Huawei AR G3 Series
Enterprise Routers Brochures

HUAWEI TECHNOLOGIES CO., LTD.

AR G3 Series Enterprise Routers

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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.

AR3200 Series		AR2200 Series	AR2201-48FE/ AR2202-48FE	AR2204
HQ/Large Branch (>350 users)		Medium Branch (50~350 users)	AR2220	AR2240
	AR3260			

AR1200 Series — Small Branch (<50 users)

AR1220	AR1220V	AR1220W/ AR1220VW	AR1220F

AR150&160 &200 — SOHO & SMB (<30 users)

AR201	AR208E	AR151/AR151W-P AR151G-HSPA+7/ AR151G-C

AR158EVW	AR162F	AR161F

AR161FG-L AR161FGW-L	AR207/AR207V/ AR207V-P/ AR207G-HSPA+7	AR156/AR156W/ AR157/ AR157G-HSPA+7 AR157W/ AR157VW

AR161FW-P-M5	AR168F/169F	AR169FVW	AR169FGW-L AR169FGVW-L

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

| Voice Gateway | Broadband/Leased Line | 3G/LTE Wireless Backup | One-stop GE Access | Value-Added Service Platform |

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
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 performance (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; Frequency: 50 Hz/60 Hz				
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-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				

Item	AR2201-48FE/ AR2202-48FE	AR2204	AR2220	AR2240	AR3260
LTE	FDD LTE: Uplink: 50Mbit/s Downlink: 100Mbit/s,				
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, 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), Hierarchical QoS, FR QoS, Smart Application Control (SAC), Hard QoS(SRU series main boards support)				
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.

Table 2: Technical Specifications of AR1200 Series Routers

Item	AR1220	AR1220-D	AR1220V/ 1220VW	AR1220W	AR1220F
WAN speed with services(IMIX)	200 Mbps	200 Mbps	200 Mbps	200 Mbps	400Mbps
Firewall performance (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 x 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	—	—

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; Frequency: 50 Hz/60 Hz		
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-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(Only voice models support voice features)				
WLAN(AP)	AP management, WLAN QoS (WMM), WLAN security (WEP/WPA/WPA2/key management), WLAN radio management (802.11b/g/n), WLAN user management(Only WLAN models 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)				
3G	CDMA 2000 EV-DO Rev A, WCDMA, individual 3G uplink/backup link				
LTE	FDD LTE: Uplink: 50Mbit/s Downlink: 100Mbit/s,				
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, 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	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 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)	1 x ADSL2+ Annex J, 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	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% (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(Only voice models support voice features)						
WLAN(AP)	AP management, WLAN QoS (WMM), WLAN security (WEP/WPA/WPA2/key management), WLAN radio management (802.11b/g/n), WLAN user management(Only WLAN models 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						
LTE	FDD LTE: Uplink: 50Mbit/s Downlink: 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, 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), 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 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				
Maximum power	24W	24W	60W	24W	60 W
Power supply (AC)	100 V to 240 V				

Item	AR151G-HSPA+7/ AR151G-C	AR151W-P	AR157VW	AR157W	AR158EVW
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)				
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(Only voice models support voice features)				
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(Only WLAN models 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				
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), 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, device management, web-based GUI, GTL, SNMP(v1/v2c/v3), RMON, NTP, CWMP, Auto-Config, site deployment using USB disk, NetConf, CLI				

Table 5: Technical Specifications of AR160 Series Routers

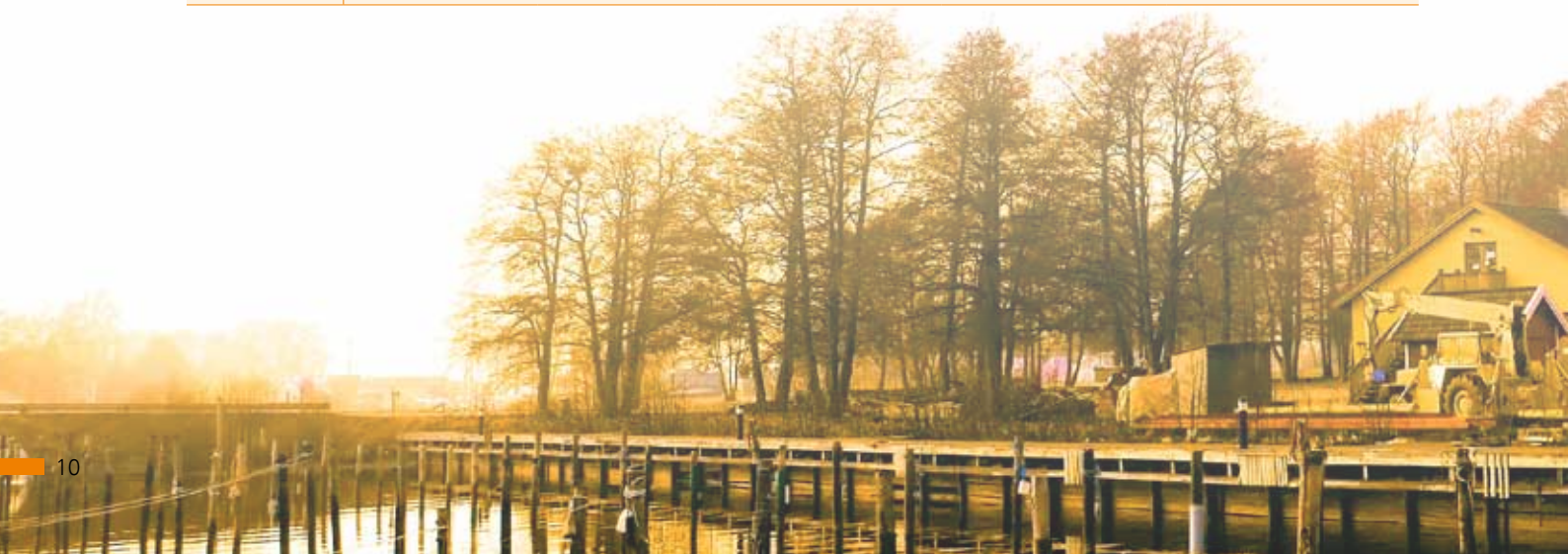| Item	AR161F	AR161FG-L	AR161FGW-L	AR162F
Hardware				
WAN speed with services(IMIX)	150 Mbps	150 Mbps	150 Mbps	150 Mbps
Fixed WAN ports	2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)	2 x GE (1x GE Combo, the interface LAN 0 of which can be used as one WAN interface)	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	—	FDD LTE	FDD 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 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 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, BEST, DISA, SBC, H.323 gatekeeper (Voice models only support voice features)
WLAN(AP)	AP management, WLAN QoS, WLAN security, WLAN radio management, WLAN user management(Only WLAN models 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, 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 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 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				
Relative humidity	5% to 95% (noncondensing)				

Item	AR168F	AR169F	AR169FVW	AR169FGW-L	AR169FGVW-L
			Software		
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, BEST, DISA, SBC, H.323 gatekeeper (Voice models only support voice features)				
WLAN(AP)	AP management, WLAN QoS, WLAN security, WLAN radio management, WLAN user management(Only WLAN models 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, 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				

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.