

Huawei AR1200 Series Enterprise Routers Datasheet



AR1200 Series Enterprise Routers

AR1200 Series Enterprise Routers

Huawei AR1200 Series routers are designed to provide secure and scalable unified voice and data communications for small enterprises or large enterprise branch offices.

Product Overview

Huawei AR1200 series enterprise routers are next-generation enterprise-class routers based on the Huawei proprietary Versatile Routing Platform (VRP). They build on Huawei's record of leadership in data communication and networking to provide industry-leading system performance and scalability to meet current and future business needs.

The AR1200 series integrates routing, switching, 3G service, Wireless LAN (WLAN), voice, and security functions. The AR1200 uses an embedded hardware encryption technique and supports a voice-optimized Digital Signal Processor (DSP). The router supports firewall security, call processing, voice mail, and other applications. It supports wired and wireless access modes, including E1/T1, xDSL, xPON, WiFi, 3G, and more. The AR1220EV and AR1220EVW models provide Power over Ethernet (PoE) on fixed 100M/1G Ethernet interfaces.

The AR1220 series has been qualified with Microsoft Lync server, and can be seamlessly integrated into Microsoft unified communications solutions.

Table 1: AR1200 Models

AR1220C



- WAN speed with services(IMIX): 200Mbps
- Fixed port: 8xGE(can be configured as WAN interfaces), 4xGE + 1xGE SFP
- Slot: 2xSIC
- Dimensions (H x W x D): 44.5mm x 390 mm x 220mm(1.8 in. x 15.4 in. x 8.7 in)

AR1220E



- WAN speed with services(IMIX): 400Mbps
- Fixed port: 8xGE(can be configured as WAN interfaces), 2xGE Combo
- Slot: 2xSIC
- Dimensions (H x W x D): 44.5mm x 390 mm x 220 mm(1.8 in. x 15.4 in. x 8.7 in)

AR1220F



- WAN speed with services(IMIX): 400Mbps
- Fixed port: 8*FE(can be configured as WAN interfaces), 2*GE(1*Combo)
- Slot: 2xSIC
- Dimensions (H x W x D):44.5mm x 390mm x 220mm(1.8 in. x 15.4 in. x 8.7 in)

AR1220EV



- WAN speed with services(IMIX): 400Mbps
- Fixed port: 8xGE(four GE ports support PoE) (can be configured as WAN interfaces), 2XGE combo
- PoE: compliance with IEEE 802.3af and 802.3at
- DSP: 32 channels supported
- Slot: 2xSIC
- Dimensions (H x W x D): 44.5mm x 390 mm x 220 mm(1.8 in. x 15.4 in. x 8.7 in)

AR1220EVW



- WAN speed with services(IMIX): 400Mbps
- Fixed port: 8xGE(four GE ports support PoE) (can be configured as WAN interfaces), 2XGE combo
- PoE: compliance with IEEE 802.3af and 802.3at
- DSP: 32 channels supported
- Slot: 2xSIC
- WiFi: compliance with 802.11b/g/n
- Dimensions (H x W x D):44.5mm x 390 mm x 220 mm(1.8 in. x 15.4 in. x 8.7 in)

AR1220-D



- WAN speed with services(IMIX): 200Mbps
- Fixed port: 8xFE(can be configured as WAN interfaces), 2xGE
- Slot: 2xSIC
- Embedded DC power supply
- Dimensions (H x W x D): 44.5mm x 390 mm x 220 mm(1.8 in. x 15.4 in. x 8.7 in)

The AR1200 supports optional interface cards, including: Ethernet, E1/T1/PRI/VE, synchronous/asynchronous, ADSL2+, G.SHDSL, and VDSL, FXS and FXO, ISDN, EPON and GPON, 3G, LTE and E&M interface cards. These cards are classified into SIC (Smart Interface Card) cards and WSIC (Double-Width SIC) cards depending on slot type. The primary interface cards are shown and described in the table below.

Note: For more information about interface cards, please refer to Ordering Guide.

Features and Benefits

Applications in one box, Reduce TCO

The AR1200 reduces equipment and deployment costs via the integration of routing, switching, 3G service, wireless LAN (WLAN), voice, and security functions in a single device. At the same time, The AR1200 realizes enterprises flexible access with rich interfaces adapting to a variety of terminals.

Industry-Leading Voice Quality and User Experience

Enterprise-class voice communication is flexible and efficient, thanks to the AR1200 voice features that can easily be integrated within new or existing data networks.

- Basic voice functions are provided by the built-in PBX, SIP server, and SIP access gateway.
- Value-added voice services include multi-party communication, IVR automatic connection, ring-back-tone, parallel ringing, sequential ringing, “one number link to you” (ONLY), billing and subscriber management.
- Intelligent call routing means exceptional voice service reliability.
- Interconnection with the NGN/IMS/PBX/terminal of mainstream vendors
- The Quality of Experience (QoE) feature monitors voice service quality in real time.
- Jitter buffer, echo cancellation, and packet loss compensation all improve the user experience.

Secure Service Access Protects Networks and Users

While delivering enterprise-class network services, the AR1200 router provides robust network security. The complete security solution includes user access control, packet detection, and active attack defense.

- The built-in firewall is the first line of defense.
- Port authentication technologies include 802.1x authentication and MAC address authentication
- Device authentication methods include RADIUS, and HWTACACS
- VPN technologies include IPSec VPN, GRE VPN, DSVPN, L2TP VPN

Integration of wireless and wired Functions

Table 3: Wireless Access Modes

| Access Mode | Description |
|-------------|---|
| WLAN | <p>Compliance with 802.11n and compatible with 802.11b/g reduces equipment costs.</p> <p>Multiple-input and multiple-output (MIMO) increases bandwidth and improves the user experience.</p> <p>Authentication technologies such as WEP, WPA/WPA2, WAPI and 802.1x provide robust security.</p> <p>Built-in AC function, establish WLAN campus flexibly</p> |
| 3G | <p>Compliance with 3G standards, including CDMA2000 EV-DO, and WCDMA, means flexible network access.</p> <p>Network Quality Analyzer (NQA) monitors the link real-time status to meet Service Level Agreements (SLAs).</p> <p>Security VPN over 3G links ensures reliable service transmission.</p> |
| LTE | <p>100M LTE enterprise access solutions, high bandwidth experience</p> <p>Support for transition from 3G networks to LTE networks protects customer investment.</p> |

Table 4: Wired Access Modes

| Access Mode | Description |
|--------------|--|
| Fiber | <p>Gigabit Ethernet optical interfaces allow flexible network access.</p> <p>10Gbps bandwidth meets the transmission requirements of bandwidth-intensive services, for instance, voice services.</p> <p>EPON and GPON interface cards are supported.</p> |
| Copper cable | <p>Support for various interfaces, including xDSL interfaces, E1/T1 interfaces, serial ports, and ISDN interfaces, protects customer investment.</p> <p>Choice of uplink access rates from 64 kbps to 1 Gbps.</p> <p>PoE support on Ethernet interfaces facilitates installation of powered devices by providing power over twisted pair cables.</p> |

Better Experience, Business Continuity

Multi-cores architecture, Industry-Leading performance

The AR1200 uses a multi-core CPU and non-blocking switching structure to provide industry-leading system performance, meeting enterprise requirements for network expansion and service deployment.

- The multi-core CPU speeds up concurrent data and voice service processing so customers can deploy a large number of services.
- Achieves maximum traffic throughput with non-blocking switching.
- Delivers high performance and service reliability through independent protocol management, service processing, and data switching.
- Simplifies device configuration and maintenance by integrating routing and switching functions, improving data switching efficiency between interface cards.

Low cost, High reliability

To guarantee the reliability of the equipment layer and network layer, the AR1200 series support hot-swap technology, a series of fault detection and judgment mechanisms, which can shorten the service interruption time.

- Assure service reliability and network stability with hot-swappable interface cards and redundant components, such as fan modules.
- Link backup for enterprise services improves reliability.
- MS level Fault detection mechanisms, shorten the service interruption time
- Local survival, improve the voice reliability of branch network

Intelligent Service Deployment

As the enterprise grows, requirements for new service deployments increase. To meet the demands of a growing enterprise, the AR1200 provides convenient configuration options:

- Use the mini-USB port to configure the devices using a GUI.
- Use a USB drive to configure devices for plug-and-play.
- Use the auto-config feature to automatically distribute configurations to devices.

Cooperation platform, On Demand applications

Open Service Platform, Enterprise-level APP

The AR1200 provides a unified communication solution for enterprise customers. It uses the Open Service Platform (OSP) to interconnect with third-party IT systems. Customers, agents, third-party vendors, and manufacturers can develop and use the AR1200 as required.

- Integrate and customize services quickly.
- Reduces costs and simplifies management as service integration does not require dedicated servers.
- Services are synchronized with cloud-side services, and local services processed locally, which improves service quality and efficiency.

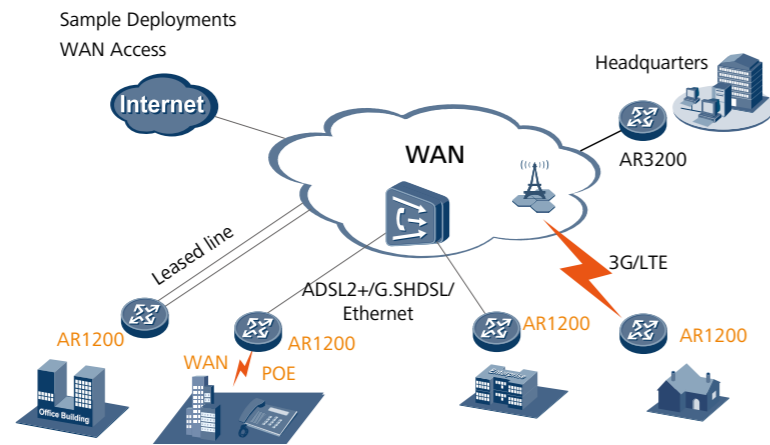
Standard MIB provided by VRP, Simplified Network and Device Management

The AR1200 makes network and device management simple:

- Manage devices easily with the Huawei eSight network management system.
- Monitor links in real time using the NQA feature.
- View traffic characteristics and statistics to maintain peak network performance using the NetStream feature.

Sample Deployments

WAN Access



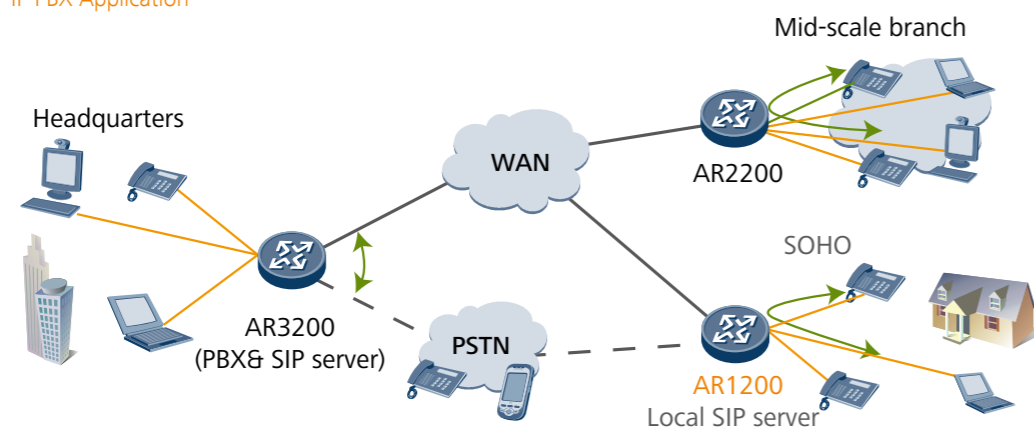
AR1200 routers deployed at the edge of enterprise branches provide flexible access to remote network connections. They meet most access requirements, including leased line, Ethernet, xDSL, LTE, 3G service, and WLAN. This flexibility adds compelling value to customers by reducing deployment and maintenance costs. Router models with fixed 100 M Ethernet interfaces support PoE and PoE+, and can provide power for powered devices (PDs), such as IP phones. Each PoE+ interface provides more than 30 W of power to support high-power PDs.

AR routers support LTE which can increase the wireless speed greatly and improve the spectral efficiency. The end-to-end LTE QoS mechanism and the AR routers' bandwidth monitoring and dynamic adjustment of QoS policy can guarantee high priority services.

High-Quality Voice Service

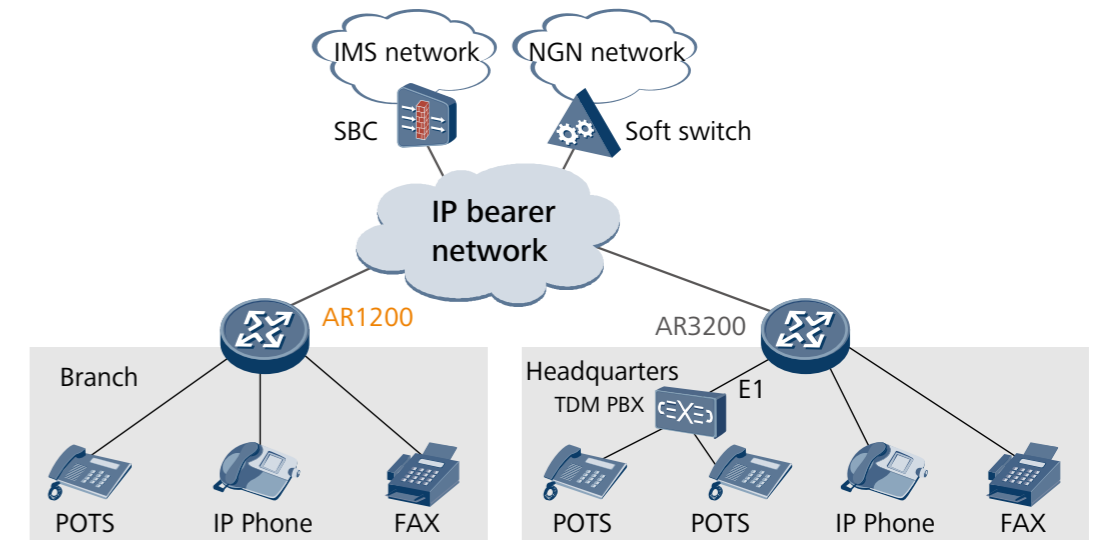
The AR1200 can function as an IP PBX or SIP gateway for enterprise networks.

IP PBX Application



To enhance the corporate image and improve communication efficiency, all AR routers include a built-in PBX. This feature supports the enterprise main number, Interactive Voice Response (IVR), and bill query functions. The AR1200 can also be located in a branch office to provide intelligent dialing.

SIP Gateway Application

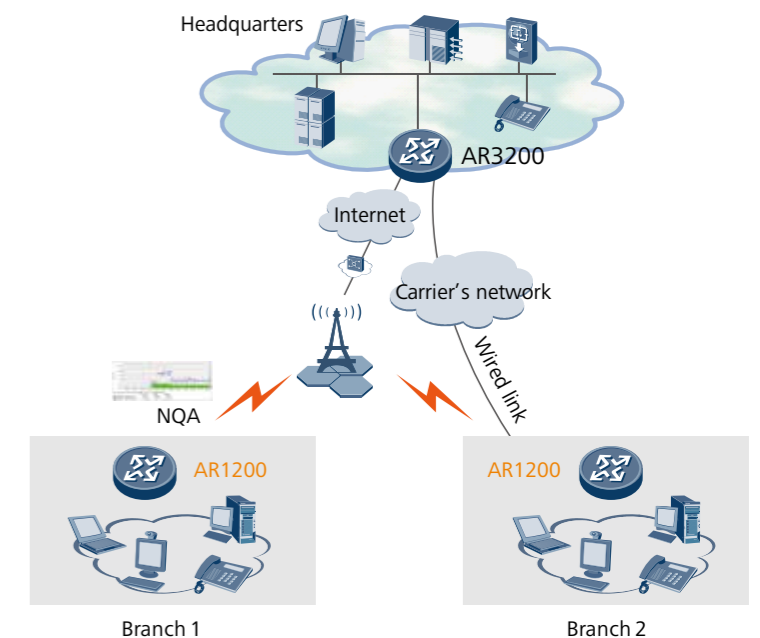


The AR1200 integrates voice, fax, and IP services. For enterprise users, the AR1200 serves as the SIP access gateway for a branch office, transforming phone signals into VoIP signals. The AR1200 uplink interfaces connect to the IP Multimedia Subsystem (IMS) or Next Generation Network (NGN) to allow any media, including phones, handsets, and computers, to communicate at any time.

Wireless Access and Management in a Branch Office

3G/LTE Wireless Access Application

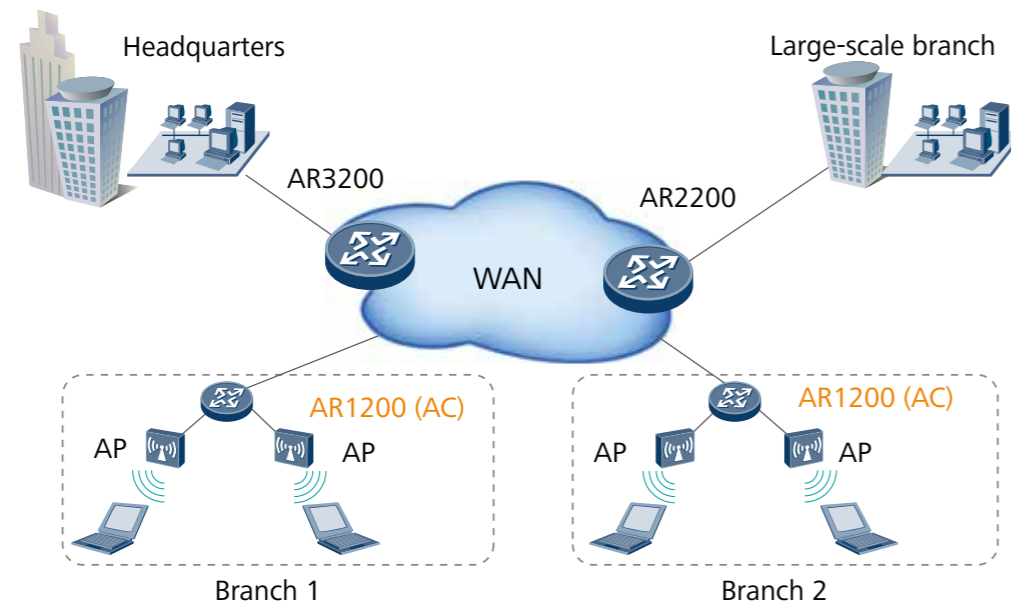
The AR1200 complies with 3G/LTE function, 3G standards including CDMA2000 EV-DO, and WCDMA, LTE supporting FDD LTE, meeting the requirements for wireless communication between enterprise branch offices and headquarters. AR1200 supports 3G and LTE interfaces cards. In addition, the 3G/LTE data link can be used to back up a wired link to protect the xDSL, FE/GE, and ISDN uplinks. The backup link improves network stability and reduces network construction costs. The Network



Quality Analyzer (NQA) monitors 3G/LTE link quality, ensuring the network meets Service Level Agreements (SLAs).

Wireless AC Management Application

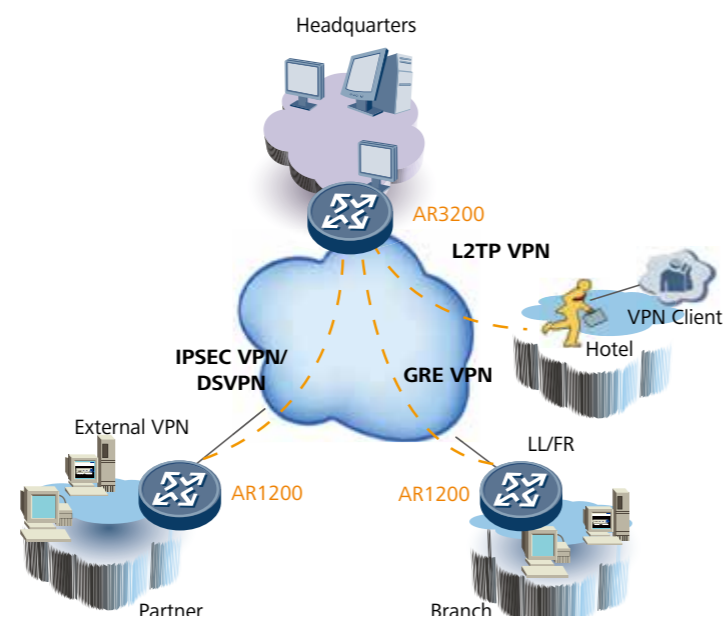
The AR1200 routers integrated AC (Access Controller, a wireless controller) functionality, which can manage the wireless AP (Access Point, Access Point) in wireless LAN. AR supported rich certification and flexible user access control, which can provide security access guarantee for Wi-Fi users. The rich wireless capabilities integrated in one device, this can realize centralized management of wired and wireless networks; meet the customers' requirements of building different scale enterprises networks.



VPN in a Branch Office

VPN Application

The AR1200 provides secure access for communication among enterprise branch offices and between headquarters and branch offices and business partners. Tunnels between the headquarters and branch offices ensure secure data access and transmission. The AR1200 implements fast tunnel deployment and authentication so branch offices and partners can easily, quickly and securely access and share enterprise resources.



Technical Specifications

Table 5: Technical Specifications

| Item | AR1220C | AR1220E | AR1220EV |
|-------------------------------------|--|--|--|
| Hardware | | | |
| WAN speed with services*** | 200Mbps | 400 Mbps | 400 Mbps |
| Firewall performance (large packet) | 1000Mbps | 1800Mbps | 1800Mbps |
| Device switching capacity | 8Gbps | 8 Gbps | 8 Gbps |
| Slot switching bandwidth | SIC & WSIC slots 2 Gbps | | |
| Number of recommended users | 100 | | |
| Fixed WAN ports | 4 x GE+ 1 x GE SFP | 2 x GE Combo | 2 x GE Combo |
| Fixed LAN ports | 8 x GE(can be configured as WAN interfaces) | 8 x GE(can be configured as WAN interfaces) | 8 x GE(can be configured as WAN interfaces) |
| SIC slots | 2 | 2 | 2 |
| WSIC slots (default/max) | 0/1 | 0/1 | 0/1 |
| DSP slots | - | - | 32 channels supported by default |
| USB 2.0 ports | 2 | 2 | 2 |
| Mini-USB ports | 1 | 1 | 1 |
| Console port | 1 | 1 | 1 |
| Memory | 512 MB | 1 GB | 1 GB |
| Flash | 512 MB | 512 MB | 512 MB |
| Max. power | 25W | 60 W | 60 W |
| PoE power | - | - | External 100 W |
| AC power | 100 V-240 V | 100 V-240 V | 100 V-240 V |
| Frequency | 50 Hz/60 Hz | 50 /60 Hz | 50 Hz/60 Hz |
| Dimensions (height x width x depth) | 44.5 mm x 390 mm x 220 mm(1.8 in. x 15.4 in. x 8.7 in) | 44.5 mm x 390 mm x 220 mm(1.8 in. x 15.4 in. x 8.7 in) | 44.5 mm x 390 mm x 220 mm(1.8 in. x 15.4 in. x 8.7 in) |
| Weight | 2.9 KG (without interface cards) | 2.9 KG (without interface cards) | 2.9 KG (without interface cards) |
| Ambient temperature | 0°C-45°C** | 0°C-45°C | 0°C-45°C |
| Relative humidity | 5-95% (non-condensing) | 5-95% (non-condensing) | 5-95% (non-condensing) |

| Item | AR1220C | AR1220E | AR1220EV |
|----------------------------|--|---------|----------|
| 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/conference call, BEST, DISA, SBC, (Only voice models support voice 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 | 3G Interface card(WCDMA) | | |
| LTE | LTE Interface card(FDD LTE: Uplink: 50Mbit/s Downlink: 100Mbit/s) | | |
| LAN | IEEE 802.1P, IEEE 802.1Q, IEEE 802.3, VL AN 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 V1/V2/V3, PIM SM, PIM DM, MSDP, MBGP | | |
| MPLS | LDP, MPLS L3 VPN, VLL, PWE3, static LSP, dynamic LSP, MPLS TE, IP FRR, LDP FRR, TE FRR | | |
| VPN | IPSec VPN, GRE VPN, DSVPN, 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),Hierarchical 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), NTP, CWMP, Auto-Config, deployment using USB disk, CLI, SSH (v1/v2) | | |

**Note: The maximum number of slots includes the number of combined slots.

The Ambient temperature of ADSL interface card is 0°C to 40°C

| Item | AR1220EVW | AR1220-D | AR1220F |
|-------------------------------------|--|--|---|
| Hardware | | | |
| WAN speed with services *** | 400 Mbps | 200 Mbps | 400Mbps |
| Firewall performance (large packet) | 1800 Mbps | 900 Mbps | 1800 Mbps |
| Device switching capacity | 8 x GE(can be configured as WAN interfaces) | 8 x FE(can be configured as WAN interfaces) | 8 x FE(can be configured as WAN interfaces) |
| Slot switching bandwidth | SIC & WSIC slots 2 Gbps | | |
| Number of recommended users | 100 | | |
| Fixed WAN ports | 2 x GE Combo | 2 x GE | 2 x GE(1*Combo) |
| Fixed LAN ports | 8 x GE | 8 x FE | 8 x FE |
| SIC slots | 2 | 2 | 2 |
| WSIC slots (default/max) | 0/1 | 0/1 | 0/1 |
| DSP slots | 32 channels supported by default | - | - |
| WiFi | 802.11 b/g/n | - | - |
| USB 2.0 ports | 2 | 2 | 2 |
| Mini-USB ports | 1 | 1 | 1 |
| Console port | 1 | 1 | 1 |
| Memory | 1 GB | 512 MB | 512 MB |
| Flash | 512 MB | 256 MB | 512MB |
| Max. power | 60 W | 54 W | 60 W |
| PoE power | External 100 W | - | - |
| AC power | 100 V-240 V | - | 100 V-240 V |
| Frequency | 50 Hz/60 Hz | - | 50 /60 Hz |
| DC power | - | -48 V or -60 V | - |
| Dimensions (height x width x depth) | 44.5 mm x 390 mm x 220 mm(1.8 in. x 15.4 in. x 8.7 in) | 44.5 mm x 390 mm x 220 mm(1.8 in. x 15.4 in. x 8.7 in) | 44.5mm x 390mm x 220mm(1.8 in. x 15.4 in. x 8.7 in) |
| Weight | 2.9 KG (without interface cards) | 2.9 KG (without interface cards) | 2.9 KG (without interface cards) |
| Ambient temperature | 0°C-45°C | 0°C-45°C | 0°C-45°C |

| Item | AR1220EVW | AR1220-D | AR1220F |
|----------------------------|---|------------------------|------------------------|
| Relative humidity | 5-95% (non-condensing) | 5-95% (non-condensing) | 5-95% (non-condensing) |
| 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/conference call, BEST, DISA, SBC, (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 | 3G Interface card(WCDMA) | | |
| LTE | LTE Interface card(FDD LTE: Uplink: 50Mbit/s Downlink: 100Mbit/s) | | |
| 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 V1/V2/V3, PIM SM, PIM DM, MSDP, MBGP | | |
| MPLS | LDP, MPLS L3 VPN, VLL, PWE3, static LSP, dynamic LSP, MPLS TE, IP FRR, LDP FRR, TE FRR | | |
| VPN | IPSec VPN, GRE VPN, A2A VPN, DSVPN, 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), Hierarchical 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), NTP, CWMP, Auto-Config, deployment using USB disk, CLI, SSH (v1/v2) | | |

**Note: The maximum number of slots includes the number of combined slots.

***Note: Service performance depending on specific feature configuration.

How to Configure the Modular AR1200 Router

Before choosing an AR1200, determine the device model, interface cards, and software configurations.

Chassis Options

The device model is determined by the slot quantity, forwarding capacity and service features that you require.

Service cards

The interface cards, including SIC cards and WSIC cards, are inserted into service card slots. Two SIC slots can be combined into one WSIC slot by removing the guide rail.

Software

The basic software and licensed software are available. The basic software provides basic functions, such as routing, switching, voice, and security. The licensed software provides additional functions, such as AC.

Ordering Information

Begin by ordering the chassis. Then select interface modules, any special licenses, and any desired accessories (SD card or USB disk).

Tables 6-11 below list the part numbers to use when ordering components.

Table 6: Chassis Options

| Chassis Configuration | Description |
|-----------------------|--|
| AR0M1200CC | AR1220,2GE WAN,8FE LAN,2 USB,2 SIC,DC -48V |
| AR1220C | AR1220C,8GE LAN,5GE WAN,2 USB,2 SIC |
| AR1220F | AR1220F,1GE WAN,1GE COMBO,8FE LAN,2 USB,2 SIC |
| AR1220E | AR1220E,2GE COMBO,8GE LAN,2 USB,2 SIC |
| AR1220EV | AR1220EV,2GE COMBO,8GE LAN,2 USB,2 SIC,build-in 32-channel DSP,PoE Power Adapter |
| AR1220EVW | AR1220EVW,2GE COMBO,8GE LAN,802.11b/g/n AP,2 USB,2 SIC,build-in 32-channel DSP,PoE Power Adapter |

Table 7: Power Module Options

| Power Module | Description |
|-----------------------|--------------|
| 100W POE Power Module | AR0MPSAP1000 |

Table 8: SIC Interface Module Options

| SIC Interface Module | Description |
|----------------------|--|
| AR0MSDME1A00 | 1-Port Channelized E1/T1/PRI/VE1 Multiflex Trunk Interface Card |
| AR0MSDE11A00 | 1-Port Fractional Channelized E1/T1 WAN Interface Card |
| AR0MSDME2A00 | 2-Port Channelized E1/T1/PRI/VE1 Multiflex Trunk Interface Card |
| AR0MSDE12A00 | 2-Port Fractional Channelized E1/T1 WAN Interface Card |
| AR0MSDSA1A00 | 1-Port Sync/Async Serial Port Interface Card |
| AR0MSDSA2A00 | 2-Port Sync/Async Serial Port Interface Card |
| AR0MSEG1CA00 | 1-Port GE Combo WAN Interface Card |
| AR0MSEF2TA00 | 2-Port FE WAN Interface Card |
| AR0MSVA4B1A0 | 4-Port FXS and 1-Port FXO Voice Interface Card |
| AR01SVB4XA | 4-Port FXO Voice Interface Card |
| AR0MSLA1XA00 | 1-port ADSL2+ ANNEX A/M WAN Interface Module,Support Wetting Current,Only For Vodafone |
| AR0MSLA1XA01 | 1-Port ADSL2+ ANNEX A/M WAN Interface Module |
| AR0MSLB1XA01 | 1-Port ADSL2+ ANNEX B/J WAN Interface Module |
| AR01SLV1XA | 1-Port VDSL2 over POTS WAN Interface Module |
| AR-2VDSL2-S | 2-Port VDSL2 over POTS with bonding WAN Interface Card |
| AR0MSLS1XA00 | 1-Port 4 Pair G.SHDSL WAN Interface Module |
| AR0MSDS1XA00 | 1-Port ISDN S/T WAN Interface Card |
| AR0MSVS2XA00 | 2-Port ISDN S/T Voice Interface Module |
| AR01SDGW1A | 3G HSPA+7 Interface Module |
| AR0MSOPP2A00 | 1-Port GPON/EPON Dual-mode Interface Card |
| AR-4ES2G-S | 4-Port 1000BASE-RJ45 L2 Ethernet Interface Card(SIC) |
| AR-1VE1-S | 1-Port VE1 Interface card |
| AR-1LTE-L-S | WCDMA LTE Interface Card |
| AR-1LTE-LV-S | LTE FDD/DC-HSPA+(NA) Data Card |
| AR-1LTE-Lo-S | FDD/HSPA+ (700M)Interface Card |

Table 9: WSIC Interface Module Options

| WSIC Interface Module | Description |
|-----------------------|---|
| AR01WAE14A | 4-port E1 Inverse Multiplexing for ATM Interface Card |
| AR01WDFE4A | 4-Port Fractional E1 WAN Interface Card |
| AR01WDFE8A | 8-Port Fractional E1 WAN Interface Card |

| WSIC Interface Module | Description |
|-----------------------|--|
| AR01WDCE8A | 8-Port Channelized E1/PRI Multiflex Trunk Interface Card |
| AR01WEG4SA | 4-Port 1000BASE-SFP-L3 Ethernet WAN Interface Card |
| AR01WEG4SB | 4-Port 1000BASE-SFP-L2 Ethernet Interface Card |
| AR01WEG4TA | 4-Port 1000BASE-RJ45-L3 Ethernet WAN Interface Card |
| AR0MWDAS8A01 | 8-Port Async Serial Port Interface Card |
| AR0MWMF9TT00 | 8-Port 10/100BASE(RJ45) and 1-Port 10/100/1000BASE(RJ45)-L3 Ethernet Switch Interface Card |
| AR01WVADXA | 16-Port FXS Voice Interface Card |
| AR-1E3T3M-W | 1-Port Channelized/Unchannelized E3/T3 WAN Interface Card |
| AR-9ES2-W | 8 Port 100M-RJ45 and 1 Port 1000M- RJ45 L2 Ethernet Interface Card |
| AR-8SA-W | 8-Port Sync/Async Serial WAN Interface Card |
| AR-4GECS-W | 4-Port GE COMBO WAN Interface Card(support syncE) |
| AR01WSX220B | Industrial Computer,Celeron 847E,DDR3 4G,2.5inch 1TB HDD,CFAST 4G,NULL |

Table 10: License Options

| License | Description |
|--------------|--|
| LAR0DATAE02 | AR1200 Value-Added Data Package |
| LAR0AC02 | AR1200 AC Express License |
| LAR0VOICEE02 | AR1200 Value-Added Voice Package |
| LAR0CMBEST01 | AR CM&BEST License-5 telephones |
| LAR0CMBEST02 | AR CM&BEST License-25 telephones |
| LAR0CMBEST03 | AR CM&BEST License-100 telephones |
| LAR0CT01 | AR CT(Call Trunk) License-5 sessions |
| LAR0CT02 | AR CT(Call Trunk) License-25 sessions |
| LAR0CT03 | AR CT(Call Trunk) License-100 sessions |
| LAR0IVR01 | AR IVR(Interactive Voice Response) License-1 session |
| LAR0IVR02 | AR IVR(Interactive Voice Response) License-12 sessions |
| LAR0SECE02 | AR1200 Value-Added Security Package |
| LAR0DSVPN02 | AR1200 DSVPN(Dynamic Smart VPN) Function |
| LAR0IPS02 | AR1200 IPS Service Subscribe 1 Year |

Table 11: SD Card and USB Disk Options

| SD Cards & USB Disks | Description |
|----------------------|--|
| NUSBDSK01 | Storage USB DISK,4GB,USB 2.0,No document |

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

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

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