

H3C MSR830 Router Series

Product overview

The MSR830 router 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 MSR830 can provide comprehensive network solutions for government, power, financial, tax, public security, railway, and education customers.

The MSR830 series has the following models: MSR830-6EI-GL, MSR830-10EI-GL, MSR830-6HI-GL, and MSR830-10HI-GL.



H3C MSR830-6EI-GL router



H3C MSR830-10EI-GL router



H3C MSR830-6HI-GL router



H3C MSR830-10HI-GL 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.

- Adopts an outstanding high-performance, multi-core CPU processor, which greatly enhances concurrent multi-service processing capabilities.

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, MPLS VPN and mix usage of different VPN technologies.
 - Routing security protection, including OSPF/RIP/IS-IS/BGP dynamic routing protocol, OSPFv3/RIPng/IS-ISv6/BGP 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 check 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

- Comprehensive network management methods—Supports command line and SNMP.
- Zero-configuration setup—Enables zero configuration setup and USB-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, VRRP, or interface backup.
- Network quality analyzer (NQA) and Track between NQA and static routing, VRRP, or interface backup.
- Multi-device redundancy and load balancing (VRRP/VRRPE).

Cloud interconnection

- Support of using VXLAN to provide Layer 2 connection in data centers. VXLAN-provided Layer 2 connection can be achieved simply by deploying edge devices with VXLAN capabilities without changing the original network structure. This reduces the networking cost and can provide enhanced security for traffic transmitted in the public network if used together with IPsec technologies.

Technical specifications

Hardware specifications

Item	MSR830-6EI-GL	MSR830-10EI-GL	MSR830-6HI-GL	MSR830-10HI-GL
CPU	800MHz	800MHz	1.3GHz	1.3GHz
Forwarding capacity	200 Kpps	200 Kpps	600 Kpps	600 Kpps
Forwarding Performance In Service (IMIX)	200 Mbps	200 Mbps	1.2 Gbps	1.2 Gbps
Memory	1 GB	1 GB	1 GB	1 GB
Internal Flash	256 MB	256 MB	256 MB	256 MB
External Flash	N/A	N/A	Micro SD card	Micro SD card
USB ports	N/A	1	1	1

Item	MSR830-6EI-GL	MSR830-10EI-GL	MSR830-6HI-GL	MSR830-10HI-GL
CON ports	1	1	1	1
WAN ports	2 × GE copper ports	4 × GE copper ports	1 × GE copper ports 1 × GE combo port	3 × GE copper ports 1 × GE combo port
LAN ports	4 × GE ports	6 × GE ports	4 × GE ports	6 × GE ports
Console ports	1	1	1	1
Max power consumption	22 W	22 W	22 W	22 W
Rated voltage	100 VAC to 240 VAC @ 50 Hz/60 Hz			
Dimensions (H × W × D)	44 × 440 × 225 mm (1.73 × 17.32 × 8.86 in)			
Weight	2.45 kg (5.40 lb)			
Operating temperature	0°C to 45°C (32°F to 113°F)			
Operating humidity	5% RH to 95% RH, non-condensing			
EMC	FCC Part 15 (CFR 47) CLASS A ICES-003 CLASS A VCCI-3 CLASS A VCCI-4 CLASS A CISPR 22 CLASS A EN 55022 CLASS A AS/NZS CISPR22 CLASS A CISPR 24 EN 55024 EN 61000-3-2 EN 61000-3-3 EN 61000-6-1 ETSI EN 300 386 EN 301 489-1 EN 301 489-17			
Security	UL 60950-1 CAN/CSA C22.2 No 60950-1 IEC 60950-1 EN 60950-1/A11			

Item	MSR830-6EI-GL	MSR830-10EI-GL	MSR830-6HI-GL	MSR830-10HI-GL
	AS/NZS 60950 EN 60825-1 EN 60825-2 FDA 21 CFR Subchapter J GB 4943			

Software specifications

Item	Specification
Layer 2 switching	Ethernet, Ethernet II, VLAN (port-based VLAN, voice 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
IPv6	IPv6 ND, IPv6 PMTU, IPv6 FIB, IPv6 ACL, NAT-PT, 6PE, and DS-LITE IPv6 tunneling: Manual tunneling, automatic tunneling, GRE tunnel, 6to4, ISATAP Static routing Dynamic routing: RIPng, OSPFv3, IS-ISv6, BGP4+ IPv6 multicast: MLDv1/v2, PIM-DM, PIM-SM
QoS	LR, port-based mirroring, Port Trust Mode, and port priority Committed access rate (CAR) FIFO, WFQ, CBQ Generic Traffic Shaping (GTS) Traffic classification
Security	PPPoE client & server, portal, 802.1X Local authentication, RBAC, RADIUS, TACACS+ ASPF, ACL, filter, connection limit

Item	Specification
	IKE, IPsec L2TP, NAT/NAPT, PKI, RSA, SSH v1.5/2.0, URPF, and mGRE ARP attack prevention
MPLS	LDP, Static LSP L3VPN: Inter-AS MPS VPN (Option 1/2/3), MPLS nested VPN, hierarchy of PE (HoPE), dual-homed CE, MCE, and multirole host L2VPN: Martini, Kompella, CCC PWs and static PWs MPLS TE, RSVP TE
High availability	VRRP, VRRPv3 Bandwidth-based load balancing and backup IP address-based load balancing and backup NQA collaboration with routing, VRRP or interface backup
Management and maintenance	SNMP v1/v2c/v3, MIB, SYSLOG, RMON 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

Ordering information

Model	Description
H3C MSR830-6EI-GL	H3C MSR830 6-port Gigabit Ethernet router (2GE WAN, 4GE LAN/WAN)
H3C MSR830-10EI-GL	H3C MSR830 10-port Gigabit Ethernet router (4GE WAN, 6GE LAN/WAN)
H3C MSR830-6HI-GL	H3C MSR830 6-port Gigabit Ethernet router (2GE WAN(1Combo), 4GE LAN/WAN)
H3C MSR830-10HI-GL	H3C MSR830 10-port Gigabit Ethernet router (4GE WAN(1Combo), 6GE LAN/WAN)

New H3C Technologies Co., Limited

Beijing base
 8 GuangShun South Street, Chaoyang District, Beijing
 Zip: 100102



Hangzhou base
 466 Changhe Road, Binjiang District, Hangzhou, Zhejiang
 Province 310052 P.R.China
 Zip: 310052
 Tel: +86-571-86760000
 Fax: +86-571-86760001

Copyright ©2019 New H3C Technologies Co., Limited Reserves all rights
 Disclaimer: Though H3C strives to provide accurate information in this document, we cannot guarantee that details do not contain any technical error or printing error. Therefore, H3C cannot accept responsibility for any inaccuracy in this document. H3C reserves the right for the modification of the contents herein without prior notification

<http://www.h3c.com>