

AR G3 Series Enterprise Router Product Brochure





AR G3 Series Enterprise Router
Product Brochure
















AR G3 Series Enterprise Routers

Huawei AR G3 series enterprise routers (AR G3) are next-generation routers dedicated for enterprise customers. The AR G3 all-in-one router series integrates multiple services including; routing, switching, 3G, WLAN, voice, and security functions in one device.

Building on over a decade of accumulated knowledge and experience in telecommunications, data communications, wired and wireless networking, Huawei's next-generation AR G3 routers are designed with the unique requirements of the Enterprise in mind. Based on Huawei's proprietary Versatile Routing Platform (VRP), the AR G3 series

integrates routing, switching, 3G, WLAN, voice, and security functions in one device, delivered via a multi-core CPU architecture coupled with a non-blocking switching infrastructure.

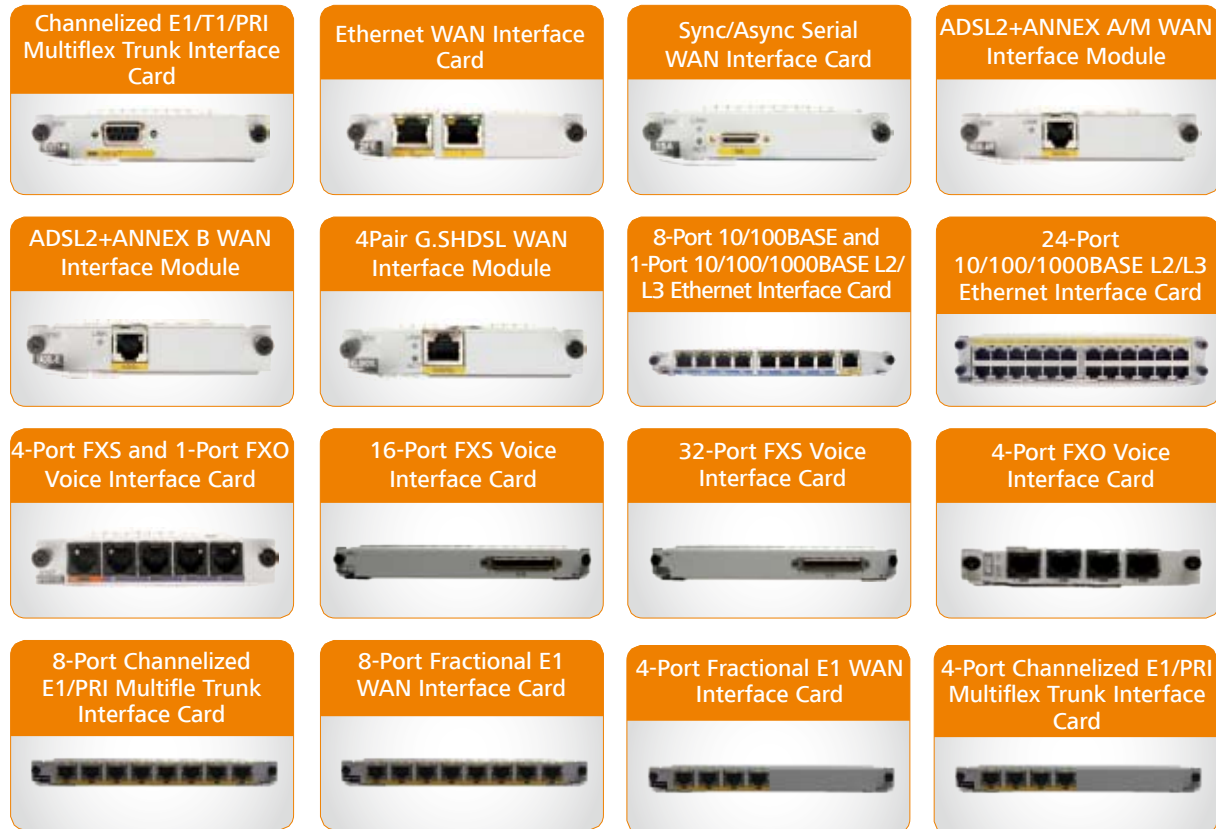
These features combine to deliver industry leading performance and extensibility, meeting customer requirements for a robust, reliable and flexible solution for enterprise-grade network deployments. Due to strict adherence to industry standards, the AR G3 router series are easily integrated into existing networks, accelerating multi-service network deployment while preserving existing network infrastructure investments.

AR3260  Headquarter	AR2240  Medium Branch	AR2220  Medium Branch	AR2204  Medium Branch
AR2201-48FE/ AR2202-48FE  Medium Branch	AR1220W/AR1220VW  Small Branch	AR1220V  Small Branch	AR1220/AR1220-D  Small Branch
AR208E  SOHO & SMB	AR207G-HSPA+7  SOHO & SMB	AR207V/AR207V-P  SOHO & SMB	AR207VW  SOHO & SMB
AR207  SOHO & SMB	AR206  SOHO & SMB	AR201VW-P  SOHO & SMB	AR201  SOHO & SMB
AR158EWW  SOHO & SMB	AR158E  SOHO & SMB	AR157G-HSP+7  SOHO & SMB	AR157VW  SOHO & SMB
AR157W  SOHO & SMB	AR157  SOHO & SMB	AR156  SOHO & SMB	AR151W-P  SOHO & SMB

The AR G3 supports various interface cards, including Ethernet interface cards, E1/T1/PRI/VE1/VT1 interface cards, synchronous/asynchronous interface cards, ADSL2+/G.SHDSL/VDSL2 interface cards, FXS/FXO voice cards, ISDN interface cards, EPON/GPON interface cards and 3G interface cards. Depending on the slot type, these cards are classified into Smart Interface Cards (SICs), Double-Width SICs (WSICs), and Double-Height SICs (XSICs).



Interface card options



Key Advantages

• 3rd Generation and High Performance



- Multi-core CPU and distributed service processing to double the performance of other products in the industry
- A switching capacity of 160 Gbit/s to ensure non-blocking service operation
- Excellent quality and high reliability

• 2-mode Network and Flexible Access



- Seamless integration of wired and 3G (wireless) networks
- 24-port gigabit Ethernet board card
- Large bandwidth and highly reliable PON access

• All-in-1 and More Benefits



- Unified office (unified communication, MMS gateway, enterprise switchboard, and antivirus)
- Open Service Platform (OSP) for cooperation with partners
- Unified and mature VRP platform



Typical Applications



AR G3 Series Enterprise Routers



Technical Specifications

Table 1: Technical Specifications of AR2200 and AR3200 Series Routers

Item	AR2201-48FE/ AR2202-48FE	AR2204	AR2220	AR2240	AR3260
Forwarding performance (64 Byte)	350Kpps	450Kpps	1 Mpps	2 Mpps (with SRU40) 2.5 Mpps (with SRU60) 4 Mpps (with SRU80)	2 Mpps (with SRU40) 2.5 Mpps (with SRU60) 4 Mpps (with SRU80)
WAN speed with services(IMIX)	200 Mbps	200 Mbps	400 Mbps	600 Mbps (with SRU40) 800 Mbps (with SRU60) 1800 Mbps (with SRU80)	600 Mbps (with SRU40) 800 Mbps (with SRU60) 1800 Mbps (with SRU80)
Firewall performance (large packets)	900 Mbps	900 Mbps	1.9 Gbps	5.5 Gbps (with SRU40) 6 Gbps (with SRU60) 9.5 Gbps (with SRU80)	5.5 Gbps (with SRU40) 6 Gbps (with SRU60) 9.5 Gbps (with SRU80)
Switching capacity	—	10 Gbps	32 Gbps	80 Gbps	160 Gbps
IPSec VPN Tunnels	2000	2000	4000	6000	6000
Fixed Ethernet ports	2 x GE (1 x Combo), 48 x FE	3 x GE (1 x Combo)	3 x GE (1 x Combo)	3 x GE (2 x Combo)	3 x GE (2 x Combo)
SIC slots	0	4	4	4	4
WSIC slots (default/max**)	0	0	2/4	2/4	2/4
XSIC slots (default/max**)	0	0	0/2	2/4	4/6
DSP	—	2 DSP Slot	1 DSP Slot	3 DSP Slots	3 DSP Slots
USB 2.0 ports	1	2	2	2	2
Memory	512 MB	1 GB	2 GB	2 GB	2 GB

Item	AR2201-48FE/ AR2202-48FE	AR2204	AR2220	AR2240	AR3260
Flash	512 MB	512 MB	16 MB	16 MB	16 MB
Micro SD (default/max)	—	—/4 GB	2 GB/4 GB	2 GB/4 GB	2 GB/4 GB
Max. power	60 W	150 W	150 W	350 W (Single Power Module)/700 W (Dual-Power Module)	350 W (Single Power Module)/700 W (Dual-Power Module)
AC power	100 V-240 V; Frequency: 50 Hz/60 Hz				
DC power	—	—	-45 V~-60 V		
Dimensions (H x W x D)	44.5 mm x 442 mm x 310 mm	44.5 mm x 442 mm x 420 mm	44.5 mm x 442 mm x 420 mm	88.1 mm x 442 mm x 470 mm	130.5 mm x 442 mm x 470 mm
Ambient temp.	0°C to 40°C				
Relative humidity	5 to 90% (non-condensing)				
WAN interfaces	Ethernet, CE1/CT1, E1/T1, ADSL2+, G.SHDSL, Sync/Async Serial, ISDN, CPOS, POS				
LAN	IEEE 802.1P, IEEE 802.1Q, IEEE 802.3, VLAN management, MAC address management, MSTP				
Basic feature	DHCP server/client, PPPoE server/client, PPPoA server/client, PPPoEoA server/client, NAT, Subinterface management				
Voice	RTP, SIP, SIP AG, IP PBX/TDM PBX, FXO/FXS, VoIP/Conference call, BESA, DISA, SBC, H.323 gatekeeper				
WLAN (AC)	AP management (AC discovery /AP access /AP management), CAPWAP, WLAN user management , WLAN radio management (802.11a/b/g/n), WLAN QoS (WMM), WLAN security (WEP/WPA/WPA2/Key management)				
3G	CDMA 2000 EV-DO Rev A, WCDMA, individual 3G uplink/backup link				
IPv4 unicast routing	Routing policy, static route, RIP, OSPF, IS-IS, BGP				
IPv6 unicast routing	Routing policy, static route, RIPng, OSPFv3, IS-ISv6, BGP4+				
Multicast	IGMP V1/V2/V3, IGMP-Snooping V1/V2/V3 (not supported on AR1200 series), PIM SM, PIM DM, MSDP				
MPLS	LDP, MPLS L3 VPN, static LSP, dynamic LSP, MPLS TE, IP FRR, LDP FRR, TE FRR				
VPN	IPSec VPN, GRE VPN, DSVPN, SSL VPN, L2TP VPN				
QoS	Diffserv mode, MPLS QoS, priority mapping, traffic policing (CAR), traffic shaping, congestion avoidance (based on IP precedence/DSCP WRED), congestion management (LAN interface: SP/WRR/SP+WRR; WAN interface: PQ/CBWFQ), MQC (traffic classifier, traffic behavior, and traffic policy), H-QoS, FR QoS, Smart Application Control (SAC)				
Security	ACL, firewall, 802.1x authentication, MAC address authentication, Web authentication, AAA authentication, RADIUS authentication, HWTACACS authentication, broadcast storm suppression, ARP security, ICMP attack defense, URPF, IP Source Guard, DHCP snooping, CPCAR, blacklist, IP source tracing				
Management and maintenance	Upgrade management, device management, web-based GUI, GTL, SNMP(v1/v2c/v3), RMON, NTP, CWMP, Auto-Config, deployment using USB disk, NetConf, CLI				

Note**: The maximum number of slots contains the number of all combined slots. Both AR2201-48FE and AR2202-48FE can support an expansion slot.

Table 2: Technical Specifications of AR1200 Series Routers

Item	AR1220	AR1220-D	AR1220V/1220VW	AR1220W
Forwarding performance (64 Byte)	450 Kpps	450 Kpps	450 Kpps	450 Kpps
WAN speed with services(IMIX)	200 Mbps	200 Mbps	200 Mbps	200 Mbps
Firewall performance (large packets)	900 Mbps	900 Mbps	900 Mbps	900 Mbps
Switching capacity	8 Gbps	8 Gbps	8 Gbps	8 Gbps
IPSec VPN Tunnels	2000	2000	2000	2000
Fixed Ethernet ports	2 x GE 8 x FE	2 x GE 8 x FE	2 x GE 8 x FE (4 x FE support PoE)	2 x GE 8 FE (4 x FE support PoE)
SIC slots	2	2	2	2
WSIC slots (default/max**)	0/1	0/1	0/1	0/1
XSIC slots (default/max**)	0/0	0/0	0/0	0/0
DSP	—	—	32 channels DSP	—
USB 2.0 ports	2			
Memory	512 MB	512 MB	512 MB	512 MB
Flash	256 MB	256 MB	256 MB	256 MB
Micro SD (default/max)	—	—	—	—
Max. power	54 W	54 W	54 W	54 W
AC power	100 V to 240 V; Frequency: 50 Hz/ 60 Hz	—	100 V-240 V; Frequency: 50 Hz/60 Hz	
DC power	—	-42 V~-53 V	—	—
Dimensions (H x W x D)	44.5 mm x 390 mm x 220 mm	44.5 mm x 390 mm x 220 mm	44.5 mm x 390 mm x 220 mm	44.5 mm x 390 mm x 220 mm
Ambient temp.	0°C to 40°C			
Relative humidity	5 to 90% (non-condensing)			
WAN interfaces	Ethernet, CE1/CT1, E1/T1, ADSL2+, G.SHDSL, Sync/Async Serial, ISDN			
LAN	IEEE 802.1P, IEEE 802.1Q, IEEE 802.3, VLAN management, MAC address management, MSTP			
Basic feature	DHCP server/client, PPPoE server/client, PPPoA server/client, PPPoEoA server/client, NAT, Subinterface management			
Voice	RTP, SIP, SIP AG, IP PBX/TDM PBX, FXO/FXS, VoIP/Conference call, BESA, DISA, SBC, H.323 gatekeeper			
WLAN (AP)	AP management, WLAN QoS (WMM), WLAN security (WEP/WPA/WPA2/key management), WLAN radio management (802.11b/g/n), WLAN user management(WLAN models only support WLAN AP features)			
WLAN (AC)	AP management (AC discovery /AP access /AP management), CAPWAP,WLAN user management, WLAN radio management (802.11a/b/g/n), WLAN QoS (WMM), WLAN security (WEP/WPA/WPA2/Key management)			

Item	AR1220	AR1220-D	AR1220V/1220VW	AR1220W
3G	CDMA 2000 EV-DO Rev A, WCDMA, individual 3G uplink/backup link			
IPv4 unicast routing	Routing policy, static route, RIP, OSPF, IS-IS, BGP			
IPv6 unicast routing	Routing policy, static route, RIPng, OSPFv3, IS-ISv6, BGP4+			
Multicast	IGMP V1/V2/V3, IGMP-Snooping V1/V2/V3 (not supported on AR1200 series), PIM SM, PIM DM, MSDP			
MPLS	LDP, MPLS L3 VPN, static LSP, dynamic LSP, MPLS TE, IP FRR, LDP FRR, TE FRR			
VPN	IPSec VPN, GRE VPN, DSVPN, SSL VPN, L2TP VPN			
QoS	Diffserv mode, MPLS QoS, priority mapping, traffic policing (CAR), traffic shaping, congestion avoidance (based on IP precedence/DSCP WRED), congestion management (LAN interface: SP/WRR/SP+WRR; WAN interface: PQ/CBWFQ), MQC (traffic classifier, traffic behavior, and traffic policy), H-QoS, WLAN QoS, FR QoS, Smart Application Control (SAC)			
Security	ACL, firewall, 802.1x authentication, AAA authentication, RADIUS authentication, HWTACACS authentication, broadcast storm suppression, ARP security, ICMP attack defense, URPF, CPCAR, blacklist, IP source tracing			
Management and maintenance	Upgrade management, device management, web-based GUI, GTL, SNMP(v1/v2c/v3), RMON, NTP, CWMP, Auto-Config, deployment using USB disk, NetConf, CLI			

Note**: The maximum number of slots contains the number of all combined slots.

Table 3: Technical Specifications of AR150 and AR200 Series Route

Item	AR201/ AR151	AR206/ AR156	AR207/ AR157	AR207V	AR207V-P	AR207G-HSPA+7/ AR157G-HSPA+7	AR208E/AR158E
Forwarding performance (64 Byte)	450 Kpps/300 Kpps	450 Kpps/300 Kpps	450 Kpps/300 Kpps	450 Kpps	450 Kpps	450 Kpps/300 Kpps	450 Kpps/300 Kpps
WAN speed with services(IMIX)	150 Mbps/100 Mbps	150 Mbps/100 Mbps	150 Mbps/100 Mbps	150 Mbps	150 Mbps	150 Mbps/100 Mbps	150 Mbps/100 Mbps
IPSec VPN Tunnels	75/30	75/30	75/30	75	75	75/30	75/30
Fixed WAN ports	2 x FE(the interface LAN 0 of which can be used as one WAN interface)	1 x ADSL2+ Annex B, 1 x FE(the interface LAN 0 of which can be used as one WAN interface)	1 x ADSL2+ Annex A/M, 1 x FE(the interface LAN 0 of which can be used as one WAN interface)	1 x ADSL2+ Annex A/M, 1 x FE(the interface LAN 0 of which can be used as one WAN interface)	1 x ADSL2+ Annex A/M, 1 x FE(the interface LAN 0 of which can be used as one WAN interface)	1 x ADSL2+ Annex A/M, 1 x FE(the interface LAN 0 of which can be used as one WAN interface)	1 x G.SHDSL 8-wire, 1 x FE(the interface LAN 0 of which can be used as one WAN interface)
Fixed Ethernet switching ports	8 x FE/4 x FE	8 x FE/4 x FE	8 x FE/4 x FE	8 x FE	8 x FE (8 x FE support PoE)	8 x FE/4 x FE	8 x FE/4 x FE
Fixed voice ports	—	—	—	4 x FXS, 1 x FXO	4 x FXS, 1 x FXO	—	—
Integrated 3G	—	—	—	—	—	WCDMA HSPA+7	—
USB 2.0 ports	1						

Item	AR201/ AR151	AR206/ AR156	AR207/ AR157	AR207V	AR207V-P	AR207G-HSPA+7/ AR157G-HSPA+7	AR208E/AR158E
Serial auxiliary /console ports	1						
Memory size	512 MB						
Flash memory	512 MB						
Maximum power	36W / 24W	36W / 24W	36W / 24W	60 W	60 W	36W / 24W	36W / 24W
Power supply (AC)	100 V to 240 V						
Frequency	50/60 Hz						
Dimensions (H x W x D)	44.5 mm x 300 mm x 220 mm (1.75 in. x 11.8 in. x 8.66 in.)						
Operating temperature	0°C to 40°C						
Relative humidity	5% to 90% (noncondensing)						
Basic feature	DHCP server/client, PPPoE server/client, PPPoA server/client, PPPoEoA server/client, NAT, Sub interface management						
Voice	RTP, SIP, SIP AG, IP PBX/TDM PBX, FXO/FXS, VoIP						
WLAN (AC)	AP management (AC discovery /AP access /AP management), CAPWAP,WLAN user management , WLAN radio management (802.11a/b/g/n), WLAN QoS (WMM), WLAN security (WEP/WPA/WPA2/Key management)						
LAN	IEEE 802.1P, IEEE 802.1Q, IEEE 802.3, VLAN management, MAC address management, MSTP						
IPv4 unicast routing	Routing policy, static route, RIP, OSPF, IS-IS, BGP						
IPv6 unicast routing	Routing policy, static route, RIPng, OSPFv3, IS-ISv6, BGP4+						
Multicast	IGMP version1/2/3, PIM SM, PIM DM, MSDP						
VPN	IPSec VPN, GRE VPN, DSVPN, SSL VPN, L2TP VPN						
QoS	Diffserv mode, Priority mapping, traffic policing (CAR), traffic shaping, congestion avoidance (based on IP precedence/DSCP WRED), congestion management (LAN interface: SP/WRR/SP+WRR; WAN interface: PQ/CBWFQ), MQC (traffic classification, traffic behavior, and traffic policy), H-QoS, WLAN QoS, FR QoS, , Smart Application Control (SAC)						
Security	ACL, firewall, 802.1x authentication, AAA authentication, RADIUS authentication, HWTACACS authentication, broadcast storm suppression, ARP security, ICMP attack defense, URPF, CPCAR, blacklist, IP source tracing, PKI						
Management and maintenance	Upgrade management, device management, web-based GUI, GTL, SNMP(v1/v2c/v3), RMON, NTP, CWMP, Auto-Config, site deployment using USB disk, NetConf, CLI						

Table 4: Technical Specifications of AR150 and AR200 Series Routers

Item	AR151G-HSPA+7	AR151W-P	AR157VW	AR157W	AR158EVW	AR201VW-P	AR207VW
Forwarding performance (64 Byte)	300 Kpps	300 Kpps	300 Kpps	300 Kpps	300 Kpps	450 Kpps	450 Kpps
WAN speed with services (IMIX)	100 Mbps	100 Mbps	100 Mbps	100 Mbps	100 Mbps	150 Mbps	150 Mbps
IPSec VPN Tunnels	30	30	30	30	30	75	75
Fixed WAN ports	2 x FE(the interface LAN 0 of which can be used as one WAN interface)	2 x FE(the interface LAN 0 of which can be used as one WAN interface)	1 x ADSL2+ Annex A/M, 1 x FE(the interface LAN 0 of which can be used as one WAN interface)	1 x ADSL2+ Annex A/M, 1 x FE(the interface LAN 0 of which can be used as one WAN interface)	1 x G.SHDSL 8-wire, 1 x FE(the interface LAN 0 of which can be used as one WAN interface)	2 x FE(the interface LAN 0 of which can be used as one WAN interface)	1 x ADSL2+ Annex A/M, 1 x FE(the interface LAN 0 of which can be used as one WAN interface)
Fixed Ethernet switching ports	4 x FE	4 x FE(4 x FE support PoE)	4 x FE	4 x FE	4 x FE	8 x FE (8 x FE support PoE)	8 x FE
Fixed voice ports	—	—	4 x FXS, 1 x FXO	—	4 x FXS, 1 x FXO	4 x FXS, 1 x FXO	4 x FXS, 1 x FXO
Integrated 3G	WCDMA HSPA+7	—	—	—	—	—	—
USB 2.0 ports	1						
Serial auxiliary /console ports	1						
Memory size	512 MB						
Flash memory	512 MB						
Maximum power	24W	24W	60W	24W	60 W	60W	60W
Power supply (AC)	100 V to 240 V						
Frequency	50/60 Hz						
Dimensions (H x W x D)	44.5 mm x 300 mm x 220 mm (1.75 in. x 11.8 in. x 8.66 in.)						
Operating temperature	0°C to 40°C						
Relative humidity	5% to 90% (noncondensing)						
Basic feature	DHCP server/client, PPPoE server/client, PPPoA server/client, PPPoEoA server/client, NAT, Sub interface management						
Voice	RTP, SIP, SIP AG, IP PBX/TDM PBX, FXO/FXS, VoIP						
WLAN (AP)	AP management, WLAN QoS (WMM), WLAN security (WEP/WPA/WPA2/key management), WLAN radio management (802.11a/b/g/n), WLAN user management(WLAN models only support WLAN AP features)						
WLAN (AC)	AP management (AC discovery /AP access /AP management), CAPWAP,WLAN user management , WLAN radio management (802.11a/b/g/n),WLAN QoS (WMM), WLAN security (WEP/WPA/WPA2/Key management)						
LAN	IEEE 802.1P, IEEE 802.1Q, IEEE 802.3, VLAN management, MAC address management, MSTP						

Item	AR151G-HSPA+7	AR151W-P	AR157VW	AR157W	AR158EVW	AR201VW-P	AR207VW
IPv4 unicast routing	Routing policy, static route, RIP, OSPF, IS-IS, BGP						
IPv6 unicast routing	Routing policy, static route, RIPng, OSPFv3, IS-ISv6, BGP4+						
Multicast	IGMP version1/2/3, PIM SM, PIM DM, MSDP						
VPN	IPSec VPN, GRE VPN, DSVPN, SSL VPN, L2TP VPN						
QoS	Diffserv mode, Priority mapping, traffic policing (CAR), traffic shaping, congestion avoidance (based on IP precedence/DSCP WRED), congestion management (LAN interface: SP/WRR/SP+WRR; WAN interface: PQ/CBWFQ), MQC (traffic classification, traffic behavior, and traffic policy), H-QoS, WLAN QoS, FR QoS, Smart Application Control (SAC)						
Security	ACL, firewall, 802.1x authentication, AAA authentication, RADIUS authentication, HWTACACS authentication, broadcast storm suppression, ARP security, ICMP attack defense, URPF, CPCAR, blacklist, IP source tracing, PKI						
Management and maintenance	Upgrade management, device management, web-based GUI, GTL, SNMP(v1/v2c/v3), RMON, NTP, CWMP, Auto-Config, site deployment using USB disk, NetConf, CLI						

Professional Service and Support

Huawei Professional Services provides expert network design and service optimization tasks, helping customers design and deploy a high-performance network that is reliable and secure, maximizing return on investment as well as reducing operational expenses.

Company Addendum

For more information, please visit <http://enterprise.huawei.com/en/> or contact your local Huawei office.







Copyright © Huawei Technologies Co., Ltd. 2013. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademark Notice

 , HUAWEI, and  are trademarks or registered trademarks of Huawei Technologies Co., Ltd. Other trademarks, product, service and company names mentioned are the property of their respective owners.

General Disclaimer

The information in this document may contain predictive statements including, without limitation, statements regarding the future financial and operating results, future product portfolio, new technology, etc. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance. Huawei may change the information at any time without notice.

HUAWEI TECHNOLOGIES CO.,LTD.
Huawei Industrial Base
Bantian Longgang
Shenzhen 518129,P.R.China
Tel: +86 755 28780808

www.huawei.com