX)	800 Mbps	800 Mbps	800 Mbps	800 Mbps	800 Mbps
SD-WAN service performance** (1400 bytes)	2 Gbps	2 Gbps	2 Gbps	2 Gbps	2 Gbps
SD-WAN typical performance*** (IMIX)	620 Mbps	620 Mbps	620 Mbps	620 Mbps	620 Mbps
SD-WAN typical performance*** (1400 bytes)	1.8 Gbps	1.8 Gbps	1.8 Gbps	1.8 Gbps	1.8 Gbps
Fixed WAN ports****	2 x GE SFP	2 x 10GE SFP+/2.5GE electrical combo			1 x 10GE SFP+/2.5GE electrical combo, 2 x GE electrical
Built-in LTE	-	-	-	LTE4EA, 2 x SIM cards (active/standby)	-
5G RU	Supported				
Fixed LAN ports****	8 x GE electrical	4 x GE electrical, 4 x GE combo			
Switch RU	Supported				

Specifications	NetEngine AR5710-S8T2S	NetEngine AR5710-S8T2X	NetEngine AR5710-S8P2X	NetEngine AR5710-S8T2X-LTE4EA	NetEngine AR5710-S10T1X2
WAC(Number of managed APs, default/maximum*****)	16/32				
PoE	-	-	Maximum total power: 130 W; up to 4 ports powered PoE, PoE+, and PoE++ auto-negotiation: •PoE: 15.4 W per port (up to 4 ports) •PoE+: 30 W per port (up to 4 ports) •PoE++: 60 W per port (up to 2 ports) or 90 W (up to 1 port)	-	-
SIC slot	-	-	-	-	2 x SIC
Auxiliary or console port	1 x RJ45 console port	1 x RJ45 console port	1 x RJ45 console port	1 x RJ45 console port	1 x RJ45 console port
USB port	1 x USB 2.0	1 x USB 2.0	1 x USB 2.0	1 x USB 2.0	1 x USB 2.0
Memory	2 GB	2 GB	2 GB	2 GB	2 GB
Dimensions without packaging (H x W x D)	43.6 mm x 321 mm x 210 mm	43.6 mm x 321 mm x 210 mm	43.6 mm x 321 mm x 210 mm	43.6 mm x 321 mm x 210 mm	43.6 mm x 442 mm x 220 mm
Dimensions with packaging (H x W x D)	90 mm x 465 mm x 360 mm	90 mm x 465 mm x 360 mm	90 mm x 465 mm x 360 mm	90 mm x 465 mm x 360 mm	90 mm x 550 mm x 355 mm
Weight without packaging	1.79 kg	1.902 kg	2.402 kg	1.978 kg	3.18 kg
Installation type	Rack, work bench				
Chassis height [U]	1U				
Rated input voltage (V)	100 V to 240 V, 50 Hz/60 Hz				

Specifications	NetEngine AR5710-S8T2S	NetEngine AR5710-S8T2X	NetEngine AR5710-S8P2X	NetEngine AR5710-S8T2X-LTE4EA	NetEngine AR5710-S10T1X2
Input voltage range (V)	90 V to 264 V				
Maximum input current (A)	0.8 A	0.8 A	3 A	1 A	2 A
Maximum output power (W)	32 W	32 W	180 W	32 W	70 W
Typical power consumption (W)	14.6 W	12 W	157 W	14 W	15 W
Maximum power consumption (W)	16 W	15 W	162 W	19 W	20 W
Fan modules	Natural heat dissipation, fanless design	Natural heat dissipation, fanless design	Built-in unpluggable fan modules	Natural heat dissipation, fanless design	Built-in unpluggable fan modules
Airflow	-	-	Left to right	-	Left to right
Noise	-	-	50 dB(A)	-	50 dB(A)
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				

*: Scenario where the SD-WAN IPsec performance specification applies: IPsec. This specification applies to the combined total of traffic in inbound and outbound directions. Manual switching to the routing mode is required.

**: Scenario where the SD-WAN performance specification applies: IPsec + QoS. This specification applies to the combined total of traffic in inbound and outbound directions. Manual switching to the routing mode is required.

***: Scenario where the typical SD-WAN performance specification applies: IPsec + QoS + SA + AppFlow. This specification applies to the combined total of traffic in inbound and outbound directions. Manual switching to the routing mode is required.

****: All fixed ports are LAN/WAN interchangeable.

*****: By default, a maximum of 16 APs can be managed for free. If the number of APs exceeds 16, licenses must be purchased. NetEngine AR5710-S series supports a maximum of 32 APs.

Features and Values of Huawei NetEngine AR5710-SE Series

Specifications	NetEngine AR5710-S8T2XE	NetEngine AR5710-S8T2XE-LTE4EA-T	NetEngine AR5710-S28T2S2XE4	NetEngine AR5710-S52T2XE4
Forwarding	1.5 Gbps	1.5 Gbps	1.5 Gbps	1.5 Gbps

Specifications	NetEngine AR5710-S8T2XE	NetEngine AR5710-S8T2XE-LTE4EA-T	NetEngine AR5710-S28T2S2XE4	NetEngine AR5710-S52T2XE4
performance (NAT + ACL + QoS, IMIX)				
IPsec performance (IMIX)	0.8 Gbps	0.8 Gbps	0.8 Gbps	0.8 Gbps
SD-WAN IPsec performance*(IMIX)	1.2 Gbps	1.2 Gbps	1.2 Gbps	1.2 Gbps
SD-WAN IPsec performance*(1400 bytes)	2.5 Gbps	2.5 Gbps	2.5 Gbps	2.5 Gbps
SD-WAN performance** (IMIX)	1 Gbps	1 Gbps	1 Gbps	1 Gbps
SD-WAN performance** (1400 bytes)	2.3 Gbps	2.3 Gbps	2.3 Gbps	2.3 Gbps
SD-WAN typical performance***(IMIX)	720 Mbps	720 Mbps	720 Mbps	720 Mbps
SD-WAN typical performance*** (1400 bytes)	2 Gbps	2 Gbps	2 Gbps	2 Gbps
Fixed WAN ports****	2 x 10GE SFP+/2.5GE electrical combo		2 x 10GE SFP+, 2 x GE Optical, 4 x GE electrical	2 x 10GE SFP+, 4 x GE electrical
Fixed LAN ports****	4 x GE electrical, 4 x GE combo		24 x GE electrical	48 x GE electrical
Build-in LTE	-	1 x LTE4EA, 2 x SIM cards (active/standby)	-	-
Switch RU	Supported			
WAC (Number of managed APs, default/maximum*****)	16/64			
SIC slot	-	-	4 x SIC	4 x SIC
Console port	1 x RJ45 console port	1 x RJ45 console port	1 x RJ45 console port	1 x RJ45 console port
USB port	1 x USB 2.0	1 x USB 2.0	1 x USB 2.0	1 x USB 2.0
Memory	4 GB	4 GB	4 GB	4 GB

Specifications	NetEngine AR5710-S8T2XE	NetEngine AR5710-S8T2XE-LTE4EA-T	NetEngine AR5710-S28T2S2XE4	NetEngine AR5710-S52T2XE4
TPM	-	Y	-	-
Dimensions without packaging (H x W x D)	43.6 mm x 321 mm x 210 mm	43.6 mm x 321 mm x 210 mm	43.6 mm x 442.0 mm x 420 mm	43.6 mm x 442.0 mm x 420 mm
Dimensions with packaging (H x W x D)	90 mm x 465 mm x 360 mm	90 mm x 465 mm x 360 mm	175 mm x 550 mm x 710 mm	175 mm x 550 mm x 710 mm
Weight without packaging	1.902 kg	1.978 kg	5.175 kg	5.565 kg
Installation type	Rack, work bench		Rack	Rack
Chassis height [U]	1U			
Rated input voltage (V)	100 V to 240 V, 50 Hz/60 Hz			
Input voltage range (V)	90 V to 264 V			
Maximum input current (A)	0.8 A	0.8 A	3 A	3 A
Maximum output power (W)	32 W	32 W	70 W	150 W
Typical power consumption (W)	12 W	14 W	29 W	53 W
Maximum power consumption (W)	15 W	19 W	38 W	65 W
Fan modules	Natural heat dissipation, without fans	Natural heat dissipation, without fans	Built-in unpluggable fan modules	Built-in unpluggable fan modules
Airflow	-	-	Left to right	Left to right
Noise	-	-	47.2 dB(A)	49.3 dB(A)
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			

*: Scenario where the SD-WAN performance specification applies: IPsec. This specification applies to the combined total of traffic in inbound and outbound directions. Manual switching to the routing mode is required.

**: Scenario where the SD-WAN performance specification applies: IPsec + QoS. This specification applies to the combined total of traffic in inbound and outbound directions. Manual switching to the routing mode is required.

***: Scenario where the typical SD-WAN performance specification applies: IPsec + QoS + SA + AppFlow. This specification applies to the combined total of traffic in inbound and outbound directions. Manual switching to the routing mode is required.

****: All fixed ports are LAN/WAN interchangeable.

*****: By default, a maximum of 16 APs can be managed for free. If the number of APs exceeds 16, licenses must be purchased. NetEngine AR5710-SE and Wi-Fi 7 series supports a maximum of 64 APs.

Features and Values of Huawei NetEngine AR5710-SE 5G, Wi-Fi 7 Series

Specifications	NetEngine AR5710-S8T2XE-NRGL	NetEngine AR5710-S8P2XE-NRGL	NetEngine AR5710-S8T1XWE	NetEngine AR5710-S8T1XWE-NRGL	NetEngine AR5710-S8TWDSE-LTE4EA	NetEngine AR5710-S8P1XDSE-2LTE4EA
Forwarding performance (NAT + ACL + QoS, IMIX)	1.5 Gbps	1.5 Gbps	1.5 Gbps	1.5 Gbps	1.5 Gbps	1.5 Gbps
IPsec performance (IMIX)	0.8 Gbps	0.8 Gbps	0.8 Gbps	0.8 Gbps	0.8 Gbps	0.8 Gbps
SD-WAN IPsec performance*(IMIX)	1.2 Gbps	1.2 Gbps	1.2 Gbps	1.2 Gbps	1.2 Gbps	1.2 Gbps
SD-WAN IPsec performance*(1400 bytes)	2.5 Gbps	2.5 Gbps	2.5 Gbps	2.5 Gbps	2.5 Gbps	2.5 Gbps
SD-WAN performance** (IMIX)	1 Gbps	1 Gbps	1 Gbps	1 Gbps	1 Gbps	1 Gbps
SD-WAN performance** (1400 bytes)	2.3 Gbps	2.3 Gbps	2.3 Gbps	2.3 Gbps	2.3 Gbps	2.3 Gbps
SD-WAN typical performance***(IMIX)	720 Mbps	720 Mbps	720 Mbps	720 Mbps	720 Mbps	720 Mbps
SD-WAN typical performance*** (1400 bytes)	2 Gbps	2 Gbps	2 Gbps	2 Gbps	2 Gbps	2 Gbps
Fixed WAN ports****	2 x 10GE SFP+/2.5GE electrical combo		1 x 10GE SFP+/2.5GE electrical combo		2 x GE combo	1 x 10GE SFP+, 1 x GE combo
WAN ports	-	-	-	-	1 x VDSL	1 x VDSL
Build-in LTE/5G	5G SA/NSA, 2 x SIM cards	5G SA/NSA, 2 x SIM cards	-	5G SA/NSA, 2 x SIM cards	1 x LTE4EA, 2 x SIM cards	2 x LTE4EA, 4 x SIM cards

Specifications	NetEngine AR5710-S8T2XE-NRGL	NetEngine AR5710-S8P2XE-NRGL	NetEngine AR5710-S8T1XWE	NetEngine AR5710-S8T1XWE-NRGL	NetEngine AR5710-S8TWDSE-LTE4EA	NetEngine AR5710-S8P1XDSE-2LTE4EA
	(active/standby)	(active/standby)		(active/standby)	(active/standby)	(Dual LTE modules with QS-DADS)
5G RU	Supported					
Fixed LAN ports****	8 x GE electrical	8 x GE electrical (4 x PoE++)	8 x GE electrical		6 x GE electrical	7 x GE electrical (4 x PoE+, 2 x PoE++)
Switch RU	Supported					
Wi-Fi 7	-	-	Dual-band (2.4 GHz and 5 GHz), 802.11a/b/g/n/ac/ax/be	Dual-band (2.4 GHz and 5 GHz), 802.11a/b/g/n/ac/ax/be	Dual-band (2.4 GHz and 5 GHz), 802.11a/b/g/n/ac/ax/be	-
Maximum number of Wi-Fi users*****	-	-	256	256	256	-
Peak Wi-Fi rate	-	-	3.57 Gbps (690 Mbps @ 2.4 GHz, 2.88 Gbps @ 5 GHz)	3.57 Gbps (690 Mbps @ 2.4 GHz, 2.88 Gbps @ 5 GHz)	3.57 Gbps (690 Mbps @ 2.4 GHz, 2.88 Gbps @ 5 GHz)	-
WAC (Number of managed APs, default/max******)	16/64					
PoE	-	Maximum total power: 130 W; up to 4 ports powered PoE, PoE+, and PoE++ auto-negotiation: •PoE: 15.4 W per port (up to 4 ports) •PoE+: 30 W	-	-	-	Maximum total power: 130 W; up to 6 ports powered PoE, PoE+, and PoE++ auto-negotiation: •PoE: 15.4 W per port (up to 6 ports) •PoE+: 30 W

Specifications	NetEngine AR5710-S8T2XE-NRGL	NetEngine AR5710-S8P2XE-NRGL	NetEngine AR5710-S8T1XWE	NetEngine AR5710-S8T1XWE-NRGL	NetEngine AR5710-S8TWDSE-LTE4EA	NetEngine AR5710-S8P1XDSE-2LTE4EA
		per port (up to 4 ports) •PoE++: 60 W per port (up to 2 ports) or 90 W (up to 1 port)				per port (up to 4 ports) •PoE++: 60 W per port (up to 2 ports) or 90 W (up to 1 port)
Auxiliary or console port	1* RJ45 console port					
USB port	1*USB 2.0					
Memory	4 GB					
Dimensions without packaging (H x W x D)	43.6 mm x 321 mm x 210 mm					
Dimensions with packaging (H x W x D)	90 mm x 465 mm x 360 mm					
Weight without packaging	2.250kg	2.696kg	2kg	2.382kg	2.115kg	2.475kg
Installation type	Rack, work bench					
Chassis height [U]	1U					
Rated input voltage (V)	100V to 240V, 50 Hz/60 Hz					
Input voltage range (V)	90V to 264V					
Maximum input current (A)	0.8 A	3 A	0.8 A	0.8 A	0.8 A	3 A
Maximum output power (W)	32 W	180 W	32 W	32 W	32 W	180 W
Typical power consumption (W)	20 W	25 W	17.5 W	24 W	22 W	24 W
Maximum power consumption (W)	24 W	176 W	19.5 W	27 W	25 W	168 W

Specifications	NetEngine AR5710-S8T2XE-NRGL	NetEngine AR5710-S8P2XE-NRGL	NetEngine AR5710-S8T1XWE	NetEngine AR5710-S8T1XWE-NRGL	NetEngine AR5710-S8TWDSE-LTE4EA	NetEngine AR5710-S8P1XDSE-2LTE4EA
Fan modules	Natural heat dissipation, fanless design	Built-in unpluggable fan modules	Natural heat dissipation, without fans	Natural heat dissipation, fanless design	Natural heat dissipation, fanless design	Built-in unpluggable fan modules
Airflow	-	Left to right	-	-	-	Left to right
Noise	-	50 dB(A)	-	-	-	50 dB(A)
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					

*: Scenario where the SD-WAN performance specification applies: IPsec. This specification applies to the combined total of traffic in inbound and outbound directions. Manual switching to the routing mode is required.

**: Scenario where the SD-WAN performance specification applies: IPsec + QoS. This specification applies to the combined total of traffic in inbound and outbound directions. Manual switching to the routing mode is required.

***: Scenario where the typical SD-WAN performance specification applies: IPsec + QoS + SA + AppFlow. This specification applies to the combined total of traffic in inbound and outbound directions. Manual switching to the routing mode is required.

****: All fixed ports are LAN/WAN interchangeable.

*****: The actual number of users varies according to the environment.

******: By default, a maximum of 16 APs can be managed for free. If the number of APs exceeds 16, licenses must be purchased. NetEngine AR5710-SE series supports a maximum of 64 APs.

Software Features and Protocols

Item	NetEngine AR5710-S Series
Basic function	DHCPv4 Server/Client/Relay, DHCPv6 Server/Client/Relay, PPPoE client, NAT, Interface management, DNS
LAN	IEEE 802.1p, IEEE 802.1Q, VLAN management, VLAN aggregation, Voice VLAN, MAC management, STP/RSTP, MSTP
IPv4 unicast routing	Routing policies, static routes, RIP, OSPF, IS-IS, BGP, IP FRR
IPv6 unicast routing	Static routing, routing policies, RIPng, OSPFv3, IS-ISv6, BGP4+
Basic IPv6 function	ND, Path MTU (PMTU), IPv6 FIB, IPv6 ACL, ICMPv6, DNSv6, DHCPv6, PPPoE client IPv6, IPv4

Item	NetEngine AR5710-S Series
	over IPv6, IPv6 over IPv4
VPN	GRE, GRE over IPsec, Ethernet over GRE, IPsec v4/v6, IKE(v1/v2), Segment Routing IPv6(SRv6), L2TP client, DSVPN, IPv4/IPv6 Dual-stack, SD-WAN EVPN
WAN optimization	A-FEC*
Multicast	IGMP V1/V2/V3, PIM SM, PIM DM, MSDP, MBGP, IP multicast over SD-WAN
MPLS	MPLS LDP, MPLS L3VPN, 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), level-3 traffic scheduling and shaping (HQoS), application identification, intelligent policy-based routing (SPR), and SaaS routing, Intelligent Traffic Policing(ITP)
Security	ACL/ACL6, firewall, AAA authentication, RADIUS, HWTACACS, NAC, PKI, Storm suppression, ARP security, ICMP security, attack defense, URPF, CPCAR, Attack defense, 802.1X authentication, MAC authentication, portal authentication, port security, integrates NGFW capabilities, offering security policy control based on IP address (groups)/regions*/domain groups/users (groups)*/applications/time ranges, ASPF, application recognition and control, IPS*, URL filtering*, Antivirus*, signature database and antivirus database update*, and interconnection with third-party SSE security clouds
System management	Upgrade management, device management, Telnet, SSH(v1/v2), WEB manager(HTTPS), File Transfer Protocols (SCP, SFTP, FTP, TFTP), OPS, SNMP (v1/v2c/v3), RMON, NTP, USB-, DHCP option-, and email-based deployment, deployment through the registration query center, NETCONF/YANG/telemetry, TCP FPM, NQA, IFIT, NetStream/NetStream v6, switch RU plug-and-play, web-based management, dying gasp, LLDP for an RU, Event Versus Action(EVA)
Reliability	BFD, BFD for IPv6, VRRP, VRRP6, HRP
Wi-Fi feature	• Compliance with IEEE 802.11be and compatibility with IEEE 802.11a/b/g/n/ac/ax • Maximum ratio combining (MRC) • Space time block code (STBC) • Cyclic Delay Diversity (CDD)/Cyclic Shift Diversity (CSD) • Beamforming • Multi-user multiple-input multiple-output (MU-MIMO) • Orthogonal frequency division multiple access (OFDMA) • Compliance with 4096-quadrature amplitude modulation (QAM) and compatibility with 1024-QAM, 256-QAM, 64-QAM, 16-QAM, 8-QAM, quadrature phase shift keying (QPSK), and binary phase shift keying (BPSK) • Low-density parity-check (LDPC) • Frame aggregation, including A-MPDU (Tx/Rx) and A-MSDU (Tx/Rx) • 802.11 dynamic frequency selection (DFS) • Short guard interval (GI) in 20 MHz, 40 MHz, 80 MHz and 160 MHz modes

Item	NetEngine AR5710-S Series
	• Wi-Fi multimedia (WMM) for priority mapping and scheduling • WLAN channel management and channel rate adjustment • Automatic channel scanning and interference avoidance • Signal sustain technology (SST) • Unscheduled automatic power save delivery (U-APSD) • Multi-user call admission control (CAC) • Advanced cellular coexistence (ACC), minimizing the impact of interference from cellular networks •STA whitelist and blacklist
WAC	•Management of Wi-Fi 5/6/7 Fit APs •CAPWAP protocol •WLAN user management •WLAN radio management •WLAN QoS •WLAN security •WLAN user roaming Supports 802.11k and 802.11v smart roaming, 802.11r fast roaming (≤ 50 ms) and AI roaming
Wi-Fi QoS	• User-based bandwidth limiting • Airtime scheduling
Wi-Fi security	• Open system authentication • WPA2-PSK authentication and encryption (WPA2-Personal) • WPA2-802.1X authentication and encryption (WPA2-Enterprise) • WPA3-SAE authentication and encryption (WPA3-Personal) • WPA3-802.1X authentication and encryption (WPA3-Enterprise) • WPA-WPA2 hybrid authentication • WPA2-WPA3 hybrid authentication • WPA2-PPSK authentication and encryption • WAPI authentication and encryption • 802.1X authentication, MAC address authentication, and Portal authentication • 802.11w Protected Management Frames (PMF)

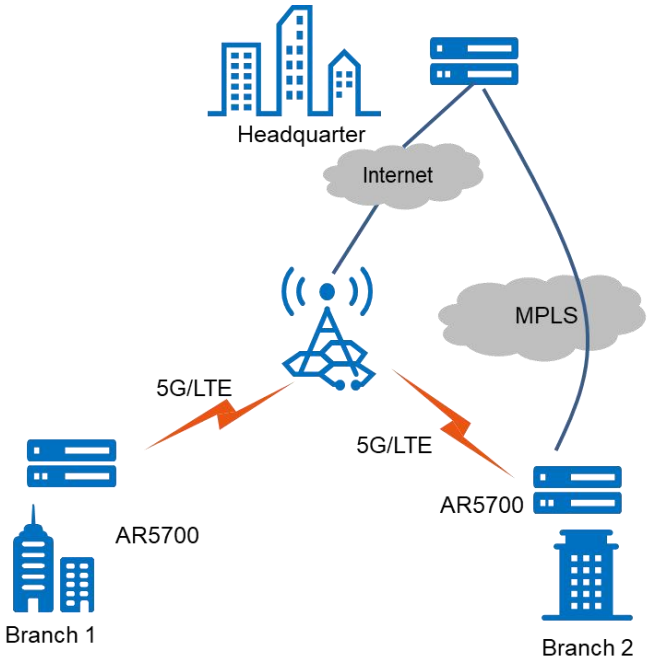
*: Supported only by the NetEngine AR5710-SE series routers with 4 GB memory.

Safety and Regulatory Standards

Item	NetEngine AR5710-S Series
EMC standards compliance	•CISPR32 •EN 55032 •CISPR24 •EN 55024 •ETSI EN 300 386 •AS/NZS CISPR32 •FCC Part 15 Subpart B •ICES 003 •IEC 61000-3-2 •EN 61000-3-2 •IEC 61000-3-3 •EN 61000-3-3 •GB 9254 •VCCI-CISPR32
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

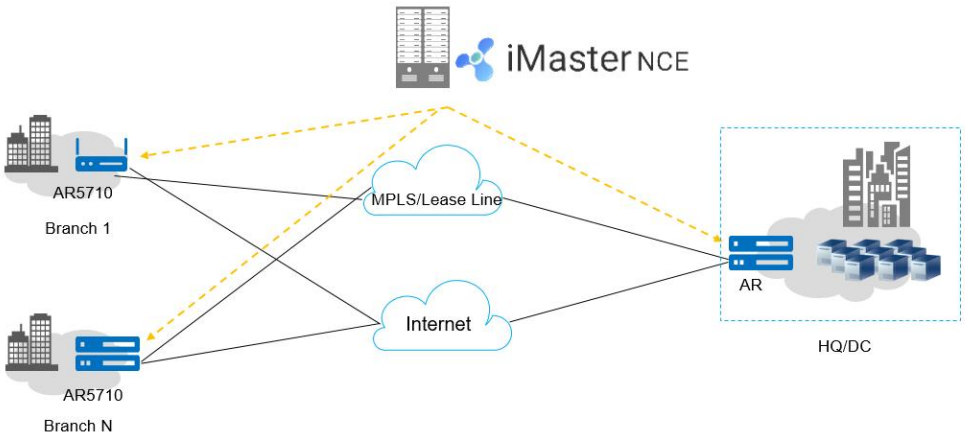
Application Scenarios

Networking diagram for branch 5G/LTE wireless access



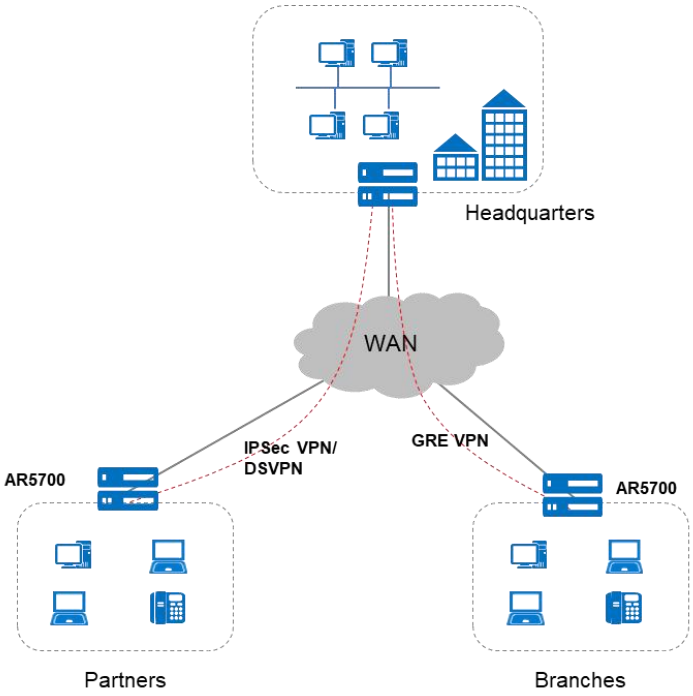
Huawei NetEngine AR5710-S series routers feature 5G/LTE functionality, enabling wireless interconnection between enterprise branches and between the headquarters and branches. 5G/LTE interfaces can function as the active link or as a backup for wired links, enhancing network stability while reducing network construction cost.

SD-WAN networking



In the SD-WAN Solution, Huawei NetEngine AR5710-S series routers can serve as gateways for small and medium-sized enterprise branches and support multiple physical links such as MPLS private lines and Internet links. Additionally, they can be managed and visualized on iMaster NCE in a unified manner. The AR5710-S series provides extensive SD-WAN features such as intelligent application identification and intelligent traffic steering to deliver better service experience to enterprises. For details about Huawei SD-WAN Solution, visit https://e.huawei.com/en/solutions/enterprise-network/campus-network/branch-campus-network.

Networking diagram in the VPN scenario



Build different types of VPNs through the Internet

Huawei NetEngine AR5710-S series routers offer a range of secure access features that enable communication between enterprise branches and headquarters, as well as allowing partners to access enterprise resources. Secure tunnels such as GRE VPN, IPsec VPN, DSVPN, and L2TP VPN tunnels can be set up between the headquarters and branches for secure data access and transmission. The AR5710-S series supports quick tunnel deployment and authentication for branches. Furthermore, authenticated and authorized partners can remotely access the enterprise resources over these tunnels.

Ordering Information

The configuration of the NetEngine AR5710-S series includes device model selection and software configuration.

- Device model

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

- Software

The NetEngine AR5710-S series software consists of the basic software and licensed software. The basic software provides basic features such as routing, switching, and security, while the licensed software provides additional functions, such as security protection.

Host	Ordering Information
AR5710-S8T2S	AR5710-S8T2S, 2 x GE SFP WAN, 8 x GE electrical LAN, 1 x USB2.0
AR5710-S8T2X	AR5710-S8T2X, 2 x 10GE SFP+/2.5GE Base-T combo WAN,4 x GE Base-T LAN,4 x GE combo LAN,1 x USB2.0

AR5710-S8P2X	AR5710-S8P2X, 2 x 10GE SFP+/2.5GE Base-T combo WAN,4 x GE Base-T (PoE++) LAN,4 x GE combo LAN,1 x USB2.0
AR5710-S8T2X-LTE4EA	AR5710-S8T2X, 2 x 10GE SFP+/2.5GE Base-T combo WAN,4 x GE Base-T LAN,4 x GE combo LAN, 1 x LTE4EA,1 x USB2.0
AR5710-S10T1X2	AR5710-S10T1X2, 1 x 10GE SFP+/2.5GE Base-T combo WAN,2 x GE Base-T WAN,4 x GE combo LAN,4 x GE Base-T LAN,2 x SIC,1 x USB2.0
AR5710-S8T2XE	AR5710-S8T2XE, 2 x 10GE SFP+/2.5GE Base-T combo WAN,4 x GE Base-T LAN,4 x GE combo LAN,1 x USB2.0
AR5710-S8T2XE-LTE4EA-T	AR5710-S8T2XE-LTE4EA-T, 2 x 10GE SFP+/2.5GE Base-T combo WAN,4 x GE Base-T LAN,4 x GE combo LAN, 1 x LTE4EA,1 x USB2.0
AR5710-S28T2S2XE4	AR5710-S28T2S2XE4, 2 x 10GE SFP+ 2 x GE optical 2 x GE electrical WAN, 24 x GE electrical LAN, 4 x SIC,1 x USB2.0
AR5710-S52T2XE4	AR5710-S52T2XE4, 2 x 10GE SFP+ 2 x GE optical 2 x GE electrical WAN, 48 x GE electrical LAN, 4 x SIC,1 x USB2.0
AR5710-S8T2XE-NRGL	AR5710-S8T2XE-NRGL, 2 x 10GE SFP+/2.5GE electrical combo WAN, 8 x GE electrical LAN, 1 x NRGL, 1 x USB2.0
AR5710-S8P2XE-NRGL	AR5710-S8P2XE-NRGL, 2*10GE SFP+/2.5GE electrical combo WAN, 8 x GE electrical LAN, 1 x NRGL, 1 x USB2.0
AR5710-S8T1XWE	AR5710-S8T1XWE, 1 x 10GE SFP+/2.5GE electrical combo WAN, 8 x GE electrical LAN, 1 x Wi-Fi, 1 x USB2.0
AR5710-S8T1XWE-NRGL	AR5710-S8T1XWE-NRGL, 1 x 10GE SFP+/2.5GE electrical combo WAN, 8 x GE electrical LAN, 1 x NRGL, 1 x Wi-Fi, 1 x USB2.0
AR5710-S8TWDSE-LTE4EA	AR5710-S8TWDSE-LTE4EA, 2 x GE combo WAN, 6 x GE Copper LAN, Wi-Fi 2.4G+5G, 1 x VDSL2, 1 x LTE4EA, 1 x USB2.0
AR5710-S8P1XDSE-2LTE4EA	AR5710-S8P1XDSE-2LTE4EA, 1 x 10GE SFP+ WAN, 1 x GE combo WAN, 7 x GE Copper LAN(4 x PoE+, 2 x PoE++), 1 x VDSL2, 2 x LTE4EA, 1 x USB2.0

Software sales model	License	Ordering Information
Threat protection service*	LAR0TP1401 LAR0TP1402 LAR0TP1403 LAR0TP1404 LAR0TP1405	Threat Protection Service Subscribe x Year (applicable to the AR5700) (corresponding model: LAR0TP140x), including: • IPS signature database update • URL remote query for URL filtering • Antivirus signature database update
Value-added package	AR57-LIC-Basic-IFIT	AR5700 Value-added Basic IFIT Package
	AR57-LIC-Enhance-IFIT	AR5700 Value-added Enhanced IFIT Package
	AR57-LIC-NETCONN	AR5700 Value-added Network Connection Package, including: • DSVPN
N1 Model	N1-AR57-B	N1 AR5700 CloudCampus Basic Software (exclude SD-WAN), Per Device
	N1-AR57-F	N1 AR5700 CloudCampus Foundation (include SD-WAN), Per Device
	N1-AR57-A	N1 AR5700 CloudCampus Advanced (include SD-WAN), Per Device

*: Supported only by the NetEngine AR5710-SE series routers with 4 GB memory.

Other Information

SIC Interface Card*	Ordering Information
SIC-4E1-V2	4-Port Channelized E1 Interface Card
SIC-4STM1-V2	4-Port 155M Packet over SDH/Sonet Optical Interface Card
SIC-NRGL-V2	5G NR/LTE Interface Card
1V35B-V2**	4-Port VDSL2 WAN Interface Card

*: Supported only by the NetEngine AR5710-S10/S28/S52 models.

** : Only PTM mode is supported.

Built-in LTE Model	Supported Standards and Frequency Bands
AR5710-S8T2X-LTE4EA AR5710-S8T2XE-LTE4EA-T	•LTE FDD: Band 1/3/5/7/8/20/28 •LTE TDD: Band 38/40/41 •WCDMA: Band 1/5/8 •GSM: Band 3/8, 900/1800 (MHz)
AR5710-S8TWDSE-LTE4EA AR5710-S8P1XDSE-2LTE4EA	•LTE FDD: Band 1/2/3/4/5/7/8/18/19/20/26/28/66 •LTE TDD: Band 38/40/41 •WCDMA: Band 1/5/8 •GSM: Band 3/5/8, 850/900/1800 (MHz)

Built-in 5G Model	Supported Standards and Frequency Bands
AR5710-S8T2XE-NRGL AR5710-S8P2XE-NRGL AR5710-S8T1XWE-NRGL	•5G NR SA: Band 1/3/5/7/8/20/28/38/40/41/75/77/78/79/80/81/82/83/84 •5G NR NSA: Band 1/3/5/7/8/20/28/38/40/41/77/78/79 •LTE FDD: Band 1/2/3/5/7/8/18/19/20/26/28 •LTE TDD: Band 34/38/39/40/41/42/43 Supported Rates: •5G SA: Uplink 500 Mbps, Downlink 2.5 Gbps •5G NSA: Uplink 125 Mbps, Downlink 2.5 Gbps

Support Switch RU	Models
Switch RU	CloudEngine S5731-L series, CloudEngine S5731S-L series, CloudEngine S5731I-L series, CloudEngine S5751-L series

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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