



HUAWEI eKit


# Huawei NetEngine AR303W Enterprise Router Datasheet



Make SME Network Easier and Smarter



Huawei NetEngine AR303W enterprise routers are next-generation fixed routers designed for small- and medium-sized businesses (SMBs) and micro enterprises. They integrate diverse service features such as routing, switching, and security to meet the diverse service and performance requirements of enterprise customers.

 <p style="text-align: center;">NetEngine AR303W</p>	<ul style="list-style-type: none"> <li>• Forwarding performance: 1 Mpps</li> <li>• Device capacity: 200 PCs</li> <li>• Fixed ports: 4 x GE electrical LAN ports (can be switched to WAN ports), 1 x GE combo WAN port</li> <li>• Dimensions (H x W x D): 38 mm x 240 mm x 161.5 mm</li> </ul>
---	---

## Product Highlights

### Dual-Core Processor, Leading Performance

- Double applications: The AR303W uses dual-core processors and separate the data plane from the forwarding plane, which can carry more enterprise applications.
- Higher performance: The AR303W delivers industry-leading service processing capability to easily process various enterprise applications.
- Wireless potential: The AR303W integrates Wi-Fi access function, making enterprise deployment more convenient.

### Multi-Service Integration and Network Convergence

- Easy to construct: The AR303W supports plug-and-play, intelligent configuration without manual IP address configuration, and USB-based deployment. The PPP and VPN indicators show the service status, facilitating the rapid construction of enterprise IT networks.
- Simplified solution: The AR303W can be used in a solution that integrates the routing, switching, security, and wireless services. It can be quickly customized for specific customer groups to deliver solutions that meet customers' real needs.
- Easy to expand: The AR303W router with 4 Ethernet ports provide greater employee access capacity for enterprises. Multiple uplink WAN ports can be flexibly configured to implement data load balancing and link protection, maximizing enterprise investment protection.

### VRP Operating System, Mature and Stable

- Maturity and stableness: The AR303W adopts Huawei's leading VRP operating system and inherited modular hardware design to provide mature and stable user experience for enterprises and their branches.
- Low-noise office: Fanless design brings low noise and optimal user experience.
- Environment security: The failure rate of NetEngine AR303W due to lightning strikes is only 3% of the industry average, making it adapting to harsh environments.

## Specifications

The following table lists the specifications of NetEngine AR303W router

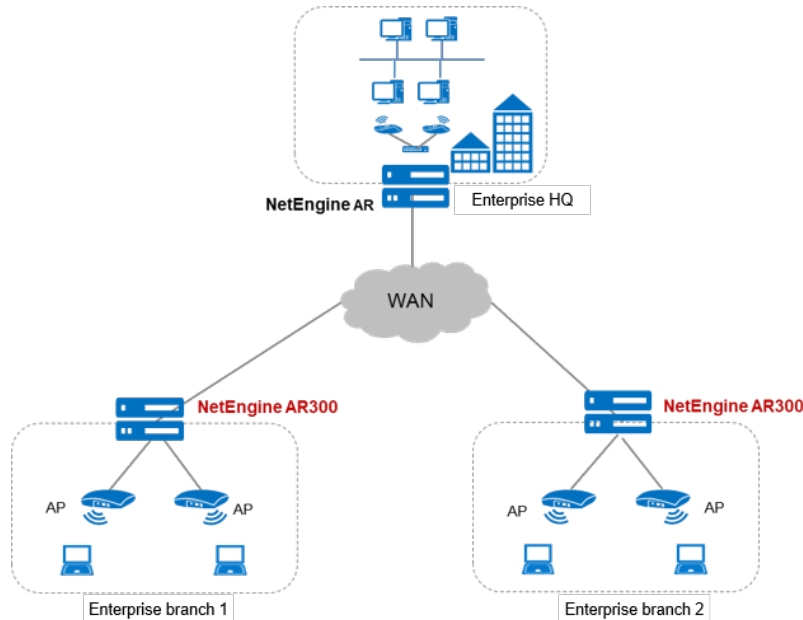
Item	NetEngine AR303W
<b>Hardware specifications</b>	
Forwarding performance (64 bytes)	1 Mpps
Device capacity*	200 PCs
Fixed WAN port	1 x GE combo

Item	NetEngine AR303W
Fixed Ethernet switching port	4 x GE (can be switched to WAN ports)
Wi-Fi	802.11b/g/n, 2.4GHz, 2 x 2 MIMO 802.11ac, 5GHz, 2 x 2 MIMO
USB port	1
Serial auxiliary or console port	1
Memory capacity	1 GB
Flash	1 GB
Maximum power	24 W
AC power supply	110V ~ 220V
Power frequency	50 Hz or 60 Hz
Operating temperature	0°C to 40°C
Relative operating humidity	5% to 95% (non-condensing)
Dimensions (H x W x D)	38 mm x 240 mm x 161.5 mm
<b>Software specifications</b>	
Basic functions	ARP, NAT, DNS, DHCP
Wireless LAN (AP)	AP management (VAP management), WLAN QoS (WMM), WLAN security (WEP/WPA/WPA2/key management), WLAN radio management (802.11ac/b/g/n), and WLAN user management
LAN	IEEE 802.1p, IEEE 802.1Q, IEEE 802.3, VLAN management, VLAN aggregation, MAC address management, STP/RSTP, etc.
IPv4 unicast routing	Static route, routing policy, RIP, OSPF, IS-IS, and BGP
IPv6 tunneling	Manual tunnel, automatic tunnel, GRE tunnel, IPv6 over IPv4 tunnel, 6to4 tunnel, and ISATAP
IPv6 unicast routing	Static routes, routing policy, RIPng, OSPFv3, IS-ISv6, and BGP4+
Multicast	IGMPv1, IGMPv2, IGMPv3, PIM SM, PIM DIM, MSDP, MBGP, IPv6 PIM, and MLD
VPN	IPsec VPN, GRE VPN, DSVPN, A2A VPN, L2TP VPN, L2TPv3 VPN, VXLAN
QoS	DiffServ mode, MPLS QoS, priority mapping, traffic policing (CAR), traffic shaping, congestion avoidance, congestion management, HQoS, MQC (traffic classifier, traffic behavior, and traffic policy), level-3 traffic scheduling and shaping (HQoS), and smart application control (SAC)
Security	ACLv4/v6, domain-based stateful firewall, 802.1X authentication, MAC address authentication, Portal authentication, and AAA, RADIUS, HWTACACS, PKI, broadcast storm suppression, ARP security, ICMP attack defense, URPF, CPCAR, blacklist, SM series cryptographic algorithms, online behavior management, and URL filtering
Management and maintenance	Upgrade management, device management, web system, GTL, SNMPv1/v2c/v3, RMON, NTP, CWMP, Auto-Config, email/USB/DHCP-based deployment, NETCONF/YANG, CLI, NetStream, TWAMP Light, IP FPM, TCP FPM, IP accounting, and NQA

\* Note: The number of connected terminals is a typical value estimated based on the service model. It is for model selection reference only and does not constitute a business commitment.

# Typical Application Scenarios

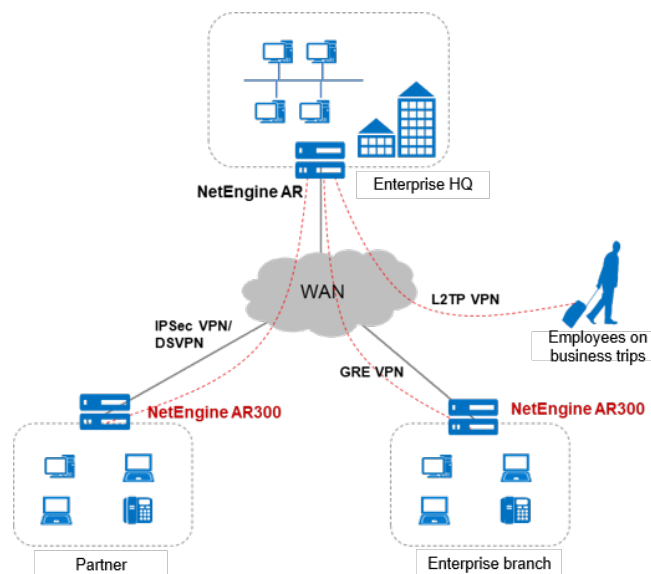
## Various WAN Interconnection Access



WAN interconnection scenario

NetEngine AR303W enterprise routers function as egress routers of enterprise branches and provide flexible access methods to support remote network connections. A single AR303W can meet various access requirements, including Ethernet and WLAN, reducing deployment and O&M costs and maximizing customer benefits.

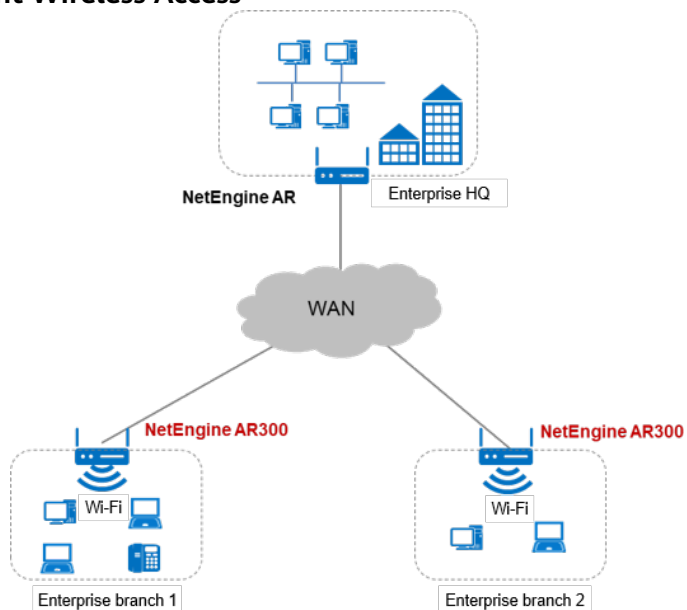
## Various VPN Networking for Enterprise Branches



Multi-branch VPN networking scenario

NetEngine AR303W enterprise routers provide diverse secure access functions to allow communication between enterprise branches and between branches and headquarters, as well as to allow partners to access enterprise resources. Security tunnels such as GRE VPN, IPsec VPN, DSVPN, and L2TP VPN tunnels can be set up between the headquarters and branches for secure data access and transmission. The AR303W supports quick tunnel deployment and authentication for branches. Through remote tunnel access, partners can flexibly access internal resources of an enterprise, ensuring resource security and sharing within the enterprise.

## Flexible and Convenient Wireless Access



**Branch Wi-Fi access scenario**

NetEngine AR303W enterprise routers integrate the WLAN access function and support 802.11ac standard communication, facilitating deployment. Its rich wireless features meet users' wireless access requirements and help enterprises flexibly build branch networks.


## More Information

---

**Copyright © Huawei Technologies Co., Ltd. 2022. 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 Cloud Computing Technologies Co., Ltd.

**Trademarks and Permissions**

 HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

**Notice**

The purchased products, services and features are stipulated by the contract made between Huawei Cloud and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents. However, all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

**Huawei Technologies Co., Ltd.**

Address: Huawei Industrial Base Bantian,  
Longgang Shenzhen 518129 People's  
Republic of China

Website: [www.huawei.com](http://www.huawei.com)