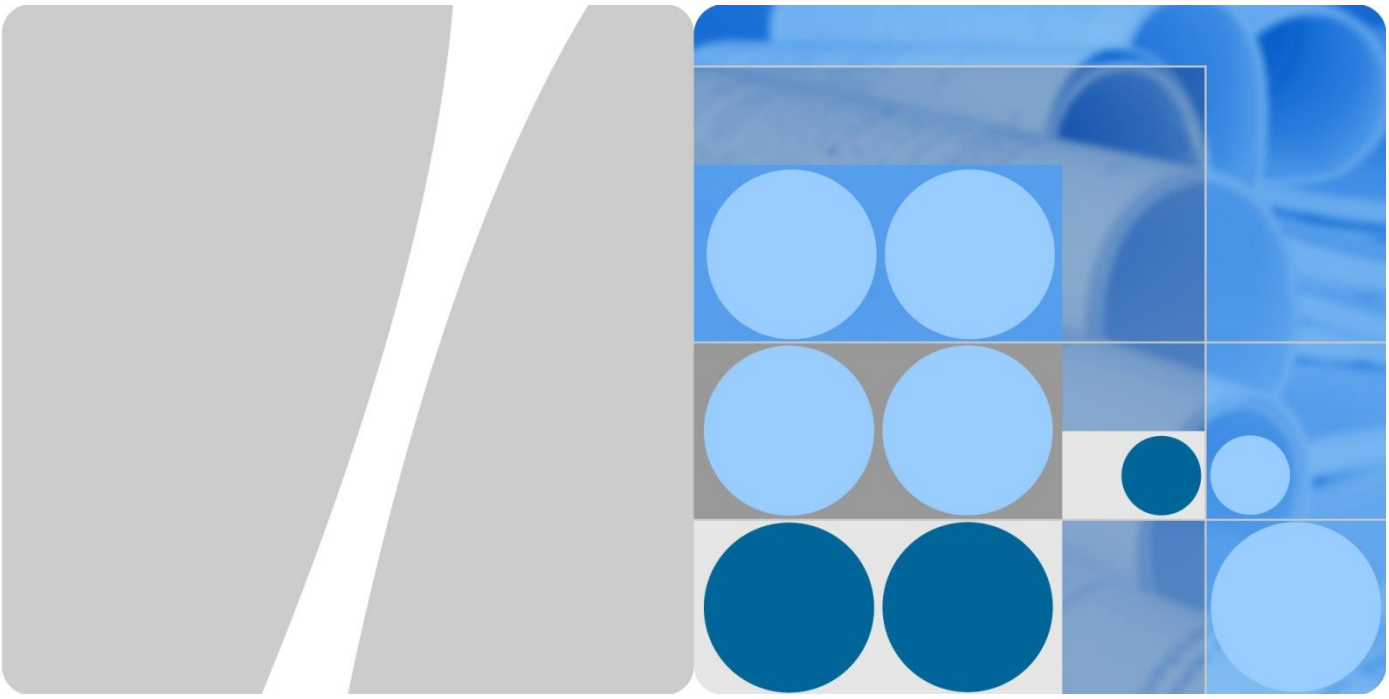

Huawei AR G3 Product Quick Sales Guide

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1 AR G3 Enterprise Branch Solution

1.1 Market Overview

AR G3 enterprise routers include AR3200 series, AR2200 series, AR1200 series and AR150&200 series. Integrated services of data, voice, video and security are provided. The target customers include government, financial, transportation, energy and other vertical industries, large and medium-sized enterprises, SMB and the Carrier resale.

Functioning as access routers of the vertical industry or enterprises, AR G3 are located at:

- Branches at level 3 or 4 networks, such as county or town networks
- Business centers of bank or urban/rural credit cooperatives
- Stations or section departments of transportation
- Transformer substations or power plants
- Headquarters, large branches, middle branches, or small branches of an enterprise

ARs provide the routing, switching, voice, security, and 3G interconnection services for customers. ARs aim at these fields in the enterprise network market.

1.2 AR G3 Main scenarios

Scenario 1: LAN egress gateway
Scenario 2: WAN access & edge aggregation
Scenario 3: 3G wireless backup
Scenario 4: Enterprise VPN gateway
Scenario 5: Enterprise voice gateway, PBX
Scenario 6: Carrier resale-managed VPN
Scenario 7: Carrier resale-managed Voice

2 Sales Strategy

2.1 Sales strategies for main scenarios

Scenario 1: Vertical Industry Branch Access

AR integrates the routing and switching functions to reduce the construction and maintenance costs on flattened construction of banking outlets. This is a new opportunity in financial and power industries.

Product Selection Strategy: AR G3 + high-density Ethernet card, AR220x-48FE

Competition Strategy: AR G3 integrates routing and switching functions in one system. Cisco and RuiJie use two devices to implement routing and switching functions. That is, a switching fabric is actually a switch device.

Scenario 2: Data and VPN Leased Line Access

Network security is a great concern. Besides the ACL, IPSec, and VPN functions, AR G3 needs to support URL filtering and IPS.

Competition Strategy: Data encryption and decryption are implemented by hardware in AR G3, which improves security and reduces investment. Cisco and H3C devices encrypt and decrypt data based on software. The software processing capability is low. An encryption card is needed to improve processing capability

Scenario 3: 3G Wireless Backup

3G Wireless networks need to be deployed to meet mobile office requirements of enterprise, and its bandwidth has met leased line requirements of enterprise. A 3G network is often used as a backup for a wired network

Product Selection Strategy: AR G3 support 3G USB dongle and 3G interface card.

Competition Strategy: Only Huawei can provide one-stop deployment and troubleshooting for wired and wireless networks, which solves the problem of multi-vendor integration; AR G3 supports all modes of 3G/LTE, and the routers can be interconnected with any 3G network.

Scenario 4: Voice Gateway Market

Enterprise voice service is developed to universal communication (UC). Voice gateway is an opportunity of AR, functioning as a small PBX

Product Selection Strategy: AR G3, high density voice card + voice service package license

Competition Strategy: AR G3 supports various SIP protocols. AR G3 supports more PBX voice functions and UC functions, improving customer experiences. To implement the voice function, a voice card and DSP are required. However, H3C switches require VPM+VCPM

Scenario 5: Router Distribution Sales Market

This market aims at small and middle scale enterprises and SOHO users. The network is simple, and Internet access is a major requirement. The connections between headquarters and branches are not required. The customers concern about channels and platforms, price, and brands.

Product Selection Strategy: Recommend products are AR201, AR207, AR151, AR1220, AR1220W etc.

Competition Strategy: Distribution channel is mainly used.

2.2 Competition

Advantage	Competitor	Competition Guide
Powerful forwarding performance (300 Kpps to 4 Mpps), which is two times that of similar devices of other vendors	**Cisco:** 100 Kpps-980 Kpps **H3C:** 160 Kpps-2 Mpps	• AR G3 adopts multi-core and high-speed switching structure. Packets are forwarded by the switching fabric automatically, which saves CPU resources. • The integrated bus structure of H3C consumes a lot of CPU resources and the processing performance of multi-service is low.

		• The low-speed interface cards are in the bus structure of Cisco, which occupies a lot of CPU resources and affects service processing performance
Leading IPSec Performance (300Mbps-4000Mbps)	**Cisco**: 35Mbp—670Mbps **H3C**: 30Mbps-600Mbps	• Huawei AR G3 relies on multi-core processors, high-performance without additional hardware boards. • Cisco default uses the built-in encryption engine, and requires additional hardware boards to improve performance. • H3C MSR default uses the CPU software encryption and decryption, and requires additional hardware boards to improve performance.
Integrated routing and switching	**Cisco:** The Ethernet interface cards and the routing system use separated operating systems **H3C:** The Ethernet interface cards and the routing system share the same platform. Packets transmitted between interface cards are sent to the CPU, and forwarding performance is low	• Huawei AR G3: The Ethernet interface cards and the routing system use the same VRP operating system. The interface cards support Layer 3 routing. • Cisco: Device operation and maintenance are complex. One physical device is maintained but operated as two separated logical devices. • H3C: The interface cards not support Layer 3 routing. All routing packets are sent to the CPU, so a lot of CPU resources are used and service processing is affected.
All interface cards are hot swappable	**Cisco:** Only the SM boards of 3900 are hot swappable. **H3C:** Only the interface cards of MSR5040/5060 are hot swappable.	• When an interface card that is not hot swappable is inserted or removed, the device needs to be powered off. All services on the device are interrupted. After the device is powered on, all services need to be reconfigured. The service interruption time is long and services are difficult to recover.

Flexible Interface Cards	**Cisco**: Cards don't have slot restrictions **H3C**: Some cards have slot restrictions.	• AR G3 full series cards are universal, don't have slot restrictions. • Cisco cards don't have slot restrictions. • H3C cards have slot restrictions: The SIC or DSIC cards can only be inserted in the given slots. The MIM cards and FIC cards are not universal.
EPON/GPON adaptive	**Cisco**: EPON or GPON is not supported. **H3C**: Only EPON is supported.	• PON access is more secure and supports longer distance • EPON technology supports only the Ethernet service, while GPON supports Ethernet, TDM, and ATM, meeting service integration requirements of customers.
Build-in AC	**Cisco**: ISR G2 requires X86 boards to support AC function. **H3C**: AC function is not supported.	• AR G3 built-in AC can support more wireless access, saving the cost of network. • Cisco requires X86 boards to support AC function. It will increase the cost of network and is not flexible enough to configure hardware board.

2.3 Highlights

- **3rd-Generation AR, Leading Performance**

Multi-Core, double performance than Industry Level
160G switching capacity, Non-blocking forwarding
The 1st dual-control access router, high availability

- **Dual-mode network, flexible access**

Fiber and wireless convergence, easy access
PON access, high speed experience
24 ports 1000M interface cards, 1000M to desktop

- **All-in-one multi-service platform, convergence and open**

Single box design, reduce TCO
OSP (Open Service Platform), service on-demand
Uniform VRP platform

2.4 Successful Stories

Story	Product selection
Spain Santander Bank Project	AR1200, AR2200
Ambulance Service of NSW Australia	AR1220VW, AR2220, AR2240 & AR3260
Vodafone Genesis/OneNet Project	All series
CDTI transnational communication Project	Deploy AR2240 as IP-PBX in Chongqing header quarter; deploy AR1220V as IP-PBX in Laos's branch.
Guangdong Sinopec Gas Station AR Project	2200 AR1220