Huawei AR G3 Series Enterprise Routers Brochures





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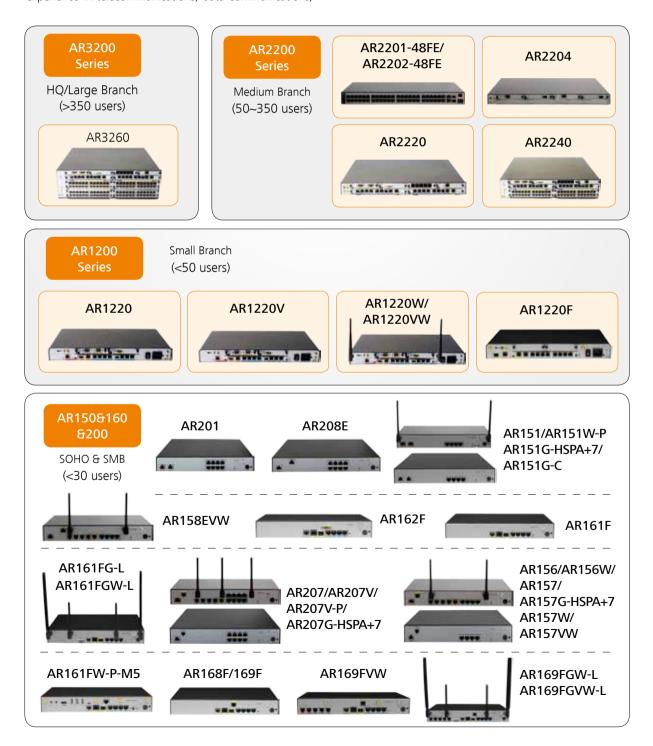
AR G3 Series Enterprise Routers

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Huawei AR G3 series enterprise routers (AR G3) are nextgeneration 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.

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, 3G interface cards and LTE 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).

About the interface card options, please refer to Huawei AR G3 Enterprise Routers Ordering Guide.

Key Advantages

Application in one, Reduce TCO



- Flexible access supporting dual-mode wireless and wired mode
- Converged Services with Data/Voice/security/WAN Acceleration, integrated in one box

Better Experience, Business Continuity



- Industry-Leading performance, cloud ready architecture, with non blocking throughput and hardware-Level QoS and IpSec Encryption service
- Service reliability and Network stability with hot-swappable boards and fault recovery<50ms

Cooperation platform, On Demand applications



- Customized services using OSP (Open Service Platform) with Linux/Windows/VM
- Easy network management using standard MIBs , on Huawei VRP platform, callable by 3rd party SNMP application

Typical Applications



Technical Specifications

Table 1: Technical Specifications of AR2200 and AR3200 Series Routers

Item	AR2201-48FE/ AR2202-48FE	AR2204	AR2220	AR2240	AR3260	
WAN speed with services(IMIX)	200 Mbps	200 Mbps	400 Mbps	600 Mbps (with SRU40) 1800 Mbps (with SRU80) 4.5 Gbps(with SRU200)	600 Mbps (with SRU40) 1800 Mbps (with SRU80) 4.5Gbps(with SRU200) 5.5Gbps(with SRU400)	
Firewall perfor- mance (large packets)	900 Mbps	900 Mbps	1.9 Gbps	5.5 Gbps (with SRU40) 9.5 Gbps (with SRU80) 15 Gbps(with SRU200)	5.5 Gbps (with SRU40) 9.5 Gbps (with SRU80) 15Gbps(with SRU200) 20Gbps(with SRU400)	
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 * GE(2 * Combo) /4 * GE Combo+ 2 * 10GE	3 * GE(2 * Combo) /4 * GE Combo+ 2 * 10GE	
SIC slots	0	4	4	4	4	
WSIC slots (default/max**)	0	0/2	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	0/3*DSP Slots	0/3*DSP Slots	
USB 2.0 ports	1	2	2	2	2	
Memory	512 MB	1 GB	2 GB	2GB/8GB	2GB/8GB	
Flash (default/max**)	512MB	512MB/4GB	2GB/4GB	2GB/4GB	2GB/4GB	
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; Frequ	uency: 50 Hz/60 H	łz	1	1	
DC power	_	_	-48 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	88.1mm x 442 mm x 470 mm	130.5 mm x 442 mm x 470 mm	
Ambient temp.	0°C to 45°C					
Relative humidity	5 to 95% (non-cor	ndensing)				
WAN interfaces	Ethernet, CE1/CT1,	E1/T1, ADSL2+, (G.SHDSL, Sync/As	ync Serial, ISDN, CPOS, POS		
LAN	IEEE 802.1P, IEEE 8	02.1Q, IEEE 802.3	3, VLAN manager	nent, MAC address management,	MSTP	
Basic feature	DHCP server/client,	, PPPoE server/clie	nt, PPPoA server/	client, PPPoEoA server/client, NAT	, Subinterface management	
Voice	RTP, SIP, SIP AG, IP	PBX/TDM PBX, FX	(O/FXS, VoIP/Con	ference call, BESA, DISA, SBC, H.3	323 gatekeeper	
WLAN(AC)	5			ement),CAPWAP,WLAN user mana AN security(WEP/WPA/WPA2/Key	5	
	management(802.11a/b/g/n),WLAN QoS(WMM), WLAN security(WEP/WPA/WPA2/Key management) CDMA 2000 EV-DO Rev A, WCDMA, individual 3G uplink/backup link					

Item	AR2201-48FE/ AR2202-48FE	AR2204	AR2220	AR2240	AR3260	
LTE	FDD LTE: Uplink: 50)Mbit/s Downlin	ık: 100Mbit/s,			
IPv4 unicast routing	Routing policy, stat	ic route, RIP, OSP	F, IS-IS, BGP			
IPv6 unicast routing	Routing policy, stat	ic route, RIPng, C)SPFv3, IS-ISv6, B	GP4+		
Multicast	IGMP V1/V2/V3, IG	GMP-Snooping V1	/V2/V3 (not supp	orted on AR1200 series), PIM SM,	, PIM DM, MSDP	
MPLS	LDP, MPLS L3 VPN,	static LSP, dynam	nic LSP, MPLS TE,	P FRR, LDP FRR, TE FRR		
VPN	IPSec VPN, GRE VP	N, DSVPN, SSL VF	PN, L2TP VPN, Sm	art VPN		
QoS	precedence/DSCP \	WRED), congestio Iffic behavior, and	n management (l traffic policy), Hi	licing (CAR), traffic shaping, cong AN interface: SP/WRR/SP+WRR; V erarchical QoS, FR QoS, Smart Ap	VAN interface: PQ/CBWFQ), MQC	
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.

The flash memory storage can be expanded by Micro SD card.

Item	AR1220	AR1220-D	AR1220V/ 1220VW	AR1220W	AR1220F
WAN speed with services(IMIX)	200 Mbps	200 Mbps	200 Mbps	200 Mbps	400Mbps
Firewall perfor- mance (large packets)	900 Mbps	900 Mbps	900 Mbps	900 Mbps	1200Mbps
Switching capacity	8 Gbps	8 Gbps	8 Gbps	8 Gbps	8Gbps
IPSec VPN Tunnels	2000	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)	2 x GE(1 x Combo) 8 x FE
SIC slots	2	2	2	2	2
WSIC slots (default/max**)	0/1	0/1	0/1	0/1	0/1
XSIC slots (default/max**)	0/0	0/0	0/0	0/0	0/0
DSP	—	_	32 channels DSP	_	—

Table 2: Technical Specifications of AR1200 Series Routers

Item	AR1220	AR1220-D	AR1220V/ 1220VW	AR1220W	AR1220F
USB 2.0 ports	2				
Memory	512 MB	512 MB	512 MB	512 MB	512MB
Flash	256 MB	256 MB	256 MB	256 MB	512MB
Micro SD (default/max)	_				—
Max. power	54 W	54 W	54 W	54 W	54W
AC power	100 V to 240 V; Frequency: 50 Hz/60 Hz	_	100 V-240 V; Frequen	cy: 50 Hz/60 Hz	1
DC power	—	-42 V~-53 V	—	—	100 V-240 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	44.5 mm x 390 mm x 220 mm
Ambient temp	0°C to 45°C				
Relative humidity	5 to 95% (non-conde	nsing)			
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 r	nanagement, MAC add	ress management, MST	Р
Basic feature	DHCP server/client, PP	PoE server/client, PPPoA	A server/client, PPPoEoA	server/client, NAT, Subi	nterface managemen
Voice	RTP, SIP, SIP AG, IP PB> models support voice		oIP/Conference call, BE	SA, DISA, SBC, H.323 g	atekeeper(Only voice
WLAN(AP)			security (WEP/WPA/WF agement(Only WLAN m		
WLAN(AC)		,	management),CAPWAI 1M), WLAN security(WE		
3G	CDMA 2000 EV-DO R	ev A, WCDMA, individu	al 3G uplink/backup linl	ζ.	
LTE	FDD LTE: Uplink: 50M	pit/s Downlink: 100Mb	pit/s,		
IPv4 unicast routing	Routing policy, static r	oute, RIP, OSPF, IS-IS, B	GP		
IPv6 unicast routing	Routing policy, static r	oute, RIPng, OSPFv3, IS	-ISv6, BGP4+		
Multicast	IGMP V1/V2/V3, IGMF	P-Snooping V1/V2/V3 (r	not supported on AR120	00 series), PIM SM, PIM	DM, MSDP
MPLS	LDP, MPLS L3 VPN, sta	tic LSP, dynamic LSP, M	PLS TE, IP FRR, LDP FRR,	, TE FRR	
VPN	IPSec VPN, GRE VPN,	DSVPN, SSL VPN, L2TP	VPN, Smart 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	HWTACACS authentic		thentication, RADIUS au suppression, ARP securi cing		
Management and maintenance			web-based GUI, GTL, S It using USB disk, NetCo		

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

Table 3: Technical Specifications of AR150 and AR200 Series Routers

Item	AR201/ AR151	AR156/ AR156W	AR207/ AR157	AR207V	AR207V-P	AR207G-HSPA+7/ AR157G-HSPA+7	AR208E/ AR158E	
WAN speed with services(IMIX)	150 Mbps/ 100 Mbps	100 Mbps/ 100Mbps	150 Mbps/ 100 Mbps	150 Mbps	150 Mbps	150 Mbps/100 Mbps	150 Mbps/ 100 Mbps	
IPSec VPN Tunnels	75/30	30/30	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)	interface LANAnnex J,Annex A/M,Annex A/M,Annex A/M,Annex A/M,A/M0 of which1 x FE(the1 x FE(the1 x FE(the1 x FE(theinterface LANcan be usedinterface LANinterface LANinterface LAN0 of which0 of which0 of which					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	4 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			•	•		•	
Serial auxiliary /console ports	1							
Memory size	512 MB							
Flash memory	512 MB							
Maximum power	36W / 24W	24W/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 45°C							
Relative humidity	5% to 95% (no	ncondensing)						
Basic feature	DHCP server/cli	ent, PPPoE serve	r/client, PPPoA s	erver/client, PPPc	DEOA server/clien	it, NAT, Sub interface m	nanagement	
Voice	RTP, SIP, SIP AG	, IP PBX/TDM PB	X, FXO/FXS, Voli	P(Only voice mod	dels support voic	e features)		
WLAN(AP)				ecurity (WEP/WP/ /LAN models sup		nagement), WLAN radio features)	o management	
WLAN (AC)						er management , WLA /PA2/Key management		
LAN	IEEE 802.1P, IEE	E 802.1Q, IEEE 8	802.3, VLAN ma	nagement, MAC	address manag	ement, MSTP		
LTE	FDD LTE: Uplink	: 50Mbit/s Dov	vnlink: 100Mbit	′s,				

Item	AR201/ AR151	AR156/ AR156W	AR207/ AR157	AR207V	AR207V-P	AR207G-HSPA+7/ AR157G-HSPA+7	AR208E/ AR158E		
IPv4 unicast routing	Routing policy,	Routing policy, static route, RIP, OSPF, IS-IS, BGP							
IPv6 unicast routing	Routing policy,	Routing policy, static route, RIPng, OSPFv3, IS-ISv6, BGP4+							
Multicast	IGMP version1/	2/3, PIM SM, PIN	M DM, MSDP						
VPN	IPSec VPN, GRE	VPN, DSVPN, S	SL VPN, L2TP VP	N, Smart VPN					
QoS	DSCP WRED), c	ongestion mana	gement (LAN int	terface: SP/WRR/	SP+WRR; WAN i	n avoidance (based on nterface: PQ/CBWFQ), mart Application Contr	MQC (traffic		
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 maint- enance	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/ AR151G-C	AR151W-P	AR157VW	AR157W	AR158EVW			
WAN speed with services (IMIX)	100 Mbps	100 Mbps	100 Mbps	100 Mbps	100 Mbps			
IPSec VPN Tunnels	30	30	30	30	30			
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)			
Fixed Ethernet switching ports	4 x FE	4 x FE(4 x FE support PoE)	4 x FE	4 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/ CDMA2000 EVDO	_	_	_	_			
USB 2.0 ports	1							
Serial auxiliary /console ports	1							
Memory size	512 MB							
Flash memory	512 MB	512 MB						
Maximum power	24W	24W	60W	24W	60 W			
Power supply (AC)	100 V to 240 V	100 V to 240 V						

Item	AR151G-HSPA+7/ AR151G-C	AR151W-P	AR157VW	AR157W	AR158EVW				
Frequency	50/60 Hz	50/60 Hz							
Dimensions (H x W x D)	44.5 mm x 300 mm x 3	220 mm (1.75 in. x 11.8	in. x 8.66 in.)						
Operating temperature	0°C to 45°C								
Relative humidity	5% to 95% (nonconde	nsing)							
Basic feature	DHCP server/client, PPF	PoE server/client, PPPoA	server/client, PPPoEoA se	rver/client, NAT, Sub inte	erface management				
Voice	RTP, SIP, SIP AG, IP PBX	/TDM PBX, FXO/FXS, Vo	IP(Only voice models sup	oport voice features)					
WLAN(AP)			ecurity (WEP/WPA/WPA2 y WLAN models support		AN radio management				
WLAN(AC)			management)),CAPWAP, M), WLAN security(WEPA						
LAN	IEEE 802.1P, IEEE 802.1	Q, IEEE 802.3, VLAN m	anagement, MAC addres	s management, MSTP					
IPv4 unicast routing	Routing policy, static ro	oute, RIP, OSPF, IS-IS, BG	Ρ						
IPv6 unicast routing	Routing policy, static ro	oute, RIPng, OSPFv3, IS-I	Sv6, BGP4+						
Multicast	IGMP version1/2/3, PIN	1 SM, PIM DM, MSDP							
VPN	IPSec VPN, GRE VPN, D	OSVPN, SSL VPN, L2TP V	PN, Smart 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							
Manage- ment and maint- enance	Upgrade management site deployment using		veb-based GUI, GTL, SNN	 ЛР(v1/v2c/v3), RMON, N	TP, CWMP, Auto-Config,				

Table 5: Technical Specifications of AR160 Series Routers

Item	AR161F	AR161FG-L	AR161FGW-L	AR162F						
	Hardware									
WAN speed with services(IMIX)	150 Mbps	150 Mbps	150 Mbps	150 Mbps						
Fixed WAN ports	2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)	2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)	2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)	1 x SA, 2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)						
Fixed Ethernet switching ports	4 x GE	4 x GE	4 x GE	4 x GE						
Fixed voice ports	—	—	—	_						

Item	AR161F	AR161FG-L	AR161FGW-L	AR162F				
Integrated 3G	—	—	—	—				
Integrated LTE								
USB 2.0 ports	1 1 1 1							
Serial auxiliary /console ports	1	1	1	1				
Memory size	512 MB	512 MB	512 MB	512 MB				
Flash memory	512 MB	512 MB	512 MB	512 MB				
PoE power	—	_	_	—				
Maximum power	24W	24W	24W	36W				
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 mi	m (1.75 in. x 11.8 in. x 8.66 in.)					
Operating temperature	0°C to 45°C							
Relative humidity	5% to 95% (noncondensing)							
		Software						
Basic feature	DHCP server/client, PPPoE ser	ver/client, PPPoA server/client,	PPPoEoA server/client, NAT, Su	ıb interface management				
Voice	RTP, SIP, SIP AG, IP PBX/TDM features)	PBX, FXO/FXS, VoIP, BEST, DISA	, SBC, H.323 gatekeeper (Void	e models only support voice				
WLAN(AP)	AP management, WLAN QoS support WLAN AP features)	, WLAN security, WLAN radio r	nanagement, WLAN user man	agement(Only WLAN models				
WLAN(AC)		ry /AP access /AP management ,WLAN QoS(WMM), WLAN sec						
LAN	IEEE 802.1P, IEEE 802.1Q, IEE	E 802.3, VLAN management, I	MAC address management, M	STP, etc.				
IPv4 unicast routing	Routing policy, static route, R	IP, OSPF, IS-IS, BGP						
IPv6 unicast routing	Routing policy, static route, RIPng, OSPFv3, IS-ISv6, BGP4+							
Multicast	IGMP version1/2/3, PIM SM,	IGMP version1/2/3, PIM SM, PIM DM, MSDP						
VPN	IPSec VPN, GRE VPN, DSVPN,	SSL VPN, L2TP VPN, Smart VP	N					
QoS	DSCP WRED), congestion ma	ng, traffic policing (CAR), traffi nagement (LAN interface: SP/V and traffic policy), Hierarchica	VRR/SP+WRR; WAN interface:	PQ/CBWFQ), MQC (traffic				
Security		ication, AAA authentication, R ARP security, ICMP attack defe						

Table 6: Technical Specifications of AR160 Series Routers

Item	AR168F	AR169F	AR169FVW	AR169FGW-L	AR169FGVW-L				
	Hardware								
WAN speed with services(IMIX)	150 Mbps	150 Mbps	150 Mbps	150 Mbps	150 Mbps				
Fixed WAN ports	1 x G.SHDSL 8-wire, 2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)	1 x VDSL2, 2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)	1 x VDSL2 2-pairs, 2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)	1 x VDSL2 2-pairs, 2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)	1 x VDSL2 2-pairs, 2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)				
Fixed Ethernet switching ports	4 x GE	4 x GE	4 x GE	4 x GE	4 x GE				
Fixed voice ports	_	—	4 x FXS, 1 x FXO	—	4 x FXS, 1 x FXO				
Integrated 3G	_	—	—	—	—				
Integrated LTE			—	FDD LTE	FDD LTE				
USB 2.0 ports	1	1	1	1	1				
Serial auxiliary /console ports	1	1	1	1	1				
Memory size	512 MB	512 MB	1G MB	1GB	1G MB				
Flash memory	512 MB	512 MB	512 MB	512 MB	512 MB				
PoE power	—	_	—	—	—				
Maximum power	24W	24W	24W	24 W	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 45°C	0°C to 45°C							
Relative humidity	5% to 95% (noncond	ensing)							

Item	AR168F	AR169F	AR169FVW	AR169FGW-L	AR169FGVW-L						
	Software										
Basic feature	DHCP server/client, PF	DHCP server/client, PPPoE server/client, PPPoA server/client, PPPoEoA server/client, NAT, Sub interface management									
Voice	RTP, SIP, SIP AG, IP PB: features)	X/TDM PBX, FXO/FXS	5, Volp, Best, Disa, SBC, H.	323 gatekeeper (Voice mo	dels only support voice						
WLAN(AP)	AP management, WL support WLAN AP fea		rity, WLAN radio managem	ient, WLAN user managem	ent(Only WLAN models						
WLAN(AC)			/AP management)),CAPW/ WMM), WLAN security(WE								
LAN	IEEE 802.1P, IEEE 802.	.1Q, IEEE 802.3, VLA	N management, MAC add	ress management, MSTP, e	tc.						
IPv4 unicast routing	Routing policy, static r	route, RIP, OSPF, IS-IS	, BGP								
IPv6 unicast routing	Routing policy, static i	route, RIPng, OSPFv3	, IS-ISv6, BGP4+								
Multicast	IGMP version1/2/3, PI	M SM, PIM DM, MSI	ЭР								
VPN	IPSec VPN, GRE VPN,	DSVPN, SSL VPN, L2 ⁻	TP VPN, Smart VPN								
QoS	WRED), congestion m	anagement (LAN inte	5	VAN interface: PQ/CBWFQ	ased on IP precedence/DSCP), MQC (traffic classification,						
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,									
Manage- ment and maint- enance	1.5		nt, web-based GUI, GTL, Si	NMP(v1/v2c/v3), RMON, N	Jpgrade management, device management, web-based GUI, GTL, SNMP(v1/v2c/v3), RMON, NTP, CWMP, Auto-Config, site deployment using USB disk, NetConf, CLI						



Table 7: Technical Specifications of AR160 Series Routers

Item	AR161FW-P-M5
WAN speed with services (IMIX)	150 Mbps
IPSec VPN Tunnels	30
Fixed WAN ports	2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)
Fixed Ethernet switching ports	4 x GE(PoE)
WLAN	802.11 b/g/n
USB 2.0 ports	1
Serial auxiliary/console ports	1
Video ports	1 x HDMI
USB ports(OSP System)	1 x USB OTG + 3 x USB 2.0 HOST
Audio ports	1 x 3.5mm audio output (Earphone), 1 x 3.5mm audio input (MIC)
Bluetooth ports	1
RS485 ports	1 x RS485/RS232/RS422
ZigBee ports	1
Memory size (Main control system)	512 MB
Flash memory	512 MB
Memory size (OSP System)	4GB
Flash(OSP System)	2GB
EMMC(OSP System)	32GB
Maximum power	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 45°C
Relative humidity	5% to 95% (noncondensing)
	Software
Basic features	DHCP server/client, PPPoE server/client, PPPoA server/client, PPPoEoA server/client, NAT, Sub interface management
WLAN(AP)	AP management, WLAN QoS, WLAN security, WLAN radio management, WLAN user management(Only WLAN models support WLAN AP features)

Item	AR161FW-P-M5
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, etc.
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, Smart 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), Hierarchical 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.





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