

# H3C MSR2600 Router Series

## Product overview

The MSR2600 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 MSR2600 can provide comprehensive network solutions for government, power, financial, tax, public security, railway, and education customers.

The MSR2600 series has the following models: MSR2600-6-X1-GL.



H3C MSR2600-6-X1-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.
- Uses H3C-proprietary innovative intelligent link engine CUBE technology that not only enhances SIC card bus bandwidth, but also enables automatic interface resource allocation.

### 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).
- Fast reroute, and GR/NSR.

## 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	MSR2600-6-X1-GL
CPU	1.6GHz
Forwarding capacity	600 Kpps
Forwarding Performance In Service (IMIX)	900 Mbps
Memory	1 G
Internal Flash	256 MB
USB ports	1
CON ports	1
AUX ports	N/A
WAN ports	1 × GE copper port 1 × SFP port
LAN ports	4 × GE ports
SIC slots	2
DSIC slots	N/A
Maximum power consumption	30 W
Power input	100 to 240 VAC @ 50 Hz/60 Hz
Rack height	1 RU
Dimensions (H × W × D)	44.2 × 360 × 300 mm (1.74 × 14.17 × 11.81 in)
Weight	3.15 kg (6.94 lb)

Item	MSR2600-6-X1-GL
Operating temperature	0°C to 45°C (32°F to 113°F)
Operating humidity	5% RH to 95% RH, non-condensing
EMC	<p>FCC Part 15 (CFR 47) CLASS A</p> <p>ICES-003 CLASS A</p> <p>VCCI-3 CLASS A</p> <p>VCCI-4 CLASS A</p> <p>CISPR 22 CLASS A</p> <p>EN 55022 CLASS A</p> <p>AS/NZS CISPR22 CLASS A</p> <p>CISPR 24</p> <p>EN 55024</p> <p>EN 61000-3-2</p> <p>EN 61000-3-3</p> <p>EN 61000-6-1</p> <p>ETSI EN 300 386</p> <p>EN 301 489-1</p> <p>EN 301 489-17</p>
Security	<p>UL 60950-1</p> <p>CAN/CSA C22.2 No 60950-1</p> <p>IEC 60950-1</p> <p>EN 60950-1/A11</p> <p>AS/NZS 60950</p> <p>EN 60825-1</p> <p>EN 60825-2</p> <p>FDA 21 CFR Subchapter J</p> <p>GB 4943</p>

## 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, HDLC, and DDR
IP services	Unicast/multicast, TCP, UDP, IP option, IP unnumbered, policy-based routing, NetStream,

Item	Specification
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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
3G/4G	Support for TDD/FDD LTE, TD-SCDMA, CDMA2000/EVDO, and WCDMA/HSPA+
Security	PPPoE client & server, portal, 802.1X Local authentication, RBAC, RADIUS, TACACS+ ASPF, ACL, filter, connection limit 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

Item	Specification
	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 MSR2600-6-X1-GL	H3C MSR2600-6-X1-GL router
<b>SIC module</b>	
RT-SIC-4GSWF	4-port 100BASE-FX/1000BASE-X(SFP) Ethernet L2/L3 SIC Module
RT-SIC-4GSW	4-Port 10/100/1000BASE-T L2 Switch SIC Module



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