

H3C MSR610 Router Series

SMB Router

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New H3C Technologies Co., Limited



Product overview

The MSR600 series can be deployed as an egress router for small- to medium-sized enterprise networks to operate with VPN, NAT, and IPSec service gateways. Together with other H3C products, the MSR600 series can provide comprehensive network solutions for government, power, financial, tax, public security, railway, and education customers.



H3C MSR610 router

Features and benefits

Advanced technologies

 Uses H3C's leading Comware network operating system to provide intelligent service scheduling management mechanism and supports loose coupling of different service modules as well as the dynamic loading of processes and patches.

Powerful security features

- Service security
 - Packet filtering, including stateful filtering, MAC address filtering, IP and port number filtering, and time range filtering.
 - Real-time traffic analysis.
- Network security
 - Rich and comprehensive VPN technologies, including IPSec, L2TP, GRE and mix usage of different VPN technologies.
 - Routing security protection, including OSPF/RIP/IS-IS/BGP dynamic routing protocol IPSec encryption and rich routing policy control functions.
- End device access security
 - Unified endpoint access binding authentication, including EAD secure check authentication, 802.1X authentication, endpoint MAC address authentication, web-based portal authentication, endpoint access static binding, and MAC address auto-learning and binding.
 - ARP attack prevention, including fixed source MAC address, ARP attack protection, ARP source suppression, ARP detection, source MAC consistency checks and protection, ARP rate limit, and ARP active acknowledgement mechanism.



- Equipment management security
 - Role-based access control that allocates resources based on roles and provides users and roles mapping.
 - Control plane traffic restriction, traffic control and filtering based on protocol type, queue, known protocol and specific protocol.
 - Remote security management, such as SNMPv3, SSH, and HTTPS remote management.
 - Management behavior control and audit, including AAA server central authentication, command line authority and real-time report of operation records.

Granular control

- Uses granular identification and control to rate limit and filter application layer services and ensure bandwidth and provides detailed network statistics for network optimization.
- Performs load balancing based on bandwidth, user, user group, service, or application by using asymmetric link, traffic load balancing, and multi-topology dynamic routing technologies.
- Supports flexible bandwidth sharing based on service, user, user group, link, and user bandwidth.

Intelligent network management

- Cloudnet APP management
- Comprehensive network management methods—Supports command line and SNMP.
- Zero-configuration setup—Enables zero configuration setup, USB-based and URL-based automatic configuration.
- Comware embedded EAA function—Monitors the internal events and status of the system's software and hardware components. If a fault occurs, it collects diagnostic information and attempts to make automatic repairs as well as sending the diagnostic information to a specific email address.

High availability

- Independent hardware processing module for monitoring and programmable components that supports online upgrade and auto loading to strengthen product reliability.
- Millisecond link fault detection technology Bidirectional Forwarding Detection (BFD) and Track between BFD and static routing, RIP/OSPF/BGP/ISIS dynamic routing, or interface backup.
- Network quality analyzer (NQA) and Track between NQA and static routing, or interface backup.

Wireless AC function:

- Maximum support for 64 APs, suggestion support for 8-16 APs. which could configure automatically and plug and play, Support unified management, configuration, and upgrade for wireless AP.
- Complete authentication technology for wireless terminals, support 802.1X/MAC/Portal authentication function.



Oasis management platform:

• With the Oasis Cloud Management Platform, enterprises can enjoy professional network management and operation and maintenance services without building professional management servers and software, greatly reducing the investment cost of enterprise users' network management and improving the network operation and maintenance management experience.



Technical specifications

Hardware specifications

Item	MSR610
Forwarding Performance In Service (IMIX)	200 Mbps
NGFW Throughput (Maximum rate for forwarding packets with 1518 bytes)	1Gbps
CPU	800MHz
Memory	1 GB
Internal Flash	256 MB
External Flash	NA
USB ports	1 (no SIM card function)
Console ports	1
WAN ports	1 × GE copper port 1 × SFP port
LAN port	$4 \times GE$ ports (can be configured as WAN interfaces)
Max power consumption	24W
Power voltage(adapter)	External power adapter: 100 VAC to 240 VAC @ 50 Hz/60 Hz
Power voltage(device)	DC 12V 2A
Dimensions (W \times D \times H)	210 x 140 x 44 mm
Operating temperature	0°C to 40°C (32°F to 104°F)
Operating humidity	5% RH to 95% RH, non-condensing
	FCC Part 15 (CFR 47) CLASS A
	ICES-003 CLASS A
	VCCI-3 CLASS A
	VCCI-4 CLASS A
EMC	CISPR 22 CLASS A
	EN 55022 CLASS A
	AS/NZS CISPR22 CLASS A
	CISPR 24
	EN 55024



Item	MSR610
	EN 61000-3-2
	EN 61000-3-3
	EN 61000-6-1
	ETSI EN 300 386
	EN 301 489-1
	EN 301 489-17
	UL 60950-1
	CAN/CSA C22.2 No 60950-1
	IEC 60950-1
	EN 60950-1/A11
Safety	AS/NZS 60950
	EN 60825-1
	EN 60825-2
	FDA 21 CFR Subchapter J
	GB 4943

Software specifications

ltem	Specification	
Layer 2 switching	Ethernet, Ethernet II, VLAN (port based VLAN, guest VLAN), 802.3x, 802.1p, 802.1Q, 802.1X, STP (802.1D), RSTP (802.1w), MSTP (802.1s), PPP, PPPoE client, PPPoE server, and DDR	
IP services	Unicast/multicast, TCP, UDP, IP option, IP unnumbered, policy-based routing, NetStream, and sFlow	
IP application	Ping, Tracert, ICMP, DHCP server, DHCP relay, DHCP client, DNS client, DNS proxy, DDNS, NTP, and SNTP	
IPv4 routing	Static routing	
	Dynamic routing: RIPv1/v2, OSPFv2, BGP, IS-IS	
	Route iteration	
	Policy routing	
	Equal-cost multi-path routing (ECMP)	
	Multicast routing: IGMPv1/v2/v3, PIM-DM, PIM-SM, MBGP, MSDP	
QoS	LR, port-based mirroring, Port Trust Mode, and port priority	
	Committed access rate (CAR)	
	FIFO, WFQ, CBQ	
	Generic Traffic Shaping (GTS)	



ltem	Specification
	Traffic classification
AC	AP management: AP access, AP configuration parameter delivery, AP version upgrade, AP
AC	restart, AP information display
	WLAN access, WLAN user security, WLAN user access authentication, WLAN roaming, client access control, WLAN snooping, etc.
	PPPoE client & server, portal, 802.1X
	Local authentication, RBAC, RADIUS, TACACS+
	Basic Firewall Function, ASPF, ACL, filter, connection limit
	IKE, IPsec
Security	L2TP, NAT/NAPT, PKI, RSA, SSH v1.5/2.0, URPF, mGRE, GRE
	ARP attack prevention
	GDVPN
	AES, DES, 3DES, MD5, SHA1
	Bandwidth-based load balancing and backup
High availability	IP address-based load balancing and backup
	NQA collaboration with routing, or interface backup
	Couldnet APP management
	Support remote management of oasis management platform
	SNMP v1/v2c/v3, MIB, SYSLOG, RMON
Management and maintenance	BiMS remote management, booting from USB drive
	CLI, file system, and dual image
	DHCP, FTP, HTTP, ICMP, UDP public, UDP private, TCP public, TCP private, and SNMP
	Console port login, Telnet (VTY) login, SSH login, and FTP login

Application scenarios

Chain enterprises wireless marketing solution

For commercial chain enterprises, MSR610 routers are ideal wireless coverage products for their branches and outlets. One MSR610 router itself can provide network security, routing, and switching services for an outlet, simplifying network deployment and management. The IMC and service platforms deployed at the center perform centralized management for the branches and outlets, improving the network deployment and management efficiency.

• One MSR610 itself deployed at the outlet can provide network security, wireless connection, routing,



and switching services.

- The MSR610 can store PHP dynamic webpages, pictures, flashes, videos, etc. and push the advertising and multimedia contents to the clients if they come online, which avoids occupying the network bandwidth.
- The router supports online activity management and audit and performs granular traffic control.



Chain enterprises marketing solution

Ordering information

Product ID	Description
RT-MSR610	H3C MSR610 Enterprise-Level 6-Port Gigabit Ethernet Router



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