Huawei Enterprise
IP Product Portfolio 2018

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Huawei IP Product Portfolio Overview

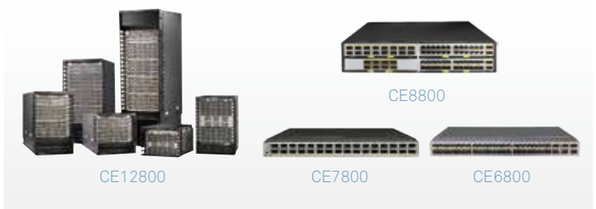
Intent-Driven Network

eSight Network

SDN Controller

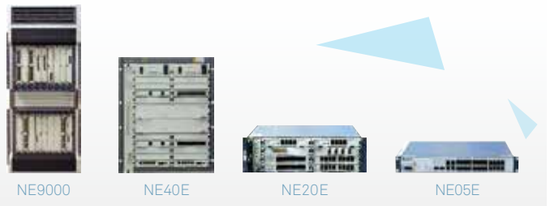
FabricInsight

Data Center Switch



Enterprise Security Products

Enterprise Core Router



Access Router

Campus Switch

IoT Gateways

WLAN

Intelligence

Big Data- and AI-powered predictive maintenance

Simplicity

Simplified O&M based on simplified architecture/protocols

Ultra-broadband

Massive connectivity, low latency,high bandwidth

Openness

Sustainable ecosystem with intent-based open APIs

Security

Proactive defense against advanced unknown threats

CONTENTS

What's New/P-01

Data Center Switch CloudEngine Series Products/P-06

Campus Switch SX700 Series Products/P-17

WLAN 802.11ac Series AP Products/P-56

Enterprise Core Router NE/ME Series products/P-68

Access Router AR Series Products/P-79

IoT Gateways AR Series Products/P-99

Enterprise Security Products/P-107

eSight Network/P-124

SDN Controller/P-127

FabricInsight/P-132

What's New

Data Center Switch

CE12800E: Programmable Agile core data center switch

The Huawei CE12800E core data center switches provide as much as 78 Tbit/s (scalable to 1032 Tbit/s) switching capacity and has up to 256*100GE, 576*40GE, or 2304*10GE line-rate ports. The CE12800E switches are programmable at the control plane and ensures agile deployment and O&M.

CE12800E → P09

CE6880: Microsegmentation-enabled TOR switch

The CE6880 supports microsegmentation and global, precision time synchronization based on IEEE 1588v2. With Huawei's Packet Conservation Algorithm for Internet (iPCA) technology, CE6880 supports accurate per-hop packet loss, delay, and jitter detection for real service flows, locating network faults in real time.

CE6880 → P12

CE6880-24S4Q2CQ-EI

Campus Switch

S6720-HI Series Agile Switches

Huawei S6720-HI series switches are fixed agile switches with 10GE downlink and 40GE/100GE uplink ports, and are applicable to enterprise campus, carrier, university, and government networks.

The S6720-HI delivers abundant agility features, and uses the fully programmable architecture to implement software-defined functions and on-demand service changes. With services and network convergence as the core, the S6720-HI supports the native AC function to manage APs. In addition, the switch provides the free mobility feature to ensure consistent user experience, and the Super Virtual Fabric (SVF) feature to virtualize the entire network into one device.

S6720-HI → P21

S5730-HI Series Next-Generation Gigabit Agile Switches

Huawei S5730-HI series Ethernet switches are next-generation gigabit agile switches that provide fixed all-gigabit access and 10GE uplink ports and come with extended card slots for expansion of uplink ports. S5730-HI series switches use an ENP-enabled fully programmable architecture and provide software-defined functions to meet changing service needs. The switches are ideal for the aggregation/access layers on large to midsize campus networks and the core layer on campus branch and small campus networks.

S5730-HI → P25

S5720I-SI Series Gigabit Switches with Extended Temperature Range

Huawei S5720I-SI series switches are standard Layer 3 gigabit switches that provide flexible all-gigabit access and cost-effective fixed GE ports and 10GE uplink ports. S5720I-SI support an extended temperature range and have strong outdoor surge protection to withstand harsh outdoor cabinet environments. They can be widely used in various access scenarios such as Safe City and ETTx.

S5720I-SI → P35

WLAN

AP7052DE Access Point: With built-in smart antennas

Huawei AP7052DE is the latest-generation 802.11ac Wave 2 Access Point (AP) that supports 4x4 MIMO and four spatial streams, and has built-in smart antennas, providing a rate of up to 2.53 Gbit/s. The AP7052DE is applicable to indoor coverage scenarios with multiple partitions, such as enterprise office and education scenarios.

AP7052DE → P58

AP7052DN & AP7152DN Access Points: IoT expansion, converging Wi-Fi and IoT networks

Huawei's AP7052DN and AP7152DN are the latest-generation 802.11ac Wave 2 Access Points (APs). They support 4x4 MIMO, four spatial streams, and 2.4G-to-5G switchover. In dual-5G mode, the device rate can reach up to 3.46 Gbit/s. The APs allow IoT application expansion through IoT modules and are applicable to enterprise office and education scenarios.

AP7052DN and AP7152DN → P58

AP4051TN Access Point: provides three radios that help increase the number of concurrent users by 50%

Huawei's AP4051TN is a next-generation Access Point (AP) that supports 802.11ac Wave 2 and has three radio channels. On the 2.4 GHz band, the AP supports 2x2 MIMO and two spatial streams; on the 5 GHz bands, the AP supports 4x4 MIMO and four spatial streams. The AP4051TN supports comprehensive service capabilities and is applicable to eClassrooms, shopping malls, and supermarkets.

AP4051TN → P60

AP8082DN & AP8182DN Access Points: recommended for stadiums and wireless cities

Huawei's AP8082DN and AP8182DN are the latest-generation 802.11ac Wave 2 outdoor Access Points (APs). The APs support 4x4 MU-MIMO and four spatial streams. With excellent outdoor coverage performance and ruggedized hardware, the AP8082DN and AP8182DN perfectly meet outdoor wireless coverage requirements. They are applicable to coverage scenarios such as high-density stadiums, squares, pedestrian streets, and amusement parks.

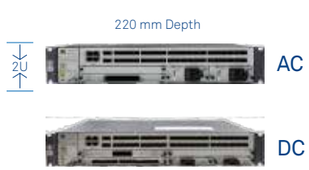
AP8082DN and AP8182DN → P65

Enterprise Core Router

NE40E-M2K:220mm-Depth High Port Density Equipment

220 mm-deep chassis with flexible deployment, low power consumption, and high adaptability to ambient temperature. Flexible L2/L3 hybrid transport for efficient full-service delivery. End-to-end versatile platform with carrier-class reliability

MultiPlay network：Various types of interfaces for different scenarios (100GE/40GE/10GE/GE/CPOS/E1/POS).Leading Ethernet networks from Triple Play to MultiPlay (FMC, HDTV, and VAS).1588v2 support and FMC for MBB



NE40E-M2K → P74

NE40E-M2H:220mm-Depth High Port Density Equipment

220 mm-deep chassis with flexible deployment, low power consumption, and high adaptability to ambient temperature. Flexible L2/L3 hybrid transport for efficient full-service delivery. End-to-end versatile platform with carrier-class reliability

Various types of interfaces for different scenarios (100GE/40GE/10GE/GE/CPOS/E1/POS).Leading Ethernet networks from Triple Play to MultiPlay (FMC, HDTV, and VAS).1588v2 support and FMC for MBB

NE40E-M2H → P74

Access Router

AR129CV:Egress voice gateways for small-sized branches and enterprises

Huawei's next-generation routers, the AR129CV is designed for enterprise branch offices and small businesses, delivering a comprehensive set of services, including routing, switching, voice, security.

AR129CV → P82

AR129CV

AR650 series: Universal computing gateways for small- and medium-sized branches

Huawei AR650 series universal computing gateways are designed to meet the requirements of cloud computing, Software-Defined Networking (SDN), and Network Functions Virtualization (NFV). The gateway is plug and-play and features high performance and high reliability. It is the universal customer premises equipment (uCPE) applicable to enterprise branches as well as small- and medium-sized enterprises.

AR651W-X4

AR651-X8

AR650 → **P94**

AR1600 series: Universal computing gateways for enterprise headquarters and branches

Huawei AR1600 series universal computing gateways use the X86-based universal computing platform, support virtualization functions and SDN architecture, and provide the virtualization environment and basic operating system (OS). The OS integrates some IP functions, for example, basic routing, switching, and IPSec. Huawei and third-party VNFs can be deployed on the AR1600 to implement multiple services, such as routing, firewall, and WAN acceleration. The OS and VNFs of the AR1600 are centrally managed by Huawei's Agile Controller, simplifying network deployment and management and reducing costs for enterprise branches.

AR1600 → **P95**

AR1610-X6

AR1000V:High-performance virtual router

The AR1000V is a virtual router launched by Huawei to transform traditional enterprise networks into SD-WANs. Based on Network Functions Virtualization (NFV) technology, the AR1000V can be deployed on the server using the x86 hardware platform, private cloud, and public cloud. It is an access gateway for enterprise cloud applications, and its key features include application-based intelligent traffic steering, outstanding performance, and automatic O&M. It expands the enterprise WAN and provides ultimate cloud application experience for enterprises.

AR1000V

AR1000V → **P96**

Security

FireHunter6000 Series Sandbox

1.Add new model：Added the software and hardware all-in-one FireHunter6200. Sold outside China (non-sensitive countries).

2.Hypervisor-based detection： Preventing sandbox evasion, Malware cannot detect virtualization environments.

3.Machine learning：Technology Innovation of the Third-Generation Sandbox.

4.Cloud reputation：Added the sandbox cloud reputation process. Reducing Detection and Response Time of Unknown Threats.

Security → **P122**

SDN Controller

SDN Controller ——Agile Controller (WAN)

Global path computation and optimization and single service path optimization for MPLS tunnels

The innovative Routing Optimization Algorithm based on Matrix (ROAM) optimizes MPLS network traffic based on multiple aspects including bandwidth, latency, cost and priority. It calculates global optimal end-to-end paths for MPLE TE tunnels while optimizing single-service paths and global load balancing. This effectively improves bandwidth utilization and can reduce the cost of network expansion

IP Network Optimization improves backbone network resource utilization and operational efficiency

IP network optimization in Agile Controller-WAN provides visualized network topology, link bandwidth utilization, and traffic information and can schedule traffic on demand. In addition, this solution uses BGP to communicate with forwarders, which eliminates the need to make significant changes to the live network and protects carrier investments.

Agile Controller (WAN) → **P130**

Huawei FabricInsight, Gain Insight into Apps and Networks

The FabricInsight is a data center network analyzer launched by Huawei. It provides ubiquitous network application analysis and visualization functions to streamline applications and networks.

Based on the big data analysis technology, the FabricInsight collects massive real service packets through the Telemetry, provides correlation analysis between internal applications and networks of the data center, and displays the application map and network quality in real time, helping customers quickly identify fault and proactively identify risks before services are affected.

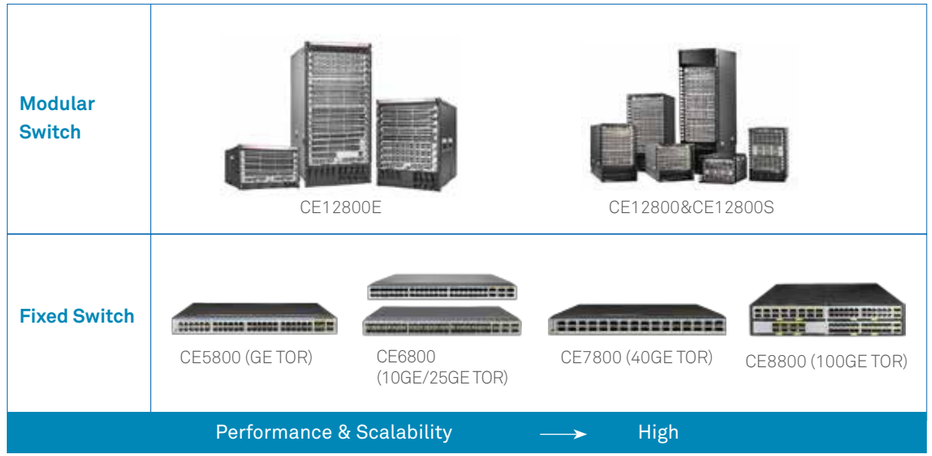
FabricInsight → **P133**

1

Data Center Switch CloudEngine Series Products

Product and Solution Overview 08
CE12800 Series..... 08
CE12800E Series 09
CE8800 Series..... 10
CE7800 Series..... 11
CE6800 Series..... 12
CE5800 Series..... 15
CloudEngine 1800V 16
Award and Certification 16

Positioning Map of Data Center Switch



Product and Solution Overview

Huawei CloudEngine (CE) series switches are high-performance cloud switches designed for next-generation data centers and high-end campus networks. This series includes Huawei's flagship CE12800 and CE12800E core switches with the world's highest performance, CE8800/7800/6800/5800 high-performance aggregation and access switches, and CE1800V distributed virtual switch. The CloudEngine series uses Huawei's next-generation VRP8 software platform and supports extensive data center and campus network service features.

The CloudFabric solution is based on Huawei's flagship CloudEngine 12800 12800E series data center core switches, CloudEngine 8800/7800/6800/5800 series high-performance fixed switches, and CloudEngine 1800V virtual switch. These switches are used with the Huawei Agile Controller to provide customers with an all-cloud data center network. The solution also integrates transmission, routing, security, and network management products, which can be combined with the data center switches to deliver a one- stop data center network solution.

CE12800 Series

CE12800 switches are high-performance core switches designed for data center networks and high-end campus networks.

Their advanced hardware architecture offers the highest performance of any currently available core switches, with as much as 178 Tbit/s per chassis switching capacity and up to 576*100GE, 576*40GE, 2,304*25GE, or 2,304*10GE line rate ports.

The CE12800 switches use an industry-leading Clos architecture and a front-to-back airflow design to provide industrial-grade reliability. The switches also provide comprehensive virtualization capabilities and data center service features. Moreover, their energy-saving designs greatly reduce power consumption.

The CE12800 series is available in six models: CE12816, CE12812, CE12808, CE12804, CE12808S, and CE12804S. They all use interchangeable modules to reduce costs of spare parts. This design ensures device scalability and provides investment protection.

Figure 1 CE12800 series

Item	CE12804S	CE12808S	CE12804	CE12808	CE12812	CE12816
Switching capacity (Tbit/s)	30/258[1]	59/516[1]	45/258[1]	89/516[1]	134/774[1]	178/1032[1]
Forwarding performance (Mpps)	17,280	34,560	17,280	34,560	51,840	69,120
Service slots	4	8	4	8	12	16
Switching fabric module slots	2	4	6	6	6	6
Fabric architecture	Clos architecture, cell switching, VoQ, and distributed large buffer					
Airflow design	Strict front-to-back					
Device virtualization	VS, CSS, SVF, M-LAG					
Network virtualization	BGP-EVPN, VxLAN					
Intelligent O&M	Proactive path detection on the entire network, real-time monitoring of network health status					

1 Roadmap

CE12800E Series

Huawei CloudEngine 12800E (CE12800E for short) series switches are high-performance core switches designed for enterprise data centers. CE12800E switches use a fully programmable architecture to meet customers' flexible and fast customization requirements. CE12800E switches use the VRP8 operating system and an orthogonal design of line processing units (LPUs) and service fabric units (SFUs). In addition to providing stable and reliable Layer 2 and Layer 3 switching services, the switches support refined network O&M, including proactive network-wide path and connectivity detection, real-time monitoring of network health status, and intelligent fault location.

Figure 2 CE12800E series

Item	CE12804E	CE12808E	CE12816E
Switching capacity (Tbit/s)	26/258[1]	52/516[1]	78/ 1,032[1]
Forwarding performance (Mpps)	6,480	12,960	25,920
Service slots	4	8	16
Switching fabric module slots	6	6	6
Fabric architecture	Clos architecture, cell switching, VoQ		
Airflow design	Strict front-to-back		
Device virtualization	VS, CSS, M-LAG		
Network virtualization	VxLAN, BGP-EVPN		
Intelligent O&M	Proactive path detection on the entire network, real-time monitoring of network health status, supporting iPCA		

CE8800 Series

The CE8800 series switch is a high-performance 100GE TOR switch released for data centers and high-end campus networks. It can act as an access node to support high-density 25GE/10GE server access, a compact core or aggregation node on a small-sized network, or connect to High-Performance Computing (HPC) servers.

The CE8860 is the industry’s first 25GE access TOR switch and provides high-density 100GE/40GE uplink ports for connection with core switches. It provides up to 32*100GE, 64*40GE, or 128*25GE/10GE ports, which can be used in combinations through cards, delivering flexible, high-density access and aggregation capabilities.

The CE8850 swiprovides high-density 100GE QSFP28 ports, L2/L3 line-rate forwarding, extensive data center features, high-performance stacking capability.

The CE8800 comes in three models.

Model and Appearance	Description
 CE8860-4C-EI	• Supports four half-width interface cards: » 24-port 10GE SFP+ and 2-port 100GE QSFP28 interface card » 24-port 10GE BASE-T and 2-port 100GE QSFP28 interface card » 8-port 100GE QSFP28 interface card » 16-port 40GE QSFP+ interface card » 24-port 25GE/16GE SFP28 and 2-port 40GE/100GE QSFP28 interface card • 6.4 Tbit/s switching capacity, forwarding performance 3200Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE8850-32CQ-EI	• 32*100GE QSFP28 ports, 2*10GE SFP+ ports • 6.4 Tbit/s switching capacity, forwarding performance 3200Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE8850-64CQ-EI	• 64*100GE QSFP28 ports • 12.8 Tbit/s switching capacity, forwarding performance 4400Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry

CE7800 Series

The CE7800 switches can be used as core or aggregation switches on data centers and campus networks.

Using an advanced hardware design, the CE7800 series provides high-density 40GE QSFP+ ports (each can be split into four 10GE SFP+ ports), L2/L3 line-rate forwarding, extensive data center features, high-performance stacking capability. CE7800 switches support front-to-back and back-to-front airflows for you to choose based on the airflow direction in your equipment room.

The CE7800 series comes in one model.

Model and Appearance	Description
 CE7855-32Q-EI	• 32*40GE QSFP+ ports • 2.56Tbit/s switching capacity, forwarding performance 1440Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, SVF, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry

CE6800 Series

The CE6800 switches provide high-density 10GE/25GE access in data centers and can also be used as core or aggregation switches on campus networks.

The CE6800 series has an advanced hardware design, which provides the industry's highest density of 10GE/25GE downlink ports as well as 100GE QSFP28 or 40GE QSFP+ uplink ports. (A 100GE QSFP28 port can be split into four 25GE SFP28 ports or work as a 40GE QSFP+ port. A 40GE QSFP+ port can be split into four 10GE SFP+ ports). The CE6800 switches provide L2/L3 line-rate forwarding on these interfaces and support extensive data center features, high-performance stacking capability. They support front-to-back and back-to-front airflows for you to choose based on the airflow direction in your equipment room.

The CE6800 series comes in sixteen models.

Model and Appearance	Description
 CE6880-24S4Q2CQ-EI	• 24*10GE SFP+ ports, 4*40GE QSFP+ ports, and 2*100GE QSFP28 ports • 1.2Tbit/s switching capacity • Rich data center features: mircorsegmentation, VxLAN, BGP-EVPN, iStack • Supports telemetry

Model and Appearance	Description
 CE6870-48T6CQ-EI	• 48-port 10GE BASE-T , and 6-port 100GE QSFP28, • 4GB deep buffer, 2.16Tbit/s switching capacity, forwarding performance • 720Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6870-48S6CQ-EI	• 48*10GE SFP+ ports, 6*100GE QSFP28 ports • 4GB deep buffer, 2.16Tbit/s switching capacity, forwarding performance • 720Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6870-24S6CQ-EI	• 24*10GE SFP+ ports, 6*100GE QSFP28 ports • 4GB deep buffer, 1.68Tbit/s switching capacity, forwarding performance • 720Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6875-48S4CQ-EI	• 48*10GE SFP+ ports, 4*100GE QSFP28 ports • 4GB deep buffer, 1.76Tbit/s switching capacity, forwarding performance • 835Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6865-48S8CQ-EI	• 48*25GE SFP28 ports, 8*100GE QSFP28 ports • 4Tbit/s switching capacity, forwarding performance 2000Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6860-48S8CQ-EI	• 48*25GE SFP28 ports, 8*100GE QSFP28 ports • 4Tbit/s switching capacity, forwarding performance 3200Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6850U-48S6Q-HI	• 48*10GE SFP+ ports, or 2/4/8G FC ports,6*40GE QSFP+ ports • 2.56Tbit/s switching capacity, forwarding performance 1080Mpps • Rich data center features: M-LAG, VxLAN, EVPN, iStack, SVF, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry

Model and Appearance	Description
 CE6856-48S6Q-HI	• 48*10GE SFP+ ports, 6*40GE QSFP+ ports • 2.56Tbit/s switching capacity, forwarding performance 1080Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, SVF, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6856-48T6Q-HI	• 48*10GE Base-T ports, 6*40GE QSFP+ ports • 2.56Tbit/s switching capacity, forwarding performance 1080Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, SVF, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6855-48S6Q-HI	• 48*10GE SFP+ ports, 6*40GE QSFP+ ports • 2.56Tbit/s switching capacity, forwarding performance 1080Mpps • Rich data center features: M-LAG, VxLAN, VxLAN RIOT, BGP-EVPN, iStack, SVF, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6855-48T6Q-HI	• 48*10GE Base-T ports, 6*40GE QSFP+ ports • 2.56Tbit/s switching capacity, forwarding performance 1080Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, SVF, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6851-48S6Q-HI	• 48*10GE SFP+ ports,6*40GE QSFP+ ports • 2.56Tbit/s switching capacity, forwarding performance 1080Mpps • Rich data center features: M-LAG, VxLAN, BGP-EVPN, iStack, SVF, FCoE • Flexible front-to-back or back-to-front airflow • Supports telemetry
 CE6810-48S4Q-LI	• 48*10GE SFP+ ports, 4*40GE QSFP+ ports • 1.28Tbit/s switching capacity, forwarding performance 960Mpps • Rich data center features: M-LAG, iStack, SVF, FCoE • Flexible front-to-back or back-to-front airflow

Model and Appearance	Description
 CE6810-32T16S4Q-LI	• 32*10GE BASE-T ports, 16*10GE SFP+ ports, 4*40GE QSFP+ ports • 1.28Tbit/s switching capacity, forwarding performance 960Mpps • Rich data center features: M-LAG, iStack, SVF, FCoE • Flexible front-to-back or back-to-front airflow
 CE6810-24S2Q-LI	• 24*10GE SFP+ ports, 2*40GE QSFP+ ports • 640Gbit/s switching capacity, forwarding performance 480Mpps • Rich data center features: M-LAG, iStack, SVF, FCoE • Flexible front-to-back or back-to-front airflow

CE5800 Series

The CE5800 switches provide high-density GE access in data centers and can also be used as aggregation or access switches on campus networks.

The CE5800 series is the first in the industry to provide 40GE uplink ports, and the advanced hardware design supports the industry's highest density of GE access ports. The CE5800 switches provide L2/L3 line-speed forwarding, extensive data center features, and high-performance stacking capability. They support front-to-back and back-to-front airflows for you to choose based on the airflow direction in your equipment room.

The CE5800 series comes in three models.

Model and Appearance	Description
 CE5855-48T4S2Q-EI	• 48*GE BASE-T ports, 4*10GE SFP+ ports, 2*40GE QSFP+ ports • 336Gbit/s switching capacity, forwarding performance 252Mpps • Rich data center features: M-LAG, iStack, SVF • Flexible front-to-back or back-to-front airflow
 CE5855-24T4S2Q-EI	• 24*GE BASE-T ports, 4*10GE SFP+ ports, 2*40GE QSFP+ ports • 288Gbit/s switching capacity, forwarding performance 215Mpps • Rich data center features: M-LAG, iStack, SVF • Flexible front-to-back or back-to-front airflow
 CE5850-48T4S2Q-HI	• 48*GE BASE-T ports, 4*10GE SFP+ ports, 2*40GE QSFP+ ports • 336Gbit/s switching capacity, forwarding performance 252Mpps • Rich data center features: M-LAG, iStack • Flexible front-to-back or back-to-front airflow

CloudEngine 1800V

Huawei CloudEngine 1800V (CE1800V) is a distributed virtual switch designed for virtualized environments in cloud data centers. It provides best-in-class forwarding performance, open architecture, and enhanced security protection. And it can run on multiple compute virtualization platforms such as Huawei FusionSphere, VMware ESXi, as well as open-source platforms.

The CE1800V can be combined with Huawei CloudEngine hardware switches and Huawei Agile Controller to offer a Software-Defined Networking (SDN) solution for data centers based on hybrid or host overlays. This solution supports Virtual Machines (VMs), containers, and physical servers with the same architecture.

Award and Certification

Best of ShowNet Award Grand Prize

- At Interop Tokyo 2016, Huawei CE8860 and CE6850 data center switches received the Best of Show Award Grand Prix in the ShowNet Product category for the Open SDN Capabilities.

Huawei Positioned as a Leader in Data Center Hardware Platforms for SDN

- Huawei has been positioned as a Leader in the new report "The Forrester Wave ™ : Hardware Platforms For Software-Defined Networking, Q1 2018" published by Forrester Research, a top technology industry research and advisory firm. This was the first time for Forrester Research to evaluate data center hardware platforms for software-defined networking (SDN) and included nine players in the industry. According to this report, CloudEngine series switches, core components in Huawei CloudFabric Solution, had the highest score in the product strategy category and the third highest score in the current offering and market presence categories.

2 Campus Switch SX700 Series Products

S12700 Series 19
S7700 Series 20
S6720-HI Series 21
S6720-EI Series 22
S6720-SI Series 23
S6720-LI Series 24
S5730-HI Series 25
S5730-SI Series 27
S5720-EI Series 29
S5720-SI Series 32
S5720I-SI Series 35
S5720-LI Series 36
S5720S-LI Series 40
S3700 Series 43
S2700 Series 44
S1700 Series 48
Award and Certification 55

Positioning Map of Campus Switch

Modular Switch	S7700	S12700			
10 Gigabit Fixed Switch	S6720-LI	S6720-SI	S6720-EI	S6720-HI	
Gigabit Fixed Switch	S5720-LI S5720S-LI	S5720I-SI	S5720-SI	S5720-EI	S5730-SI	S5730-HI
100Mb Switch	S2700-SI	S2700-EI	S2720-EI*	S3700-SI	S3700-EI	
SMB Switch	S1700	S1720	S1720-E	S1720X	S1720X-E	
Performance & Scalability → High					

Note: *S2720-EI supports Gig ports

S12700 Series

HUAWEI S12700 series agile switches are designed for next-generation campus networks. Using a fully programmable switching architecture, the S12700 series allows fast, flexible function customization and supports a smooth evolution to Software-Defined Networking (SDN). The S12700 series uses a Huawei Ethernet Network Processor (ENP) and provides a native Wireless Access Controller (AC) to help build a wired and wireless converged network. Its Unified User Management capabilities deliver unified user and service management, and Huawei's Packet Conservation Algorithm for Internet (iPCA) supports hop-by-hop monitoring of any service flows, helping manage services in a more refined way. The S12700 series runs the Huawei Versatile Routing Platform (VRP), which provides high-performance L2/L3 switching services and rich network services, such as Multiprotocol Label Switching (MPLS) VPN, hardware IPv6, desktop cloud, and video conferencing. In addition, the S12700 series offers a variety of reliability technologies, including non-stop forwarding, Cluster Switch System Generation2(CSS2), a switch fabric hardware clustering system that allows 1+N backup of Main Processing Units (MPUs), hardware Eth-OAM/BFD, and ring network protection. These technologies help improve productivity and maximize network operation time, reducing Total Cost of Ownership (TCO).

The S12700 series is available in four models: S12704, S12708, S12710 and S12712.

S12712 S12710 S12708 S12704

Product Specifications

Item	S12704	S12708	S12710	S12712
Switching capacity	4.88Tbps/ 16.08*Tbps	12.32Tbps/ 44.96*Tbps	13.12Tbps/ 38.56*Tbps	17.44Tbps/ 44.96*Tbps
Packet forwarding rate	3,120Mpps/ 4,560*Mpps	6,240Mpps/ 30,240*Mpps	7,440Mpps/ 11,040*Mpps	9,120Mpps/ 30,240*Mpps
MPU slots	2	2	2	2
SFU slots	2	4	4 (2 integrated in MPU)	4
Service card slots	4	8	10	12

* Roadmap

S7700 Series

Product Overview

The S7700 series agile switches (S7700 for short) are high-end smart routing agile switches designed for next-generation enterprise networks. The S7700 design is based on Huawei's intelligent multi-layer switching technology to provide intelligent service optimization methods, such as MPLS VPN, traffic analysis, comprehensive HQoS policies, controllable multicast, load balancing, and security, in addition to high-performance Layer 2 to Layer 4 switching services. The S7700 also features super scalability and reliability.

The S7700 can function as an aggregation or core node on a campus network to provide integrated wireless access. The S7700 also offers voice, video, and data services, helping enterprises build routing and switching integrated end-to-end networks.

The S7700 series is available in three models: S7703, S7706, and S7712. The switching capacity and port density of all three models is expandable. The S7700 is developed based on a new hardware platform and adopts a left-to-rear ventilation channel to achieve better energy efficiency. Key components work in redundancy mode to minimize risks of system breakdown and service interruption. Using innovative energy-saving chips, the S7700 provides an industry-leading solution for a sustainable energy-saving network.

S7703

S7706

S7712

Product Specifications

Item	S7703	S7706	S7712
Switching capacity	1.92 Tbps	3.84 Tbps	3.84Tbps
Forwarding performance	1440 Mpps	2880 Mpps	2880 Mpps
MPU slot	2	2	2
Service slot	3	6	12

S6720-HI Series

Product Overview

Huawei S6720-HI series switches are fixed agile switches with 10GE downlink and 40GE/100GE uplink ports, and are applicable to enterprise campus, carrier, university, and government networks.

The S6720-HI delivers abundant agility features, and uses the fully programmable architecture to implement software-defined functions and on-demand service changes. With services and network convergence as the core, the S6720-HI supports the native AC function to manage APs. In addition, the switch provides the free mobility feature to ensure consistent user experience, and the Super Virtual Fabric (SVF) feature to virtualize the entire network into one device.

The S6720-HI supports both cloud management and on-premise management modes. These two management modes can be flexibly switched as required to achieve smooth evolution while maximizing return on investment (ROI). The Huawei cloud management platform allows users to configure, monitor, and inspect switches on the cloud, reducing on-site deployment and O&M manpower costs and decreasing network OPEX.

Models and Appearances

S6720-50L-HI-48S

- 48 × 10 Gig SFP+,6 × 40 Gig QSFP+ or 44 × 10 Gig SFP+,4 × 40 Gig QSFP+,2 × 100 Gig QSFP28
- Dual pluggable power modules, 600 W AC or 350 W DC (no equipped power modules by default)
- Switching capacity: 2.56 Tbit/s

S6720-30L-HI-24S

- 24 × 10 Gig SFP+,4 × 40 Gig QSFP+,2 × 100 Gig QSFP28
- Dual pluggable power modules, 600 W AC or 350 W DC (no equipped power modules by default)
- Switching capacity: 2.56 Tbit/s

S6720-EI Series

Product Overview

The S6720-EI series switches are next-generation 10GE box switches. The S6720-EI can function as an access switch in an Internet data center (IDC) or a core/aggregation switch on a campus network.

The S6720-EI has industry-leading performance, provides line-speed 10GE access ports and line-speed 40GE uplink ports. It can be used in a data center to provide 10 Gbit/s access to servers or function as a core switch on a campus network to provide 10 Gbit/s traffic aggregation. In addition, the S6720-EI provides a wide variety of services, comprehensive security policies, and various QoS features to help customers build scalable, manageable, reliable, and secure data centers.

The S6720-EI supports both cloud management and on-premise management modes. These two management modes can be flexibly switched as required to achieve smooth evolution while maximizing return on investment (ROI). The Huawei cloud management platform allows users to configure, monitor, and inspect switches on the cloud, reducing on-site deployment and O&M manpower costs and decreasing network OPEX.

S6720S-26Q-EI-24S is a compact switch with 220mm depth , perfectly suitable in a 300 mm deep cabinet, saving installation space for customers.

Models and Appearances

S6720-30C-EI-24S-AC
S6720-30C-EI-24S-DC

- 24 × 10 Gig SFP+, 2 × 40 Gig QSFP+ ports
- One extended slot
- Double hot swappable AC/DC power supplies
- Forwarding performance: 720 Mpps
- Switching capacity: 2.56 Tbps

S6720-54C-EI-48S-AC
S6720-54C-EI-48S-DC

- 48 × 10 Gig SFP+, 2 × 40 Gig QSFP+ ports
- One extended slot
- Double hot swappable AC/DC power supplies
- Forwarding performance: 1080 Mpps
- Switching capacity: 2.56 Tbps

S6720S-26Q-EI-24S-AC
S6720S-26Q-EI-24S-DC

- 24 × 10 Gig SFP+, 2 × 40 Gig QSFP+ ports
- Double hot swappable AC/DC power supplies
- Forwarding performance: 480 Mpps
- Switching capacity: 2.56 Tbps

S6720-SI Series Multi-Gigabit Switches

Product Overview

Huawei S6720-SI series switches are next-generation multi-gigabit 10 GE fixed switches. The S6720-SI series can provide access for high-speed wireless devices and 10G data center servers, and can serve as campus network access/aggregation switches.

The S6720-SI series provides the industry’s highest performance among multi-gigabit fixed switches, with line-rate 100M/1G/2.5G/5G/10G access ports and 40 GE uplink ports. They can provide access for high-speed APs and high-density 10G servers, and can serve as 40 GE core/aggregation switches on campus networks. In addition, the S6720-SI series offers a wide range of services, comprehensive security policies, and various QoS features to help customers build scalable, manageable, reliable, and secure campus and data center networks.

The S6720-SI supports both cloud management and on-premise management modes. These two management modes can be flexibly switched as required to achieve smooth evolution while maximizing return on investment (ROI). The Huawei cloud management platform allows users to configure, monitor, and inspect switches on the cloud, reducing on-site deployment and O&M manpower costs and decreasing network OPEX.

Models and Appearances

S6720-26Q-SI-24S-AC
S6720S-26Q-SI-24S-AC

- 24 × 10 Gig SFP+ ports, 2 × 40 Gig QSFP+ ports
- Double pluggable power supplies, AC power supply
- Forwarding performance: 240 Mpps
- Switching capacity: 2.56 Tbit/s

S6720-32X-SI-32S-AC

- 32 × 10 Gig SFP+ ports
- Double pluggable power supplies, AC power supply
- Forwarding performance: 240 Mpps
- Switching capacity: 2.56 Tbit/s

S6720-32X-SI-32S-AC

- 32 × 10 Gig SFP+ ports
- Double pluggable power supplies, AC power supply
- Forwarding performance: 240 Mpps
- Switching capacity: 2.56 Tbit/s

S6720-32C-PWH-SI-AC
S6720-32C-PWH-SI

- 24 × 100M/1G/2.5G/5G/10G Base-T Ethernet ports, 4 × 10 Gig SFP+ ports
- One extended slot
- Double pluggable power supplies, AC/DC power supply
- Long distance PoE++
- Forwarding performance: 240 Mpps
- Switching capacity: 2.56 Tbit/s

S6720-56C-PWH-SI-AC
S6720-56C-PWH-SI

- 32 × 10/100/1,000 Base-T Ethernet ports, 16 × 100M/1G/2.5G/5G/10G Base-T Ethernet ports, 4 × 10 Gig SFP+ ports
- One extended slot
- Double pluggable power supplies, AC/DC power supply
- PoE++
- Forwarding performance: 240 Mpps
- Switching capacity: 2.56 Tbit/s

S6720-52X-PWH-SI

- 48 × 100M/1G/2.5G/5G/10G Base-T Ethernet ports, 4 × 10 Gig SFP+ ports
- Double pluggable power supplies, AC/DC power supply
- PoE++
- Forwarding performance: 480 Mpps
- Switching capacity: 2.56 Tbit/s

S6720-LI Series

Product Overview

The S6720-LI series switches are next-generation simplified 10 GE fixed switches and can be used as access switches for campus and data center networks.

The S6720-LI series provides line-rate 10 GE access ports and 40 GE uplink ports. In addition, the S6720-LI series delivers a wide range of services, comprehensive security control policies, and various QoS features to help customers build scalable, reliable, manageable, and secure campus and data center networks.

Models and Appearances

S6720-16X-LI-16S-AC
S6720S-16X-LI-16S-AC

- 16 × 10 Gig SFP+ ports
- Built-in AC power supply and Redundant Power Supply (RPS)
- Packet forwarding rate: 240 Mpps
- Switching capacity: 1.28 Tbit/s

S6720-26Q-LI-24S-AC
S6720S-26Q-LI-24S-AC

- 24 × 10 Gig SFP+ ports, 2 × 40 Gig QSFP+ ports
- Built-in AC power supply and RPS
- Packet forwarding rate: 240 Mpps
- Switching capacity: 1.28 Tbit/s

S6720-32X-LI-32S-AC
S6720S-32X-LI-32S-AC

- 32 × 10 Gig SFP+ ports
- Built-in AC power supply and RPS
- Packet forwarding rate: 240 Mpps
- Switching capacity: 1.28 Tbit/s

S5730-HI Series HOT

Product Overview

Huawei S5730-HI gigabit Ethernet switches (hereinafter referred to as the S5730-HI) are Huawei-developed next-generation agile switches that provide fixed full gigabit access and 10GE uplink interfaces as well as one or two slots for uplink interface extension. The switches are developed based on Huawei Versatile Routing Platform (VRP), and use the fully programmable structure to implement software definition and service change on demand. With services and network convergence as the core, the switches provide the free mobility function to ensure consistent user experience. The Super Virtual Fabric (SVF) function virtualizes the entire network into one device. In addition, the switches support flexible Ethernet networking, comprehensive VPN tunnel solutions, various security control methods,

intelligent deployment, and simple operations & maintenance (O&M). The S5730-HI series switches are the best choices for the access or aggregation layers of large- and middle-sized campus networks, and the core layer of branch or small campus networks.

Models and Appearances

S5730-36C-HI

- 24 × 10/100/1000Base-T Ethernet ports,4 × 10 Gig SFP+ ports
- One extended slot
- 1+1 power backup, with AC, DC, or AC+DC power supply
  Switching capacity: 758 Gbit/s

S5730-36C-PWH-HI

- 24 × 10/100/1000Base-T Ethernet ports,4 × 10 Gig SFP+ ports
- One extended slot
- 1+1 power backup, with AC, DC, or AC+DC power supply
- PoE++
- Switching capacity: 758 Gbit/s

S5730-44C-HI

- 24 × 10/100/1000Base-T Ethernet ports,4 × 10 Gig SFP+ ports
- Two extended slots
- 1+1 power backup, with AC, DC, or AC+DC power supply
- Switching capacity: 758 Gbit/s

S5730-44C-PWH-HI

- 24 × 10/100/1000Base-T Ethernet ports,4 × 10 Gig SFP+
- Two extended slots
- 1+1 power backup, with AC, DC, or AC+DC power supply
- PoE++
- Switching capacity: 758 Gbit/s

S5730-60C-HI

- 48 × 10/100/1000Base-T Ethernet ports,4 × 10 Gig SFP+ ports
- One extended slot
- 1+1 power backup, with AC, DC, or AC+DC power supply
- Switching capacity: 758 Gbit/s

S5730-60C-HI

- 48 × 10/100/1000Base-T Ethernet ports,4 × 10 Gig SFP+ ports
- One extended slot
- 1+1 power backup, with AC, DC, or AC+DC power supply
- Switching capacity: 758 Gbit/s

S5730-60C-PWH-HI

- 48 × 10/100/1000Base-T Ethernet ports,4 × 10 Gig SFP+ ports
- One extended slot
- 1+1 power backup, with AC, DC, or AC+DC power supply
- PoE++
- Switching capacity: 758 Gbit/s

S5730-60C-PWH-HI

- 48 × 10/100/1000Base-T Ethernet ports,4 × 10 Gig SFP+ ports
- Two extended slots
- 1+1 power backup, with AC, DC, or AC+DC power supply
- Switching capacity: 758 Gbit/s

S5730-68C-PWH-HI

- 48 × 10/100/1000Base-T Ethernet ports,4 × 10 Gig SFP+ ports
- Two extended slots
- 1+1 power backup, with AC, DC, or AC+DC power supply
- PoE++
- Switching capacity: 758 Gbit/s

S5730-SI Series

Product Overview

The S5730-SI series switches (S5730-SI for short) are next-generation standard gigabit Layer 3 Ethernet switches. They can be used as an access or aggregation switch on a campus network or as an access switch in a data center.

The S5730-SI series switches provide flexible full gigabit access and cost-effective fixed GE/10 GE uplink ports. Meanwhile, the S5730-SI can provide 4 x 40 GE uplink ports with an interface card.

Models and Appearances

S5730-48C-SI-AC

- 24 × Ethernet 10/100/1,000 ports, 8 × 10 Gig SFP+
- One extended slot
- Dual pluggable AC or DC power supplies, one 150W AC power supply equipped by default
- Forwarding performance: 240 Mpps
- Switching capacity: 680 Gbit/s

S5730-48C-PWR-SI-AC

- 24 × Ethernet 10/100/1,000 ports, 8 × 10 Gig SFP+
- One extended slot
- One 500W AC power supply equipped by default
- PoE+
- Forwarding performance: 240 Mpps
- Switching capacity: 680 Gbit/s

S5730-68C-SI-AC

- 48 × Ethernet 10/100/1,000 ports, 4 × 10 Gig SFP+
- One extended slot
- Dual pluggable AC or DC power supplies, one 150W AC power supply equipped by default
- Forwarding performance: 240 Mpps
- Switching capacity: 680 Gbit/s

S5730-68C-PWR-SI-AC

- 48 × Ethernet 10/100/1,000 ports, 4 × 10 Gig SFP+
- One extended slot
- One 500W AC power supply equipped by default
- PoE+
- Forwarding performance: 240 Mpps
- Switching capacity: 680 Gbit/s

S5730-68C-PWR-SI

- 48 × Ethernet 10/100/1,000 ports, 4 × 10 Gig SFP+, PoE+
- One extended slot
- PoE+
- Forwarding performance: 240 Mpps
- Switching capacity: 680 Gbit/s

S5720-EI Series

Product Overview

The S5720-EI series enhanced gigabit Ethernet switches (S5720-EI for short) are next-generation switches that provide flexible GE access ports (including optical, electrical, and combo ports) and 10GE uplink ports. Built on next-generation high-performing processors and the Huawei Versatile Routing Platform (VRP), the S5720-EI provides larger table sizes and higher hardware processing capabilities than equivalent switches. comprehensive service processing capabilities, enhanced security control, and mature IPv6 features, and supports MACsec, intelligent stack (iStack), flexible Ethernet networking, and easy operations and maintenance (O&M). With all these advantages, the S5720-EI is widely used for access/aggregation in enterprise campus networks or gigabit access in data center networks.

Models and Appearances

S5720-32P-EI-AC

- 24 × Ethernet 10/100/1000 ports, 4 × 100/1000 SFP, 4 × Gig SFP, 2 × QSFP+ dedicated stack ports
- Fixed AC power supply, RPS supported
- Forwarding performance: 48 Mpps
- Switching capacity: 598 Gbit/s

S5720-32X-EI-AC

- 24 × Ethernet 10/100/1000 ports, 4 × 100/1000 SFP, 4 × 10 Gig SFP+, 2 × QSFP+ dedicated stack ports
- Fixed AC power supply, RPS supported
- Forwarding performance: 102 Mpps
- Switching capacity: 598 Gbit/s

S5720-32X-EI-24S-AC
S5720-32X-EI-24S-DC

- 24 × Gig SFP, 4 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+, 2 × QSFP+dedicated stack ports
- Fixed AC/DC power supply, RPS supported
- Forwarding performance: 102 Mpps
- Switching capacity: 598 Gbit/s

S5720-36C-EI-28S-AC
S5720-36C-EI-28S-DC

- 24 × Gig SFP, 4 × Combo Gig ports , 4 × 10 Gig SFP+
- One extended slot
- Hot-swappable dual AC/DC power supplies, one AC/DC power supply equipped by default
- Forwarding performance: 132 Mpps
- Switching capacity: 598 Gbit/s

S5720-36C-EI-AC

- 24 × Ethernet 10/100/1000 ports, 4 × Combo Gig ports，4 × 10 Gig SFP+
- One extended slot
- Hot-swappable dual AC power supplies, one AC power supply equipped by default
- Forwarding performance: 132 Mpps
- Switching capacity: 598 Gbit/s

S5720-36C-PWR-EI-AC

- 24 × Ethernet 10/100/1000 PoE+ ports, 4 × Combo Gig ports , 4 × 10 Gig SFP+
- One extended slot
- PoE+
- Hot-swappable dual AC power supplies, one AC power supply equipped by default
- Forwarding performance: 132 Mpps
- Switching capacity: 598 Gbit/s

S5720-36PC-EI-AC

- 24 × Ethernet 10/100/1000 ports, 4 × Combo Gig ports, 4 × Gig SFP
- One extended slot
- Hot-swappable dual AC power supplies, one AC power supply equipped by default
- Forwarding performance: 78 Mpps
- Switching capacity: 598 Gbit/s

S5720-50X-EI-AC
S5720-50X-EI-DC

- 46 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+, 2 × QSFP+ dedicated stack ports
- Fixed AC/DC power supply, RPS supported
- Forwarding performance: 129 Mpps
- Switching capacity: 598 Gbit/s

S5720-50X-EI-46S-AC
S5720-50X-EI-46S-DC

- 46 × Gig SFP, 4 × 10 Gig SFP+,2 × QSFP+ dedicated stack ports
- Fixed AC/DC power supply, RPS supported
- Forwarding performance: 129 Mpps
- Switching capacity: 598 Gbit/s

S5720-52X-EI-AC

- 48 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+, 2 × QSFP+ dedicated stack ports
- Fixed AC power supply, RPS supported
- Forwarding performance: 132 Mpps
- Switching capacity: 598 Gbit/s

S5720-52P-EI-AC

- 48 × Ethernet 10/100/1000 ports, 4 × Gig SFP, 2 × QSFP+ dedicated stack ports
- Fixed AC power supply, RPS supported
- Forwarding performance: 78 Mpps
- Switching capacity: 598 Gbit/s

S5720-56C-EI-48S-AC
S5720-56C-EI-48S-DC

- 48 × Gig SFP, 4 × 10 Gig SFP+
- One extended slot
- Hot-swappable dual AC/DC power supplies, one AC/DC power supply equipped by default
- Forwarding performance: 162 Mpps
- Switching capacity: 598 Gbit/s

S5720-56C-EI-AC
S5720-56C-EI-DC

- 48 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+
- One extended slot
- Hot-swappable dual AC/DC power supplies, one AC/DC power supply equipped by default
- Forwarding performance: 162 Mpps
- Switching capacity: 598 Gbit/s

S5720-56C-PWR-EI-AC
S5720-56C-PWR-EI-AC1
S5720-56C-PWR-EI-DC

- 48 × Ethernet 10/100/1000 PoE+ ports, 4 × 10 Gig SFP+
- One extended slot
- PoE+
- Hot-swappable dual AC/DC power supplies, one AC/DC power supply equipped by default
- 500W/1100W AC power supply
- Forwarding performance: 162 Mpps
- Switching capacity: 598 Gbit/s

S5720-56PC-EI-AC

- 48 × Ethernet 10/100/1000 ports, 4 × Gig SFP
- One extended slot
- Hot-swappable dual AC power supplies, one AC power supply equipped by default
- Forwarding performance: 108 Mpps
- Switching capacity: 598 Gbit/s

S5720-SI Series

Product Overview

The S5720-SI series switches (S5720-SI for short) are next-generation standard gigabit Layer 3 Ethernet switches that provide flexible full gigabit access and cost-effective fixed GE ports and 10GE uplink ports. The S5720-SI was developed based on next-generation high-performing hardware and the Huawei Versatile Routing Platform (VRP). The S5720-SI supports simplified operations and maintenance (O&M), intelligent stack (iStack), flexible Ethernet networking, and MACsec. It also provides enhanced Layer 3 features and mature IPv6 features. The S5720-SI can be used in various scenarios. For example, it can be used as an access or aggregation switch on a campus network or as an access switch in a data center.

The S5720-SI supports both cloud management and on-premise management modes. These two management modes can be flexibly switched as required to achieve smooth evolution while maximizing return on investment (ROI). The Huawei cloud management platform allows users to configure, monitor, and inspect switches on the cloud, reducing on-site deployment and O&M manpower costs and decreasing network OPEX.

Models and Appearances

S5720-28P-SI-AC

- 24 × Ethernet 10/100/1000 ports, 4 × Combo Gig ports , 4 × Gig SFP
- Hot-swappable dual AC power supplies, one AC power supply equipped by default
- Forwarding performance: 42 Mpps
- Switching capacity: 336 Gbit/s

S5720-28X-SI-AC
S5720-28X-SI-DC

- 20 × Ethernet 10/100/1000 ports, 4 × Combo Gig ports, 4 × 10 Gig SFP+ ports
- Hot-swappable dual AC/DC power supplies, one AC/DC power supply equipped by default
- Forwarding performance: 96 Mpps
- Switching capacity: 336 Gbit/s

S5720-28X-SI-24S-AC

S5720-28X-SI-24S-DC

- 24 × Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 × 10 Gig SFP+
- Hot-swappable dual AC/DC power supplies, one AC/DC power supply equipped by default
- Forwarding performance: 96 Mpps
- Switching capacity: 336 Gbit/s

S5720-52P-SI-AC

- 48 × Ethernet 10/100/1000 ports, 4 × Gig SFP
- Hot-swappable dual AC power supplies, one AC power supply equipped by default
- Forwarding performance: 78 Mpps
- Switching capacity: 336 Gbit/s

S5720-52X-SI-AC
S5720-52X-SI-DC

- 48 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+
- Hot-swappable dual AC/DC power supplies, one AC/DC power supply equipped by default
- Forwarding performance: 132 Mpps
- Switching capacity: 336 Gbit/s

S5720-28X-PWR-SI-AC
S5720-28X-PWR-SI-DC

- 20 × Ethernet 10/100/1000 PoE+ ports, 4 × Combo Gig ports , 4 × 10 Gig SFP+
- Hot-swappable dual AC/DC power supplies, one AC/DC power supply equipped by default
- PoE+
- Forwarding performance: 96 Mpps
- Switching capacity: 336 Gbit/s

S5720-52X-PWR-SI-AC
S5720-52X-PWR-SI-DC

- 48 × Ethernet 10/100/1000 PoE+ ports, 4 × 10 Gig SFP+
- Hot-swappable dual AC/DC power supplies, one AC/DC power supply equipped by default
- PoE+
- Forwarding performance: 132 Mpps
- Switching capacity: 336 Gbit/s

S5720-52X-PWR-SI-ACF

- 48 × Ethernet 10/100/1000 PoE+ ports, 4 × 10 Gig SFP+
- Hot-swappable dual AC power supplies,one 1150W AC power supply equipped by default
- PoE+
- Forwarding performance: 132 Mpps
- Switching capacity: 336 Gbit/s

S5720S-28P-SI-AC

- 24 × Ethernet 10/100/1000 ports, 4 × Gig SFP
- Fixed AC power supply, RPS supported
- Forwarding performance: 42 Mpps
- Switching capacity: 336 Gbit/s

S5720S-28X-SI-AC

- 24 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+
- Fixed AC power supply, RPS supported
- Forwarding performance: 96 Mpps
- Switching capacity: 336 Gbit/s

S5720S-52P-SI-AC

- 48 × Ethernet 10/100/1000 ports, 4 × Gig SFP
- Fixed AC power supply, RPS supported
- Forwarding performance: 78 Mpps
- Switching capacity: 336 Gbit/s

S5720S-52X-SI-AC

- 48 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+
- Fixed AC power supply, RPS supported
- Forwarding performance: 132 Mpps
- Switching capacity: 336 Gbit/s

S5721-28X-SI-24S-AC

- 24 × Gig SFP, 8 of which are dual-purpose 10/100/1,000 or SFP, 4 x 10 Gig SFP+
- Dual pluggable AC or DC power supplies, one 60W AC power supply equipped by default
- Forwarding performance: 96 Mpps
- Switching capacity: 336 Gbit/s

S5720I-SI Series

Product Overview

The S5720I-SI series switches (S5720I-SI for short) are next-generation standard gigabit Layer 3 Ethernet switches that provide flexible full gigabit access and cost-effective fixed GE ports and 10GE uplink ports. The S5720I-SI was developed based on next-generation high-performing hardware and the Huawei Versatile Routing Platform (VRP). The S5720I-SI supports simplified operations and maintenance (O&M), intelligent stack (iStack) and flexible Ethernet networking. It also provides enhanced Layer 3 features and mature IPv6 features.

The S5720I-SI supports high range of operating temperature, so the switch can be working in the outdoor cabinet in the very cold and very hot environments. S5720I-SI can be widely used in safe city, ETTx and other scenarios.

Models and Appearances

S5720I-12X-SI-AC

- 8 × Ethernet 10/100/1000 ports,4 × 10 Gig SFP+ ports
- Fixed AC power supply
- Forwarding performance: 72 Mpps
- Switching capacity: 336 Gbit/s
- Operating temperature: -40°C to 75°C

S5720I-12X-PWH-SI-DC

- 8 × Ethernet 10/100/1000 ports,4 × 10 Gig SFP+
- -50--56V DC power input or optional DC power supply module
- PoE++
- Forwarding performance: 72 Mpps
- Switching capacity: 336 Gbit/s
- Operating temperature: -40°C to 75°C

S5720I-28X-SI-AC

- 24 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+ ports
- Built-in dual AC power module
- Forwarding performance: 96 Mpps
- Switching capacity: 336 Gbit/s
- Operating temperature: -40°C to 65°C

S5720I-28X-PWH-SI-AC

- 24 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+ ports
- Built-in dual AC power module
- PoE++
- Forwarding performance: 96 Mpps
- Switching capacity: 336 Gbit/s
- Operating temperature: -40°C to 65°C

S5720-LI Series HOT

Product Overview

The S5720-LI is a next-generation energy-saving gigabit Ethernet switch that provides flexible GE access ports and 10GE uplink ports. Building on next-generation, high-performance hardware and the Huawei Versatile Routing Platform (VRP), the S5720-LI supports intelligent stack (iStack), flexible Ethernet networking, and diversified security control. It provides customers with a green, easy-to-manage, easy-to-expand, and cost-effective gigabit to the desktop solution.

The S5720-LI supports both cloud management and on-premise management modes. These two management modes can be flexibly switched as required to achieve smooth evolution while maximizing return on investment (ROI). The Huawei cloud management platform allows users to configure, monitor, and inspect switches on the cloud, reducing on-site deployment and O&M manpower costs and decreasing network OPEX.

Models and Appearances

S5720-12TP-LI-AC

- 8 × Ethernet 10/100/1000 Base-T ports, 2 × Gig SFP ports, 2 × Combo Gig ports
- AC power supply
- Forwarding performance:22.5 Mpps
- Switching capacity: 336 Gbit/s

S5720-12TP-PWR-LI-AC

- 8 × Ethernet 10/100/1000 Base-T ports, 2 × Gig SFP ports, 2 × Combo Gig ports
- AC power supply
- PoE+
- Forwarding performance: 22.5 Mpps
- Switching capacity: 336 Gbit/s

S5720-28P-LI-AC

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports
- AC power supply
- Forwarding performance: 51 Mpps
- Switching capacity: 336 Gbit/s

S5720-28P-PWR-LI-AC

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports
- AC power supply
- PoE+
- Forwarding performance: 51 Mpps
- Switching capacity: 336 Gbit/s

S5720-52P-LI-AC

- 48 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports
- AC power supply
- Forwarding performance: 87 Mpps
- Switching capacity: 336 Gbit/s

S5720-52P-PWR-LI-AC

- 48 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports
- AC power supply
- PoE+
- Forwarding performance: 87 Mpps
- Switching capacity: 336 Gbit/s

S5720-28X-LI-AC
S5720-28X-LI-DC

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × 10 Gig SFP+ ports
- Fixed AC/DC power supply, RPS supported
- Forwarding performance: 108 Mpps
- Switching capacity: 336 Gbit/s

S5720-28X-PWR-LI-AC

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × 10 Gig SFP+ ports
- Fixed AC power supply, RPS supported
- PoE+
- Forwarding performance: 108 Mpps
- Switching capacity: 336 Gbit/s

S5720-28X-LI-24S-AC

S5720-28X-LI-24S-DC

- 16 × Gig SFP ports, 8 ×Combo Gig ports , 4 × 10 Gig SFP+ ports
- Fixed AC/DC power supply, RPS supported
- Forwarding performance: 108 Mpps
- Switching capacity: 336 Gbit/s

S5720-52X-LI-AC
S5720-52X-LI-DC

- 48 × Ethernet 10/100/1000 Base-T ports, 4 × 10 Gig SFP+ ports
- Fixed AC/DC power supply, RPS supported
- Forwarding performance: 144 Mpps
- Switching capacity: 336 Gbit/s

S5720-52X-PWR-LI-AC

- 48 × Ethernet 10/100/1000 Base-T ports, 4 × 10 Gig SFP+ ports
- Fixed AC power supply, RPS supported
- PoE+
- Forwarding performance: 144 Mpps
- Switching capacity: 336 Gbit/s

S5720-28TP-LI-AC

- 24 × Ethernet 10/100/1000 Base-T ports, 2 × Gig SFP ports, 2 × Combo Gig ports
- AC power supply
- Forwarding performance: 46.5 Mpps
- Switching capacity: 336 Gbit/s

S5720-28TP-PWR-LI-AC

- 24 × Ethernet 10/100/1000 Base-T ports, 2 × Gig SFP ports, 2 × Combo Gig ports
- AC power supply
- PoE+
- Forwarding performance: 46.5 Mpps
- Switching capacity: 336 Gbit/s

S5720-28TP-PWR-LI-ACL

- 8 × Ethernet 10/100/1000 PoE+ ports, 16 × Ethernet 10/100/1000 Base-T ports, 2 × Gig SFP ports, 2 × Combo Gig ports
- AC power supply
- PoE+
- Forwarding performance: 46.5 Mpps
- Switching capacity: 336 Gbit/s

S5720-16X-PWH-LI-AC

- 12 × Ethernet 10/100/1000 PoE++ ports, 2 × Ethernet 10/100/1000 Base-T ports, 2 × 10 Gig SFP+ ports
- AC power supply
- PoE++
- Forwarding performance: 51 Mpps
- Switching capacity: 336 Gbit/s

S5720-28X-PWH-LI-AC

- 16 × Ethernet 10/100/1000 Base-T ports, 8 × 100M/1G/2.5G Base-T ports, 4 × 10 Gig SFP+ ports
- Fixed AC power supply, RPS supported
- PoE++
- Forwarding performance: 126 Mpps
- Switching capacity: 336 Gbit/s

S5720-52X-PWR-LI-ACF

- 48 x Ethernet 10/100/1,000 Base-T ports, 4 x 10 Gig SFP+ ports
- AC power supply, supporting Redundant Power Supply (RPS)
- PoE+
- Forwarding performance: 144 Mpps
- Switching capacity: 336 Gbit/s

S5720S-LI Series

Product Overview

The S5720S-LI is a next-generation energy-saving gigabit Ethernet switch that provides flexible GE access ports and 10GE uplink ports. Building on next-generation, high-performance hardware and the Huawei Versatile Routing Platform (VRP), the S5720S-LI supports intelligent stack (iStack), flexible Ethernet networking, and diversified security control. It provides customers with a green, easy-to-manage, easy-to-expand, and cost-effective gigabit to the desktop solution. In addition, Huawei customizes specialized models to meet customer requirements to suit special scenarios.

The models with front power sockets can be installed in the 300 mm deep cabinet. They can be maintained through the front panel, saving space in small equipment rooms.

The S5720S-LI supports both cloud management and on-premise management modes. These two management modes can be flexibly switched as required to achieve smooth evolution while maximizing return on investment (ROI). The Huawei cloud management platform allows users to configure, monitor, and inspect switches on the cloud, reducing on-site deployment and O&M manpower costs and decreasing network OPEX.

As part of Huawei’s channel distribution products, the S5720S-LI is only sold in Russia, Switzerland, Hong Kong, Dubai, Turkey, Malaysia, Saudi Arabia, Singapore, Qatar, and New Zealand.

Models and Appearances

S5720S-12TP-LI-AC

- 8 × Ethernet 10/100/1000Base-T ports, 2 × Gig SFP ports, 2 × Combo Gig ports
- AC power supply
- Forwarding performance: 22.5 Mpps
- Switching Capacity: 336Gbit/s

S5720S-12TP-PWR-LI-AC

- 8 × Ethernet 10/100/1000Base-T ports, 2 × Gig SFP ports, 2 × Combo Gig ports
- AC power supply
- PoE+
- Forwarding performance: 22.5 Mpps
- Switching Capacity: 336Gbit/s

S5720S-28P-LI-AC

- 24 × Ethernet 10/100/1000Base-T ports, 4 × Gig SFP ports
- AC power supply
- Forwarding performance: 51Mpps
- Switching Capacity: 336Gbit/s

S5720S-28P-PWR-LI-AC

- 24 × Ethernet 10/100/1000Base-T ports, 4 × Gig SFP ports
- AC power supply
- PoE+
- Forwarding performance: 51Mpps
- Switching Capacity: 336Gbit/s

S5720S-52P-LI-AC

- 48 × Ethernet 10/100/1000Base-T ports, 4 × Gig SFP ports
- AC power supply
- Forwarding performance: 87Mpps
- Switching Capacity: 336Gbit/s

S5720S-52P-PWR-LI-AC

- 48 × Ethernet 10/100/1000Base-T ports, 4 × Gig SFP ports
- AC power supply
- PoE+
- Forwarding performance: 87Mpps
- Switching Capacity: 336Gbit/s

S5720S-28X-LI-AC

- 24 × Ethernet 10/100/1000Base-T ports, 4 × 10 Gig SFP+ ports
- AC power supply
- Forwarding performance: 108Mpps
- Switching Capacity: 336Gbit/s

S5720S-28X-PWR-LI-AC

- 24 × Ethernet 10/100/1000Base-T ports, 4 × 10 Gig SFP+ ports
- AC power supply
- PoE+
- Forwarding performance: 108Mpps
- Switching Capacity: 336Gbit/s

S5720S-28X-LI-24S-AC

- 16 × Gig SFP ports, 8 × Combo Gig ports ,4 × 10 Gig SFP+ ports
- Fixed AC power supply, RPS supported
- Forwarding performance: 108Mpps
- Switching Capacity: 336Gbit/s

S5720S-52X-LI-AC

- 48 × Ethernet 10/100/1000Base-T ports, 4 × 10 Gig SFP+ ports
- AC power supply
- Forwarding performance: 144Mpps
- Switching Capacity: 336Gbit/s

S5720S-52X-PWR-LI-AC

- 48 × Ethernet 10/100/1000Base-T ports, 4 × 10 Gig SFP+ ports
- AC power supply
- PoE+
- Forwarding performance: 144Mpps
- Switching Capacity: 336Gbit/s

S5720S-28TP-PWR-LI-ACL

- 8 × Ethernet 10/100/1000 PoE+ ports, 16 × Ethernet 10/100/1000Base-T ports, 2 × Gig SFP ports,2 × Combo Gig ports
- AC power supply
- PoE+
- Forwarding performance: 46.5 Mpps
- Switching Capacity: 336Gbit/s

S3700 Series

Product Overview

The S3700 series enterprise switches (S3700s) are next-generation energy-saving Layer 3 switches. The S3700 utilizes cutting-edge hardware and Huawei Versatile Routing Platform (VRP) software to provide high-performance access and aggregation to an enterprise campus network. The S3700 is easy to install and maintain. With its flexible VLAN deployment, PoE capabilities, comprehensive routing functions, and capability to migrate to an IPv6 network, the S3700 helps enterprise customers build next-generation IT networks. In addition, the S3700 uses advanced reliability technologies such as stacking, VRRP, and RRPP, enhancing network reliability and diversity.

The S3700 is a box device that is 1 U high. It is available in a standard version (SI), an enhanced version (EI). The SI version provides Layer 2 functions and basic Layer 3 functions. The EI version supports complex routing protocols and provides more functions than the SI version offers.

Models and Appearances

S3700-28TP-SI-AC

- 24 × 10/100Base-TX ports, 2 × 1000Base-X SFP ports, 2 × Combo Gig ports (10/100/1000Base-T or 100/1000Base-X)
- AC power supply
- Forwarding performance: 9.6 Mpps
- Switching Capacity: 64Gbps

S3700-28TP-EI-AC

S3700-28TP-PWR-EI

- 24 × 10/100Base-TX ports, 2 × 1000Base-X SFP ports, 2 × Combo Gig ports (10/100/1000Base-T or 100/1000Base-X)
- AC power supply
- PoE+
- Forwarding performance: 9.6 Mpps
- Switching Capacity: 64Gbps

S3700-28TP-EI-24S-AC

- 24 × 100Base-FX SFP ports, 2 × 1000Base-X SFP ports, 2 × Combo Gig ports (10/100/1000Base-T or 100/1000Base-X)
- AC power supply
- Forwarding performance: 9.6 Mpps
- Switching Capacity: 64Gbps

S3700-52P-SI-AC

S3700-52P-EI-AC

- 28 × 10/100Base-TX ports, 2 × 100/1000Base-X SFP ports, 2 × 1000Base-X SFP ports
- AC power supply
- Forwarding performance: 13.2 Mpps
- Switching Capacity: 64Gbps

S3700-52P-PWR-EI

- 28 × 10/100Base-TX ports, 2 × 100/1000Base-X SFP ports, 2 × 1000Base-X SFP ports
- AC power supply
- PoE+
- Forwarding performance: 13.2 Mpps
- Switching Capacity: 64Gbps

S2700 Series

Product Overview

The S2700 series enterprise switches (S2700 for short), including S2710, S2720,S2750, and S2751 series, are next-generation energy-saving intelligent 100M Ethernet switches developed by Huawei. The S2700 utilizes cutting-edge switching technologies and Huawei Versatile Routing Platform (VRP) software to meet the demand for multi-service provisioning and access on Ethernet networks. It is easy to install and maintain. With its flexible network deployment, comprehensive security and quality of service (QoS) policies, and energy-saving technologies, the S2700 helps enterprise customers build next-generation IT networks.

The S2700 is a box device that is 1 U (44.45 mm or 1.75 in.) high. It is available in a standard version (SI) or an enhanced version (EI).

Models and Appearances

S2700-9TP-SI-AC

S2700-9TP-EI-AC

S2700-9TP-EI-DC

- 8 × Ethernet 10/100 ports, 1 dual-purpose 10/100/1000 or SFP
- AC or DC power supply for the EI version; AC power supply for the SI version
- Forwarding performance: 2.7 Mpps
- Switching Capacity: 32Gbps

S2700-9TP-PWR-EI

- 8 × Ethernet 10/100 ports, 1 dual-purpose 10/100/1000 or SFP
- AC power supply
- PoE+
- Forwarding performance: 2.7 Mpps
- Switching Capacity: 32Gbps

S2700-18TP-SI-AC

S2700-18TP-EI-AC

- 16 × Ethernet 10/100 ports, 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- Forwarding performance: 5.4 Mpps
- Switching Capacity: 32Gbps

S2700-26TP-SI-AC

S2700-26TP-EI-AC

- 24 × Ethernet 10/100 ports, 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- Forwarding performance: 6.6 Mpps
- Switching Capacity: 32Gbps

S2700-26TP-PWR-EI

- 24 × Ethernet 10/100 ports, 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- PoE+
- Forwarding performance: 6.6 Mpps
- Switching Capacity: 32Gbps

S2710-52P-SI-AC

- 48 × Ethernet 10/100 ports, 4 × Gig SFP
- AC power supply
- Forwarding performance: 13.2 Mpps
- Switching Capacity: 32Gbps

S2700-52P-EI-AC

- 48 × Ethernet 10/100 ports, 4 × Gig SFP
- AC and DC power supply
- Forwarding performance: 13.2 Mpps
- Switching Capacity: 32Gbps

S2700-52P-PWR-EI

- 48 × Ethernet 10/100 ports, 4 × Gig SFP
- AC power supply
- PoE+
- Forwarding performance: 13.2 Mpps
- Switching Capacity: 32Gbps

S2750-20TP-PWR-EI-AC

- 16 × Ethernet 10/100 ports, 2 × Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- PoE+
- Forwarding performance: 8.4 Mpps
- Switching Capacity: 64Gbps

S2750-28TP-EI-AC

- 24 × Ethernet 10/100 ports, 2 × Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- Forwarding performance: 9.6 Mpps
- Switching Capacity: 64Gbps

S2750-28TP-PWR-EI-AC

- 24 × Ethernet 10/100 ports, 2 × Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- PoE+
- Forwarding performance: 9.6 Mpps
- Switching Capacity: 64Gbps

S2720-28TP-EI-AC

- 24 × Ethernet 10/100 ports,2 × Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- Forwarding performance: 9.6 Mpps
- Switching Capacity: 12.8Gbps

S2720-12TP-EI

- 4 × Ethernet 10/100 ports, 4 × Ethernet10/100/1000 ports,2 dual-purpose 10/100/1000 or SFP,2 × Gig SFP
- AC power supply
- Forwarding performance: 12.6 Mpps
- Switching Capacity: 68 Gbit/s

S2720-12TP-PWR-EI

- 4 × Ethernet 10/100 ports, 4 × Ethernet10/100/1000 ports,2 dual-purpose 10/100/1000 or SFP,2 × Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 12.6 Mpps
- Switching Capacity: 68 Gbit/s

S2720-28TP-PWR-EI

- 16 × Ethernet 10/100 ports,8 × Ethernet10/100/1000,4 x Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- PoE+
- AC power supply
- Forwarding performance: 20.4 Mpps
- Switching Capacity: 68 Gbit/s

S2720-28TP-PWR-EI-L

- 6 × Ethernet 10/100,8 Ethernet10/100/1000,4 × Gig SFP and 2 dual-purpose × 10/100/1000 or SFP,8 ports
- PoE+
- AC power supply
- Forwarding performance: 20.4 Mpps
- Switching Capacity: 68 Gbit/s

S2720-52TP-EI

- 32 × Ethernet 10/100 ports,16 × Ethernet 10/100/1000 ports,4 Gig SFP
- AC power supply
- Forwarding performance: 34.8 Mpps
- Switching Capacity: 336 Gbit/s

S2720-52TP-PWR-EI

- 32 × Ethernet 10/100 ports,16 × Ethernet 10/100/1000 ports,4 Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 34.8 Mpps
- Switching Capacity: 336 Gbit/s

S1700 Series

Product Overview

The S1700 series enterprise switches (S1700s) are next-generation energy-saving Ethernet access switches. The S1700 uses high-performance hardware, which offers a wide array of features to help customers build secure, reliable, high-performance networks. The S1700 is easy to install and maintain, and is ideal for small-size and medium-size enterprises, Internet cafes, hotels, and schools.

The S1700 consists of unmanaged switches, Web/SNMP-based switches, and a web-managed switch:

- Unmanaged switches include the S1700-24-AC, S1724G-AC, S1700-16G, S1700-24GR, S1700-28GR-4X, S1700-52R-2T2P-AC, S1700-52GR-4X.
- The web-managed switches include the S1720-10GW-2P, S1720-10GW-PWR-2P, S1720-28GWR-4P, S1720-28GWR-4X, S1720-28GWR-PWR-4P, S1720-28GWR-PWR-4X, S1720-52GWR-4P, S1720-52GWR-4X, S1720-52GWR-PWR-4P, S1720-52GWR-PWR-4X, S1720-28GWR-PWR-4TP, S1720X-16XWR, S1720X-16XWR.
- Web/SNMP-based switches include the S1700-28FR-2T2P-AC, S1700-28GFR-4P-AC, S1700-52FR-2T2P-AC, S1700-52GFR-4P-AC, S1720-20GFR-4TP and S1720-28GFR-4TP, S1720-10GW-2P-E, S1720-10GW-PWR-2P-E,S1720-28GWR-4P-E, S1720-28GWR-4X-E, S1720-28GWR-PWR-4P-E,S1720-28GWR-PWR-4TP-E,S1720-28GWR-PWR-4X-E, S1720-52GWR-4P-E,S1720-52GWR-4X-E,S1720-52GWR-PWR-4P-E,S1720-52GWR-PWR-4X-E, S1720X-16XWR-E, S1720X-32XWR-E.

Models and Appearances

S1700-24-AC

- 24 × Ethernet 10/100 ports
- AC power supply
- Forwarding performance: 3.6Mpps
- Switching Capacity: 4.8Gbps

S1700-52R-2T2P-AC

- 48 × Ethernet 10/100 ports, 2 × Ethernet 10/100/1000 ports and 2 × Gig SFP
- AC power supply
- Forwarding performance: 13.2Mpps
- Switching Capacity: 17.6Gbps

S1700-28GR-4X

- 24 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+
- AC power supply
- Forwarding performance: 96Mpps
- Switching Capacity: 168Gbps

S1700-52GR-4X

- 48 × Ethernet 10/100/1000 ports, 4 × 10 Gig SFP+
- AC power supply
- Forwarding performance: 132Mpps
- Switching Capacity: 336Gbps

S1724G-AC

- 24 × Ethernet 10/100/1000 ports
- AC power supply
- Forwarding performance: 36Mpps
- Switching Capacity: 48Gbps

S1700-24GR

- 24 × Ethernet 10/100/1000 ports
- AC power supply
- Forwarding performance: 36Mpps
- Switching Capacity: 48Gbps

S1700-16G

- 16 × Ethernet 10/100/1000 ports
- AC power supply
- Forwarding performance: 24Mpps
- Switching Capacity: 32Gbps

S1720-10GW-2P

- 8 × Ethernet 10/100/1000 ports,2 × Gig SFP
- AC power supply
- Forwarding performance: 15 Mpps
- Switching Capacity: 68Gbps

S1720-10GW-PWR-2P

- 8 × Ethernet 10/100/1000 ports,2 × Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 15 Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-4P

- 24 × Ethernet 10/100/1000 ports,4 × Gig SFP
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-4X

- 24 × Ethernet 10/100/1000 ports,4 × 10 Gig SFP+
- AC power supply
- Forwarding performance: 96Mpps
- Switching Capacity: 168Gbps

S1720-28GWR-PWR-4P

- 24 × Ethernet 10/100/1000 ports,4 × Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-PWR-4TP

- 24 × Ethernet 10/100/1000,2 × Gig SFP and 2 × Combo Gig ports
- PoE+
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-PWR-4X

- 24 × Ethernet 10/100/1000 ports,4 × 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 96Mpps
- Switching Capacity: 168Gbps

S1720-52GWR-4P

- 48 × Ethernet 10/100/1000 ports,4 × Gig SFP
- AC power supply
- Forwarding performance: 78Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-4X

- 48 × Ethernet 10/100/1000 ports,4 × 10 Gig SFP+
- AC power supply
- Forwarding performance: 132Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-PWR-4P

- 48 × Ethernet 10/100/1000 ports,4 × Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 78Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-PWR-4X

- 48 × Ethernet 10/100/1000 ports,4 × 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 132Mpps
- Switching Capacity: 336Gbps

S1700-28FR-2T2P-AC

- 24 × Ethernet 10/100 ports, 2 × Ethernet 10/100/1000 ports, 2 × Gig SFP
- AC power supply
- Forwarding performance: 9.6Mpps
- Switching Capacity: 12.8Gbps

S1700-52FR-2T2P-AC

- 48 × Ethernet 10/100 ports, 2 × Ethernet 10/100/1000 ports, 2 × Gig SFP
- AC power supply
- Forwarding performance: 13.2Mpps
- Switching Capacity: 17.6Gbps

S1700-28GFR-4P-AC

- 24 × Ethernet 10/100/1000 ports, 4 × Gig SFP
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 56Gbps

S1700-52GFR-4P-AC

- 48 × Ethernet 10/100/1000 ports,4 × Gig SFP
- AC power supply
- Forwarding performance: 78Mpps
- Switching Capacity: 104Gbps

S1720-20GFR-4TP

- 16 × Ethernet 10/100/1000 ports,2 × Gig SFP ports, 2 × Combo Gig ports
- AC power supply
- Forwarding performance: 30Mpps
- Switching Capacity: 128Gbps

S1720-28GFR-4TP

- 8 × Ethernet 10/100/1000 ports,2 × Gig SFP
- AC power supply
- Forwarding performance: 42 Mpps
- Switching Capacity: 128 Gbps

S1720-10GW-2P-E

- 8 × Ethernet 10/100/1000 ports, 2 × Gig SFP
- AC power supply
- Forwarding performance: 15Mpps
- Switching Capacity: 68Gbps

S1720-10GW-PWR-2P-E

- 8 × Ethernet 10/100/1000 ports,2 × Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 15Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-4P-E

- 24 × Ethernet 10/100/1000 ports,4 × Gig SFP
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-4X-E

- 24 × Ethernet 10/100/1000 ports,4 × 10 Gig SFP+
- AC power supply
- Forwarding performance: 96Mpps
- Switching Capacity: 168Gbps

S1720-28GWR-PWR-4P-E

- 24 × Ethernet 10/100/1000 ports,4 × Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-PWR-4TP-E

- 24 × Ethernet 10/100/1000,2 × Gig SFP and 2 × Combo Gig ports
- 8-port PoE+
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-PWR-4X-E

- 24 × Ethernet 10/100/1000 ports,4 × 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 96Mpps
- Switching Capacity: 168Gbps

S1720-52GWR-4P-E

- 48 × Ethernet 10/100/1000 ports,4 × Gig SFP
- AC power supply
- Forwarding performance: 78Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-4X-E

- 48 × Ethernet 10/100/1000 ports,4 × 10 Gig SFP+
- AC power supply
- Forwarding performance: 132Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-PWR-4P-E

- 48 × Ethernet 10/100/1000 ports,4 × Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 78Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-PWR-4X-E

- 48 × Ethernet 10/100/1000 ports,4 × 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 132Mpps
- Switching Capacity: 336Gbps

S1720X-16XWR

- 16 × 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 240 Mpps
- Switching Capacity: 680 Gbit/s

S1720X-32XWR

- 32 × 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 252 Mpps
- Switching Capacity: 680 Gbit/s

S1720X-16XWR-E

- 16 × 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 240 Mpps
- Switching Capacity: 680 Gbit/s

S1720X-32XWR-E

- 32 × 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 252 Mpps
- Switching Capacity: 680 Gbit/s

Award and Certification

National and International Certificates

- Huawei switches have won 90+ international and national certifications (for example, MEF2.0, Common Criteria, IPv6 Ready Logo Certificate, and TÜV Green Product Certificate), and are providing high-quality services to users across 150+ countries and regions.

Miercom Performance Verified Certification

- The Huawei S12708 earned Miercom Performance Verified Certification.

Best of Show Award 2017

- At Interop, the biggest annual ICT exhibition in Japan, thanks to its series of innovative and differentiated features, such as the all-new management concepts, unique dual-stack mode, and flexible business models, the Huawei CloudCampus Solution successfully claimed the Best of Show Award 2017.

3

WLAN 802.11ac Series AP Products

Overview 58
Indoor Settled AP 58
Indoor Wall Plate AP 62
Distributed Central AP and RU 63
Rail Transportation AP 64
Outdoor AP 65
Award and Certification 67

Positioning Map of WLAN

Outdoor APs	AP8050DN, AP8130DN, AP8050TN-HD, AP8030DN, AP8150DN, AP8082DN, AP8182DN
Indoor Settled APs	AP4051DN/ AP4151DN, AP4050DN-E, AP6050DN/ AP6150DN, AP7050DE, AP7052DN/ AP7152DN; AP4050DN, AP4050DN-HD, AP4051TN, AP6052DN, AP7052DE
Indoor Wall Plate APs	AP2050DN, AP2050DN-E, AP2051DN, AP2051DN-E
Distributed APs	RUs: R250D, R250D-E, R251D, R251D-E, R450D; Central APs: AD9430DN-12, AD9430DN-24, AD9431DN-24X
Rail Transportation APs	AP9131DN, AP9132DN
Performance → High	

Overview

As the IEEE 802.11ac Wave 1 and Wave 2 standards have been released, Wi-Fi is declared to embrace the gigabit era, providing choices for customers who require better performance, higher-bandwidth wireless access networks.

After in-depth survey and analysis on customer requirements, Huawei conducted scenario segmentation based on customers' coverage targets and STA service types, and launched 20+ AP products falling into five categories: indoor settled, indoor wall plate, agile distributed, rail transportation, and outdoor. Such a wide assortment of AP products will support wireless network deployment and coverage in various service scenarios.

Indoor Settled AP

Wave 2 AP: AP7052DE

- 802.11ac Wave 2 compliance, MU-MIMO (4SU-4MU), delivering services simultaneously on 2.4G and 5G radios; 800 Mbit/s at 2.4 GHz; 1.73 Gbit/s at 5 GHz; and 2.53 Gbit/s for the device.
- 5GE uplink interface that can connect to a 100M/1000M/2.5G interface, to improve the service load capability.
- Smart antenna array technology enables targeted signal coverage for mobile terminals, reduces interferences, and improves signal quality. Additionally, it implements millisecond-level switchover as STAs move.
- Dual PoE power supply for backup.
- Built-in Bluetooth (BLE4.1) to implement precise location with eSight.
- USB interface used for external power supply and storage.
- Cloud-managed.

Wave 2 AP: AP7052DN&AP7152DN

- 802.11ac Wave 2 compliance, MU-MIMO (4SU-4MU), delivering services simultaneously on 2.4G and 5G radios; 800 Mbit/s at 2.4 GHz; 1.73 Gbit/s at 5 GHz; and 2.53 Gbit/s for the device.
- 2.4G-to-5G switchover. In dual-5G mode, the device rate can reach up to 3.46 Gbit/s.
- 5GE uplink interface that can connect to a 100M/1000M/2.5G interface, to improve the service load capability.
- Dual PoE power supply for backup.
- Built-in Bluetooth (BLE4.1) to implement precise location with eSight.
- USB interface used for external power supply and storage.
- IoT module to allow for flexible expansion of IoT applications.
- Cloud-managed.

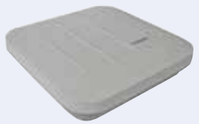
Wave 2 AP: AP7050DE

- Applicable to mobile office, high-density coverage, elementary education, and higher education scenarios.
- 802.11ac Wave 2 and MU-MIMO (4SU-4MU) technology, delivering services simultaneously on 2.4G and 5G radios; 800 Mbit/s at 2.4 GHz; 1.73 Gbit/s at 5 GHz; and 2.53 Gbit/s for the device.
- Smart antenna array technology enables targeted signal coverage for mobile terminals, reduces interferences, and improves signal quality. Additionally, it implements millisecond-level switchover as terminals move.
- Built-in Bluetooth, which collaborates with eSight Network to accurately locate Bluetooth terminals.
- Dual GE ports, supporting data backup.
- Cloud-managed

Wave 2 AP: AP6052DN

- 802.11ac Wave 2 compliance, MU-MIMO (4SU-3MU), delivering services simultaneously on 2.4G and 5G radios; 800 Mbit/s at 2.4 GHz; 1.73 Gbit/s at 5 GHz; and 2.53 Gbit/s for the device.
- 2.4G-to-5G switchover. In dual-5G mode, the device rate can reach up to 3.46 Gbit/s.
- 5GE uplink interface that can connect to a 100M/1000M/2.5G interface, to improve the service load capability.
- Built-in Bluetooth (BLE4.1) to implement precise location with eSight.
- USB interface used for external power supply and storage.
- Cloud-managed.

Wave 2 AP: AP6050DN&AP6150DN



- Applicable to medium- to large-scale scenarios such as mobile office, high-density coverage, elementary education, and higher education.
- 802.11ac Wave 2 and MU-MIMO (4SU-3MU) technology, delivering services simultaneously on 2.4G and 5G radios; 800 Mbit/s at 2.4 GHz; 1.73 Gbit/s at 5 GHz; and 2.53 Gbit/s for the device.
- Dual GE ports, supporting data backup.
- Cloud-managed

Wave 2 AP: AP4051TN

- 802.11ac Wave 2 compliance, delivering services simultaneously on one 2.4G radio and two 5G radios (one 5G radio supporting 2x2 MU-MIMO and the other 5G radio supporting 4x4 MU-MIMO); 400 Mbit/s at 2.4 GHz; 867 Mbit/s + 1733 Mbit/s at 5 GHz; and 3 Gbit/s for the device.
- Dual Ethernet interfaces support link aggregation and traffic load balancing to ensure link reliability. Both of the two interfaces support the PoE in function.
- Built-in Bluetooth (BLE4.1) to implement precise location with eSight.
- USB interface used for external power supply and storage.
- Cloud-managed.

Wave 2 AP: AP4050DN-E

- Applicable to scenarios including shopping malls, supermarkets, healthcare, warehousing, manufacturing, and logistics.
- 802.11ac Wave 2 and MU-MIMO (2SU-2MU) technology, delivering services simultaneously on 2.4G and 5G radios; 400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- Built-in Bluetooth, which collaborates with eSight Network to accurately locate Bluetooth terminals.
- 3 IoT module slots, allowing for flexible IoT application extension.
- PoE out function, supplying power to other APs or devices.
- Dual GE ports, supporting data backup.
- Cloud-managed

Wave 2 AP: AP4050DN-HD

- Applicable to high-density scenarios such as indoor stadiums, auditoriums, shopping malls, and supermarkets.
- 802.11ac Wave 2 and MU-MIMO (2SU-2MU) technology, delivering services simultaneously on 2.4G and 5G radios; 400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- Built-in smart directional high-density antennas, reducing inter-AP interference and saving construction costs.
- PoE out function, supplying power to other APs or devices.
- Dual GE ports, supporting data backup.
- Cloud-managed

Wave2 AP: AP4050DN&AP4051DN

AP4050DN

AP4051DN

- Applicable to commercial chains, medical, warehousing, manufacturing, and logistics environments
- 802.11ac Wave 2 standards compliance, MU-MIMO (2SU-2MU), delivering services simultaneously on 2.4G and 5G radios; 400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- AP4051DN： Dual GE ports, supporting data backup
- USB interface used for external power supply and storage.

Wave 1 AP: AP5030DN&AP5130DN

AP5030DN

AP5130DN

- Recommended for use in enterprise offices, airports and stations, digital trains, and stadiums.
- 3 x 3 MIMO with three spatial streams; 450 Mbit/s at 2.4 GHz; 1.3 Gbit/s at 5 GHz; and 1.75 Gbit/s for the device.

Indoor Wall Plate AP

AP2050DN&AP2050DN-E

- Recommended for environments with densely distributed small rooms, such as hotels, dormitories, hospitals, and offices.
- Compliance with 802.11ac Wave 2, MU-MIMO (2SU-2MU);400Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- One GE uplink port, four GE downlink ports for Ethernet connections or wired terminal connections, and two RJ45 pass-through phone ports (compatible with RJ11).
- Various installation modes for easy deployment, including plate-mounting, and desk-mounting modes.
- USB port for storage and external power supply.
- AP2050DN-E:Built-in Bluetooth, working with eSight Network to implement
- AP2050DN-E:PoE OUT, supplying power for STAs such as IP phones.
- Cloud-managed

Wave2 AP: AP2051DN&AP2051DN-E

- Recommended for environments with densely distributed small rooms, such as hotels, dormitories, hospitals, and offices.
- Compliance with 802.11ac Wave 2, MU-MIMO (2SU-2MU);400Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- Smart antenna array technology features targeted signal coverage for mobile terminals, reduces interferences, and improve signal quality.
- One GE uplink port, four GE downlink ports for Ethernet connections or wired terminal connections, and two RJ45 pass-through phone ports (compatible with RJ11).
- Various installation modes for easy deployment, including 86/118/120-type boxes and wall-mounting scenarios with adapter.
- AP2051DN-E:USB port for storage and external power supply.
- AP2051DN-E:Built-in Bluetooth, working with eSight Network to implement
- AP2051DN-E:PoE OUT, supplying power for STAs such as IP phones.
- Cloud-managed

Distributed Central AP and RU

Central AP: AD9431DN-24X& AD9430DN-24 & AD9430DN-12

AD9431DN-24X

AD9430DN-24

AD9430DN-12

- Manages and configures remote units. The AD9431DN-24X&AD9430DN-24&AD9430DN-12 can be flexibly deployed in the equipment rooms, weak-current wells, and corridors, to cover scenarios with a high density of rooms and complex wall structure, such as schools, hotels, hospitals, and office conference rooms.
- AD9431DN-24X&AD9430DN-24 provide 24 downlink GE ports supporting standard
- The AD9431DN-24X have 4 uplink 10 * GE interfaces.
- PoE power supply, and supports direct management over 24 remote units, which can be extended through the switch to a maximum of 48 remote units. The AD9431DN-24X&AD9430DN-24 support a maximum of 1000 concurrent users and association from a maximum of 4000 users.
- An AD9430DN-12 central AP provides 2 uplink GE ports and 12 downlink GE ports, and supports direct management over 12 remote units, which can be extended through the switch to a maximum of 24 remote units. The AD9430DN-12 supports a maximum of 512 concurrent users and association from a maximum of 2000 users.
- Cloud-managed

Remote Unit: R251D&R251D-E

- Recommended for environments with densely distributed small rooms, such as hotels, dormitories, hospitals, and offices.
- Compliance with 802.11ac Wave 2, MU-MIMO (2SU-2MU);400Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- Smart antenna array technology features targeted signal coverage for mobile terminals, reduces interferences, and improve signal quality.
- One GE uplink port, four GE downlink ports for Ethernet connections or wired terminal connections, and two RJ45 pass-through phone ports (compatible with RJ11).
- Various installation modes for easy deployment, including 86/118/120-type boxes and wall-mounting scenarios with adapter.
- R251DN-E:USB port for storage and external power supply.
- R251DN-E:Built-in Bluetooth, working with eSight Network to implement.
- R251DN-E:PoE OUT, supplying power for STAs such as IP phones.

Remote Unit: R250D-E

- Managed by the central AP, remote units can be directly installed in rooms to cover scenarios with a high density of rooms and complex wall structure, such as schools, hotels, hospitals, and office conference rooms.
- Compliance with 802.11ac Wave 2, MU-MIMO (2SU-2MU);400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- One GE uplink port, four GE downlink ports for Ethernet connections or wired terminal connections.
- Built-in Bluetooth, working with eSight Network to implement Bluetooth device location.
- Supports PoE power supply in compliance with IEEE 802.3af/at and power supply of –48 V DC.
- PoE OUT, supplying power for STAs such as IP phones.
- Various installation modes for easy deployment, including plate-mounting, and desk-mounting modes.

Rail Transportation AP

Wave 1 AP: AP9132DN&AP9131DN

AP9132DN

AP9131DN

- Serves as the vehicle-mounted AP, trackside AP, or compartment AP and applies to transportation industry train-ground backhaul and compartment coverage scenarios.
- 802.11ac Wave 1, delivering services simultaneously on 2.4G and 5G radios; 450 Mbit/s at 2.4 GHz; 1.3 Gbit/s at 5 GHz; and 1.75 Gbit/s for the device.
- External dual-band antenna (2.4 GHz and 5 GHz), which can adjust the radiation direction to ensure the coverage.
- Soft switchover technology that establishes the link and then conducts the switchover, implementing fast link switching in train-to-ground communication and minimizing packet loss during the switchover.
- High-level material, overall heat dissipation design, –40 ℃ to +65 ℃ wide operating temperature range, and industrial M12 shockproof connectors for power supply Ethernet ports that meet shockproof, waterproof, and fireproof requirements, supporting vehicle-mounted deployment required by the rail transportation industry.
- Fast link switching in train-to-ground communication, controlling the switchover time within 50 ms and providing a stable and high-speed train-ground backhaul network.
- AP9132DN: supports the splitting function, that is, compartments are covered at 2.4 GHz and bridged at 5 GHz, which are flexible and easy to deploy.

Outdoor AP

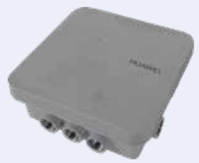
Wave 2 AP: AP8082DN&AP8182DN

- 802.11ac Wave 2 compliance, MU-MIMO (4SU-4MU), delivering services simultaneously on 2.4G and 5G radios; 800 Mbit/s at 2.4 GHz; 1.73 Gbit/s at 5 GHz; and 2.53 Gbit/s for the device.
- The AP8182DN can switch from the 2.4 GHz frequency band to the 5 GHz frequency band. When working at dual 5 GHz frequency bands simultaneously, the AP provides a system rate of 3.46 Gbit/s.
- Built-in 5 kA surge protectors; no additional surge protection device required. This design simplifies installation and saves costs.
- Uses a metal shell and heat dissipation design, adapts to a wide temperature range from –40° C to +65° C, and provides 6 kA or 6 kV surge protection capability on an Ethernet interface, and IP68 protection level, meeting industry-level use requirements.
- Cloud-managed.

Wave 2 AP: AP8050TN-HD

- 802.11ac Wave 2 compliance, MU-MIMO (2SU-2MU-2MU), delivering services simultaneously on one 2.4G radio and two 5G radios; 400 Mbit/s at 2.4 GHz; 867 Mbit/s+867 Mbit/s at 5 GHz; and 2.134 Gbit/s for the device.
- Built-in 5 kA surge protectors; no additional surge protection device required. This design simplifies installation and saves costs.
- Uses a metal shell and heat dissipation design, adapts to a wide temperature range from –40° C to +65° C, and provides 6 kA or 6 kV surge protection capability on an Ethernet interface, and IP68 protection level, meeting industry-level use requirements.
- Cloud-managed.

Wave2 AP：AP8050DN&8150DN



AP8050DN

AP8150DN

- recommended for use in coverage scenarios (for example, high-density stadiums, squares, pedestrian streets, and amusement parks) and bridging scenarios (for example, wireless harbors, data backhaul, video surveillance, and train-to-ground backhaul).
- 802.11ac wave 2 standards compliance, MU-MIMO (2SU-2MU), delivering services simultaneously on 2.4G and 5G radios; 400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device
- PoE power supply in compliance with IEEE 802.3at, making APs easy to install.
- Uplink optical port and dual GE Ethernet ports, supporting data backup and PoE power supply.
- The AP8150DN can switch from the 2.4 GHz frequency band to the 5 GHz frequency band. When working at dual 5 GHz frequency bands simultaneously, the AP provides a system rate of 1.73 Gbit/s and can function as a relay AP to implement wireless bridging functions, which reduces costs and improves device installation efficiency.
- Built-in 5 kA surge protectors; no additional surge protection device required. This design simplifies installation and saves costs.
- Use a metal shell and heat dissipation design, adapt to a wide temperature range from -40° C to +65° C, provide 6 kA or 6 kV surge protection capability on an Ethernet interface, and IP68 protection level, meeting industry-level use requirements.

Wave 1 AP: AP8030DN&AP8130DN

AP8030DN

AP8130DN

- Recommended for use in coverage scenarios (for example, high-density stadiums, squares, pedestrian streets, and amusement parks) and bridging scenarios (for example, wireless harbors, data backhaul, video surveillance, and vehicle-ground backhaul).
- 3 x 3 MIMO with three spatial streams; 450 Mbit/s at 2.4 GHz; 1.3 Gbit/s at 5 GHz; and 1.75 Gbit/s for the device.
- PoE power supply in compliance with IEEE 802.3at, making APs easy to install.
- Uplink optical port and dual GE Ethernet ports, supporting data backup and PoE power supply.
- AP8130DN: uses external antennas. Antennas can be configured, and deployment locations are determined based on networking requirements.
- AP8030DN: uses built-in antennas with 10 dBi gain at 2.4 GHz and 10 dBi gain at 5 GHz (horizontal: 60 degrees; vertical: 30 degrees).
- Cloud-managed

Award and Certification

IF Design and Red Dot Awards

- Huawei AP7X52 series Won iF Design and Red Dot Awards for its groundbreaking innovative design. These are two of the world’s highest honors. The AP7052DE also stirred up interests of media and analysts on Huawei Global Analyst Summit 2017.

4

Enterprise Core Router NetEngine Series Products

Huawei NetEngine 9000 Series Cloud Backbone Routers..... 70
Huawei NetEngine 5000E Series Cluster Routers..... 71
Huawei NetEngine 40E Series Aggregation Services Routers..... 73
Huawei NetEngine 20E Series Aggregation Services Routers..... 74
Huawei NetEngine 08E&05E Series Aggregation Services Routers..... 76
Award and Certification..... 78

Positioning Map of Enterprise Core Router

Cloud Backbone Routers (NE9000)	NE9000-20, NE9000-8
Cluster Routers (NE5000E)	
Aggregation Services Routers (NE40E)	NE40E-M2H, NE40E-M2K, NE40E-X3, NE40E-X3A, NE40E-X8, NE40E-X8A, NE40E-X16, NE40E-X16A
Aggregation Services Routers (NE20E)	NE20E-S2E, NE20E-S2F, NE20E-S4, NE20E-S8, NE20E-S8A, NE20E-S16, NE20E-S16A
Aggregation Services Routers (NE08E&05E)	NE05E-SM, NE05E-SJ/SR, NE05E-S2, NE05E-SQ, NE08E-S6/6E, NE08E-S9
Performance → High	

Huawei NetEngine 9000 Series Cloud Backbone Routers

Product Overview

As the Internet enters the Cloud Era, cloud business diversification will make data traffic unpredictable, and as Over the Top (OTT) and 4K video services consume a lot of bandwidths, IP backbone networks will need greater bandwidths, more flexibility, and continuous expanding capability. Huawei's NetEngine9000 series router (NE9000) is Huawei's flagship router created for the Cloud Internet Era. With features that include high capacity, high stability and a green design, the NE9000 is positioned for large-scale Data Center Interconnect (DCI), and core nodes on large-scale enterprise networks.

As the industry's largest Pbit router, the NE9000 adopts Huawei's self-developed Solar series NP chips for excellent wire-speed forwarding performance. The NE9000 is based on the CLOS distributed multi-stage architecture with non-blocking switching technology. The NE9000 supports SDN technology and can work in SDN solutions such as SDN PCE+/RR+, SDN IP+Optical and SDN VXLAN. The NE9000 continues to innovate based on an industry-leading platform for improved QoS mechanism and carrier-class reliability to rapidly deal with the new challenges that backbone networks face in the Cloud

Product Appearance

NE9000-20 with front doors closed

NE9000-20 with front doors open

NE9000-20 back

NE9000-8

NE9000-8

Product Specifications

	NE9000-20	NE9000-8
Number of Slots	2 MPUs ,8SFUs,20LPUs	2 MPUs ,8SFUs,8LPUs
Slot Capacity	4T, scale to 8T	4T, scale to 8T
System Capacity	80Tbps, scale to 160Tbps	32Tbps, scale to 64Tbps
Forwarding Performance(Mpps)	36,160Mpps	14,464Mpps
Power Consumption	0.4W/G	0.4W/G
Physical Dimensions(H x W x D)	2200mm x 600mm x 1000mm	1016mm x 442mm x 945mm
Interface Type	100GE、100GE DWDM、40GE、10GE、10GE OTN、10GE DWDM、1000M	

Huawei NetEngine 5000E Series Cluster Routers

Product Overview

NetEngine5000E cluster router (NE5000E) delivers industry-leading huge capacity, carrier-level availability and green design，which fully guarantees the network robustness, service flexibility and TCO saving for service providers. Powered advanced backplane connection design, distributed and highly scalable Versatile Routing Platform (VRP) operating system, NE5000E, a super-core routing platform,

service steadily and high-efficiency at Internet backbone, Internet data center and Internet bearer network.

Offering the innovative and advanced solutions such as the industry-largest capacity board, back-to-back cluster system and hybrid-chassis cluster system, the NE5000E makes network configured on demand and helps customer improve earnings, as well as save TCO.

The NE5000E has two parts in hardware: Cluster Central Chassis (CCC) and Cluster Line Chassis (CLC). CLC is used to forward service flow and CCC is used to connect CLC’ s control plane and data plane in cluster system.

Product Appearance

Single Chassis | Back-to-Back Cluster System | 2+8 Cluster System

Product Specifications

Attribute	Description
Throughput capability	Non-block switch fabric, support multi Chassis 2048Tbps/64 Chassis (1T)
Swithing Capability	81.92Tbps/single Chassis
Slots/CLC	16 slots/single Chassis
Interface Types	GE, 10GE, 10G POS, 40GE, 40G POS, 100GE, 100G OTN, etc.
Routing protocol	IPv4 static route, OSPF, IS-IS, BGP, PIM, MSDP, MBGP

Huawei NetEngine 40E Series Aggregation Services Routers

Product Overview

NetEngine 40E series aggregation services routers (NE40E), a high-end network product, features wire-speed forwarding capability, a well designed Quality of Service (QoS) mechanism, strong service-processing capability, and excellent expansibility and are usually deployed at the edges of backbone networks, Internet Data Centers (IDCs) networks and other large-scale IP networks. The NE40E can provide comprehensive services for enterprises, residential as universal edge device.

Based on distributed hardware forwarding and non-blocking switching technologies, the NE40E provides maximum 2T line cards to satisfy the increased demand for bandwidth.

Product Appearance

NE40E-X16A | NE40E-X16 | NE40E-X8A | NE40E-X8 | NE40E-X3A | NE40E-X3

Product Specifications

Attribute	NE40E-X16A	NE40E-X16	NE40E-X8A	NE40E-X8	NE40E-X3A	NE40E-X3
Number of slots	22 slots, including 2 MPUs (1:1 backup), 4 SFUs (3+1 backup), and 16 LPUs	22 slots, including 2 MPUs (1:1 backup), 4 SFUs (3+1 backup), and 16 LPUs	12 slots, including 2 SRUs (1:1 backup), 2 SFUs (3+1 backup), and 8 LPUs	11 slots, including 2 SRUs (1:1 backup), 1 SFUs (2+1 backup), and 8 LPUs	5 slots (for 3 LPUs and 2 MPUs)	5 slots (for 3 LPUs and 2 MPUs)

Attribute	NE40E-X16A	NE40E-X16	NE40E-X8A	NE40E-X8	NE40E-X3A	NE40E-X3
Interface type	100GE/40GE GE/FE OC-48c/STM-16c POS OC-3c/STM-1c POS Channelized OC-3/STM-1 OC-12c/STM-4c ATM CE1/CT1		10GE- LAN /WAN OC-192c/STM-64c POS OC-12c/STM-4c POS Channelized STM-4 OC-3c/STM-1c ATM E3/CT3 E1/T1			

Item	NE40E-M2H	NE40E-M2K
Switching capacity	960Gps	1.8 Tbs
Forwarding performance	333Mpps	410Mpps
Fixed ports	Model 1, 16*(10GE SFP+) + 12*(10GE SFP+/GE SFP) Model 2, 16*(10GE SFP+) + 10*(10GE SFP+/GE SFP) + 18*(GE SFP) Model 3, 16*(10GE SFP+) + 4*(10GE SFP+/GE SFP) + 24*(GE SFP)	2*(100GE QSFP28) + 20*(10GE SFP+) + 10*(10GE SFP+/GE SFP) + 10*(GE SFP)
Number of slots	2 PICs	2 PICs
Interface type	100GE/40GE/10GE/GE/FEOC-3c/STM-1c POSOC-12c/STM-4c POSChannelized OC-3/STM-1 POSOC-3c/STM-1c ATME1/CE1	100GE/40GE/10GE/GE/FEOC-3c/STM-1c POSOC-12c/STM-4c POSChannelized OC-3/STM-1 POSOC-3c/STM-1c ATME1/CE1

Huawei NetEngine 20E Series Aggregation Services Routers

Product Overview

NetEngine 20E series aggregation services routers (NE20E) are high-end network products developed by Huawei for transportation, finance, electricity, government, education, and enterprise networks. They mainly serve as aggregation nodes on corporation networks, core nodes on small and medium enterprise networks, edge nodes on campus networks, and access nodes on small and medium education networks.

The NE20E runs on the Versatile Routing Platform (VRP) operating system and uses Huawei-developed NP chips and hardware-based forwarding and non-blocking switching technologies. The NE20E has the following features:

- Wire-speed forwarding capabilities, carrier-class reliability, excellent scalability, a well-designed quality of service (QoS) mechanism, and strong service processing capabilities
- Powerful service access and aggregation capabilities and various features, such as Layer 2 virtual private network (L2VPN), L3VPN, multicast, multicast VPN (MVPN), Multiprotocol Label Switching (MPLS) Traffic Engineering (TE), and QoS, to ensure carrier-class service transmission reliability
- Various service features, such as Generic Routing Encapsulation (GRE), IP Security (IPSec), Network Address Translation (NAT), and NetStream
- Support for IPv6 and smooth transition from IPv4 to IPv6

The NE20E can be flexibly deployed at the access and aggregation layer of IP/MPLS networks and work with other NE routers to provide an all-around network solution for enterprise users, satisfying diversified service requirements in the future.

Product Appearance


NE20E-S2E


NE20E-S2F


NE20E-S4


NE20E-S8


NE20E-S16


NE20E-S8A


NE20E-S16A

Product Specifications

Item	NE20E-S2E	NE20E-S2F	NE20E-S4	NE20E-S8	NE20E-S16	NE20E-S8A	NE20E-S16A
Switching capacity	160 Gbps	320 Gbps	480 Gbps	960Gbps	960Gbps	2Tbps	2Tbps
Forwarding performance	120Mpps	160Mpps	360Mpps	360 Mpps	360 Mpps	452Mpps	452Mpps
Fixed ports	2*10 GE (SFP+) and 24*GE (SFP)	4*10 GE (SFP+) and 40*GE (SFP)	-	-	-	-	-
Number of slots	2PICs	2PICs	2 MPUs 1 NSP 4 PICs	2 MPUs 2 NSPs 8 PICs	2 MPUs 2 NSPs 16 PICs	2 MPUs 2 NSPs 8 PICs	2 MPUs 2 NSPs 16 PICs
Interface type	10GE/GE/ FEOC-3c/STM-1c POSOC-12c/STM-4c POS Channelized OC-3/STM-1 POSOC-3c/ ST M-1c ATME1/CE1	40GE/ 10GE/GE /FEOC-3c/STM-1c POSOC-12c/STM-4c POSCh annelized OC-3/STM-1 POSOC-3c/ STM-1c ATME1/CE1	40GE/ 10GE/ GE/FEOC-3c/STM-1c POSOC-12c/STM-4c POSChanne lized OC -3/STM-1 POS OC-3c/STM-1 c ATME1/ CE1	40GE/ 10GE/GE /FEOC-3c/STM -1c POSO C-12c/ST M-4c POS Channe lized OC -3/STM-1 POSOC-3c/STM-1c ATME 1/CE1	100GE/40GE/10GE/GE/FEOC-3c/STM-1c POSOC-12c/STM-4c POSChannelized OC-3/STM-1 POSOC-3c/STM-1c ATME1/CE1		

Huawei NetEngine 08E&05E Series Aggregation Services Routers

Product Overview

NetEngine 08E&05E series aggregation services routers are the cloud era ENP-based aggregation service routers which help transportation, finance, power, government, education, enterprise to build agile networks, can be flexibly applied to IP / MPLS network edge access scenarios, to meet the diverse needs of users for future business development.

NetEngine08E / NetEngine05E series is cloud service architecture design oriented, large cache to ensure the best service experience; IP pipeline firmness and flexibility, support IP soft pipes for statistical multiplexing to improve resource efficiency and IP hard pipe exclusive resources to ensure the best customer experience .

Product Appearance

NE08E-S9

NE08E-S6/6E

NE05E-S2

NE05E-SQ

NE05E-SJ/SR

NE05E-SM

Product Specifications

Attribute	NE08E-S9	NE08E-S6E/ S6	NE05E-SQ	NE05E-S2	NE05E-SJ/SR	NE05E-SM
Switching capacity (Bi-direction)	320Gbps	320Gbps/ 112Gbps	272Gbps	24Gbps	12Gbps	8Gbps
Typical power consumption	DC:182W/ AC:250W	164W/ 127W	80.4W	55W	11.4W	17.4W
Slots	redundant MPUs 9 FICs 10GE/GE/FE/ STM-1/E1/PCM	redundant MPUs 6 FICs 10GE/ GE/FE/ STM-1/ E1/PCM	Fixbox 4*10GE (SFP+)+ 8*10GE/GE/ FE (O) + 8*GE/ FE (O) + 8*GE/ FE (E)	1 CXP with 6GE(O)+ 4GE(E) and 2 FICs	Fixbox 2*GE/ FE(O)+ 2*GE/ FE(E)+ 2*GE/ FE Combo	1*GE(O)+ 2*GE/ FE(E)+ 1*FE /GE Combo
Dimension (W × D × H)	442mm × 220mm × 155.6 mm (3.5U)	442mm × 220mm × 88.9mm(2U)	442mm × 220mm × 44.45mm (1U)	442mm × 220mm × 44.45mm (1U)	250 mm × 180 mm × 43.6 mm (1U)	250mm × 180mm × 52mm
Operating Temperature	-40°C to +65°C	-40°C to +65°C	-40°C to +65°C	-20°C to +60°C	-40°C to +65°C	-40°C to +55°C

Award and Certification

Huawei IP Hard Pipe Solution Wins Interop Best of Show Grand Prix Award

- Huawei's IP hard pipe solution has won the Best of Show Grand Prix Award at Interop Tokyo 2016. Interop is the ICT industry's most influential annual exhibition that focuses on technical innovation and new products. Every year, more than 300 ICT manufacturers choose Interop as the platform to launch new products and services. Huawei's IP hard pipe solution was given the award for its innovation, representing the first time the Interop Executive Committee has given the award to a solution.

5 Access Router AR Series Products

AR100,AR120,AR160 and AR200 Series Access Router.....81
AR1200 Series Access Router.....86
AR2200 Series Access Router.....88
AR3200 Series Access Router.....91
AR160-M Series Access Router.....93
AR650 Series Universal Computing Gateways.....94
AR1600 Series Universal Computing Gateways.....95
AR1000V Virtual Router.....96
Award and Certification.....98

Positioning Map of Access Router

Headquarters/ Large-scale branch	AR3260
Medium-scale branch	AR2204-27GE/ AR2204-27GE-P; AR2204-51GE-P; AR2204E; AR2204XE; AR2220E; AR2240/AR2240C
Small-scale branch	AR1220-D; AR1220C; AR1220E/AR1220EV/AR1220EVW
SOHO&SMB	AR109; AR109W AR109GW-L; AR129CGVW-L/ AR129CVW/ AR129CV; AR161/AR161F/ AR161F-DGP AR161FWAR161W/ AR161FV-1P/ AR161EW; AR161FG-L/ AR161FGW-L/ AR161G-L/ AR169EGW-L; AR168F; AR168F-4P; AR169EW; AR169/ AR169F/ AR169W; AR169FGW-L/ AR169FVW/ AR169FVW-8S/ AR169G-L; AR201; AR207; AR169WP-M9/ AR169RW-P-M9
uCPE/vCPE	AR651W-X4; AR651-X8; AR1610-X6; AR1000V
Performance & Scalability → High	

AR100, AR120, AR160 and AR200 Series Access Router

Huawei's next-generation routers, the AR100, AR120, AR160 and AR200 series are designed for enterprise branch offices and small businesses, delivering a comprehensive set of services, including routing, switching, voice, security, and wireless access.

Product Overview

The AR100, AR120, AR160 and AR 200 series are fixed interface routers that provide a comprehensive platform for a variety of network topologies, including IMS, NGN, WAN and PSTN. The AR100, AR120, AR160 and AR200 also employ embedded hardware encryption for security as well as a voice Digital Signal Processor (DSP) for voice services.

The AR100, AR120, AR160 and AR200 series are mature, stable and quiet routers that offer high performance functionality for small networks, enabling small businesses to greatly increase productivity at a lower cost.

AR100s, AR120s, AR160s and AR 200s are easy to deploy, configure and customize, greatly reducing cost of deployment and maintenance, while offering maximum value to customers. These models allow network administrators to expand their networks easily and quickly, saving time and costs. Both models support firewalls, call processing, and application program functionalities.

The AR100, AR120,AR160 and AR200 series includes the following models:

- AR109, AR109W, AR109GW-L
- AR129CV , AR129CVW, AR129CGVW-L
- AR161, AR161G-L, AR161W, AR169, AR169G-L, AR169W,AR161F, AR161F-DGP, AR161FG-L, AR161FGW-L, AR161FW, AR161FV-1P, AR168F, AR169F, AR169FVW,AR169FVW-8S, AR169FGW-L, AR168F-4P,AR161EW, AR169EW, AR169EGW-L
- AR201, AR207
- The specifications for these models are shown in the following table.

Models and Appearances

Table1: AR100 Models

AR109

- WAN speed with services (IMIX): 40 Mbps
- Fixed ports: 4 x GE LAN, 1 x VDSL2/ADSL, 1 x GE WAN
- Dimensions (H x W x D): 30 mm x 230mm x 130 mm(1.18 in. x 9.1 in. x 5.1 in.)

AR109W

- WAN speed with services (IMIX): 40 Mbps
- Fixed ports: 4 x GE LAN, 1 x VDSL2/ADSL, 1 x GE WAN
- WLAN: 802.11b/g/n
- Dimensions (H x W x D): 30 mm x 230mm x 130 mm(1.18 in. x 9.1 in. x 5.1 in.)

AR109GW-L

- WAN speed with services (IMIX): 40 Mbps
- Fixed ports: 4 x GE LAN, 1 x VDSL2/ADSL, 1 x GE WAN
- LTE: LTE FDD
- WLAN: 802.11b/g/n
- Dimensions (H x W x D): 30 mm x 230mm x 130 mm(1.18 in. x 9.1 in. x 5.1 in.)

Table2: AR120 Models

AR129CV

- WAN speed with services (IMIX): 50 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x VDSL2, 1 x GE WAN
- Voice ports: 2 x FXS
- Dimensions (H x W x D): 30 mm x 230mm x 130 mm(1.18 in. x 9.1 in. x 5.1 in.)

AR129CVW

- WAN speed with services (IMIX): 50 Mbps
- Fixed ports: 4 x GE LAN, 1 x VDSL2, 1 x GE WAN
- Voice ports: 2 x FXS
- WLAN: 802.11ac, 802.11b/g/n
- Dimensions (H x W x D): 30 mm x 230mm x 130 mm(1.18 in. x 9.1 in. x 5.1 in.)

AR129CGVW-L

- WAN speed with services (IMIX): 50 Mbps
- Fixed ports: 4 x GE LAN, 1 x VDSL, 1 x GE WAN
- Voice ports: 2 x FXS
- LTE: LTE FDD
- WLAN: 802.11ac, 802.11b/g/n
- Dimensions (H x W x D): 30 mm x 230mm x 130 mm(1.18 in. x 9.1 in. x 5.1 in.)

Table3: AR160 Models

AR161

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE WAN
- 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.)

AR161F

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE Combo WAN
- 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.)

AR161F-DGP

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE Combo WAN
- 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.)

AR161FW

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE Combo WAN, 802.11 b/g/n
- 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.)

AR161FG-L

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE Combo WAN, FDD LTE
- 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.)

AR161FGW-L

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE Combo WAN, FDD LTE, 802.11 b/g/n
- 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.)

AR161G-L

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE WAN, FDD LTE
- 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.)

AR161W

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE WAN, 802.11 b/g/n
- 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.)
- Cloud-managed

AR161FV-1P

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE Combo WAN
- Fixed Voice ports: 1 x VE1
- 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.)

AR168F

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x G.SHDSL 4-pair, 1 x GE Combo WAN
- 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.)

AR168F-4P

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE Combo WAN, 4 x E1, 1 x G.SHDSL , 1 x RS232
- Dimensions (H x W x D): 44.0 mm x 300.0 mm x 216.4 mm (1.73 in. x 11.8 in. x 8.5 in.)

AR169

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x VDSL2
- 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.)

AR169F

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x VDSL2 with bonding, 1 x GE Combo WAN
- 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.)

AR169FVW

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE Combo WAN, 1 x VDSL2 with bonding, 802.11 b/g/n
- Fixed Voice ports: 4 x FXS, 1 x FXO
- 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.)

AR169FVW-8S

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE Combo WAN, 1 x VDSL2 with bonding, 802.11 b/g/n
- Fixed Voice ports: 8 x FXS, 1 x FXO
- 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.)

AR169FGW-L

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x GE Combo WAN, 1 x VDSL2 with bonding, LTE FDD, 802.11 b/g/n
- 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.)

AR169G-L

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x VDSL2, FDD LTE
- 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.)

AR169W

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 4 x GE LAN(can be configured as WAN interfaces), 1 x VDSL2, 802.11 b/g/n
- 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.)

AR161EW

- WAN speed with services (IMIX): 600 Mbps
- Fixed ports: 4 x GE RJ45 LAN, 1 x GE Combo WAN
- WLAN: 802.11a/b/g/n/ac/ac wave2, 4x4:4 MU-MIMO
- Dimensions (H x W x D): 44.0 mm x 300.0 mm x 216.4 mm (1.73 in. x 11.8 in. x 8.5 in.)

AR169EW

- WAN speed with services (IMIX): 600 Mbps
- Fixed ports: 4 x GE RJ45 LAN, 1 x VDSL2 with Bonding, 1 x GE Combo WAN
- WLAN: 802.11a/b/g/n/ac/ac wave2, 4x4:4 MU-MIMO
- Dimensions (H x W x D): 44.0 mm x 300.0 mm x 216.4 mm (1.73 in. x 11.8 in. x 8.5 in.)

AR169EGW-L

- WAN speed with services (IMIX): 600 Mbps
- Fixed ports: 4 x GE RJ45 LAN, 1 x VDSL2 with Bonding, 1 x GE Combo WAN
- WWAN: LTE FDD
- WLAN: 802.11a/b/g/n/ac/ac wave2, 4x4:4 MU-MIMO
- Dimensions (H x W x D): 44.0 mm x 300.0 mm x 216.4 mm (1.73 in. x 11.8 in. x 8.5 in.)

Table4: AR200 Models

AR201

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 8 x FE LAN(can be configured as WAN interfaces), 1 x FE WAN
- 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.)

AR207

- WAN speed with services (IMIX): 150 Mbps
- Fixed ports: 8 x FE LAN(can be configured as WAN interfaces), 1 x ADSL2+ Annex A/M
- 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.)

AR1200 Series Access Router

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 Access Router 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 Ethernet interfaces.

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

Models and Appearances

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 220 mm

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

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

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

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

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.

AR2200 Series Access Router

With industry-leading performance, Huawei AR2200 series Access Router provide secure and scalable unified voice and data communications for enterprise headquarters or branch offices.

Product Overview

The AR2200 routers are next-generation enterprise-class routers based on the Huawei proprietary

Versatile Routing Platform (VRP). These modular-chassis routers integrate routing, switching, 3G service, LTE service, voice, and security functions. Users customize the routers by selecting the interface cards that meet their requirements.

The AR2200 use the embedded hardware encryption technique and support a voice-optimized Digital Signal Processor (DSP). They provide firewall security, call processing, voice mail, and other application programs.

The AR2200 routers support wired and wireless access modes, including E1/T1, xDSL, xPON, CPOS and 3G. Building on Huawei’s leading data communication and networking technologies, they provide industry-leading system performance and scalability to meet current and future business needs.

Models and Appearances

Table 1: AR2200 Models

AR2204-27GE

- WAN speed with services(IMIX): 200Mbps
- Fixed port: 3xGE (one combo port), 24xGE
- Slot: 4xSIC
- Dimensions (H x W x D): 44.5mm x 442mm x 420mm

AR2204-27GE-P

- WAN speed with services(IMIX): 200Mbps
- Fixed port: 3xGE (one combo port), 24xGE(8 GE ports support PoE)
- PoE: compliance with IEEE 802.3af and 802.3at
- Slot: 4xSIC
- Dimensions (H x W x D): 44.5mm x 442mm x 420mm

AR2204-51GE-P

- WAN speed with services(IMIX): 200Mbps
- Fixed port: 3xGE (one combo port), 48xGE(8 GE ports support PoE)
- PoE: compliance with IEEE 802.3af and 802.3at
- Slot: 4xSIC
- Dimensions (H x W x D): 44.5mm x 442mm x 420mm

AR2204E

- WAN speed with services(IMIX): 200Mbps
- Fixed port: 3xGE (one combo port)
- Slot: 4xSIC
- Dimensions (H x W x D): 44.5mm x 442mm x 420mm

AR2204XE

- WAN speed with services(IMIX): 900 Mbps
- Fixed port: 2x10GE SFP+, 10xGE SFP , 8xGE RJ45 WAN (PoE supported)
- 2 x HDD or SSD
- PoE: Compliance with IEEE 802.3af and 802.3at
- Slot: 4xSIC
- Dimensions (H x W x D): 44.5mm x 442mm x 420mm

AR2220E

- WAN speed with services(IMIX): 800 Mbps
- Fixed port: 3xGE (one combo port)
- Slot: 4xSIC + 2xWSIC
- Dimensions (H x W x D): 44.5 mm x 442 mm x 420mm

AR2240C

- WAN speed with services(IMIX): 1Gbps
- Fixed port: 4 xGE + 4xGE SFP + 2 x GE Combo
- Slot: 4xSIC + 2xWSIC + 2xXSIC
- Dimensions (H x W x D): 88.1 mm x 442 mm x 470 mm

AR2240

- WAN speed with services(IMIX):
  - » o 1Gbps (with SRU40*)
  - » o 2Gbps (with SRU80*)
  - » o 1Gbps (with SRU100E*)
  - » o 4.5Gbps(with SRU200*)
- Hardware-based Traffic Management (with SRU80*)
- Hardware-based HQoS (with SRU80*)
- Fixed port:
  - » o SRU40: 3 x GE(2 x Combo)
  - » o SRU80: 3 x GE(2 x Combo)
  - » o SRU100E: 4 x GE Combo+ 2 x GE SFP
  - » o SRU200: 4 x GE Combo+ 2 x 10GE SFP+
- Slot: 4xSIC + 2xWSIC + 2xXSIC
- Dimensions (H x W x D): 88.1 mm x 442 mm x 470 mm

* Main control board model number

The AR2200 supports optional interface cards, including Ethernet, E1/T1/PRI/VE1, synchronous/asynchronous, ADSL2+/G.SHDSL, FXS/FXO, ISDN, CPOS, EPON/GPON, 3G, LTE and E&M interface cards. These cards are designated SIC (Smart Interface Card) cards, WSIC (Double-Width SIC) cards, or XSIC (Double-Height WSIC) cards, depending on the number of slots they occupy.

AR3200 Series Access Router

With its flexible modular design, the Huawei AR3200 series Access Router are designed to provide secure unified voice and data communication with exceptional performance and scalability to meet the demands of today's enterprise requirements.

* The 3200 series routers only has one model AR3260 now, but we will add more new models in future.

Product Overview

The Huawei AR3200 Access Router are next-generation enterprise-class routers based on the Huawei proprietary Versatile Routing Platform (VRP), which takes advantage of Huawei's leadership in data communication, wireless, access network, and core network technologies.

The AR3200 routers integrate routing, switching, 3G,LTE, voice, and security functions. It utilizes a multi-core CPU and non-blocking switching structure providing industry-leading system performance and extensibility, supporting evolving service development requirements. The AR3200 routers provide an integrated solution for enterprise networks, speed up multi-service provisioning and protect customers' investments. The modular chassis allows customers to customize the router with interchangeable interface cards.

The AR3200 routers use embedded hardware encryption techniques and support a voice-optimized Digital Signal Processor (DSP). It supports firewall functions, call processing, voice mail, and other applications. The AR3200 routers support wired and wireless access modes, including E1/T1, xDSL, xPON, CPOS, 3G, and LTE.

Models and Appearances

Table 1: AR3200 Models

AR3260

• WAN speed with services(IMIX): » 1Gbps (with SRU40*) » 2Gbps (with SRU80*) » 1Gbps (with SRU100E*) » 4.5 Gbps(SRU200*) » 5.5 Gbps (SRU400*) • Hardware-based Traffic Management (with SRU80, SRU200* and SRU400*) • Hardware-based HQoS (with SRU80, SRU200* and SRU400*) • Fixed port: » SRU40: 3 x GE(2 x Combo) » SRU80: 3 x GE(2 x Combo) » SRU100E: 4 x GE Combo+ 2 x GE SFP » SRU200: 4 x GE Combo+ 2 x 10GE SFP+ » SRU400: 4 x GE Combo+ 2 x 10GE SFP+ • Slots: 4*SIC + 2*WSIC + 4*XSIC • Dimensions (H x W x D): 130.5 mm x 442 mm x 470 mmv

* Main control board model number

The AR3200 routers support optional interface cards, including Ethernet, E1/T1/PRI/VE1, synchronous/asynchronous, ADSL2+/G.SHDSL，ISDN, CPOS, EPON/GPON 、 FXS/FXO voice cards, 3G, LTE and E&M interface cards. They are available in the following formats: SIC (Smart Interface Card), WSIC (Double-Width SIC), and XSIC (Double-Height WSIC), depending on the number of slots available.

AR160-M Series Access Router

The Huawei AR160-M series Access Router integrates a comprehensive set of services, including routing, switching, security, and wireless access. With an open service platform, the AR160-M can provide computing, storage and network connection functions in one device.

Product Overview

The AR160-M has two models, AR169W-P-M9 and AR169RW-P-M9. The specifications for these models are shown in the following table.

Models and Appearances

AR169W-P-M9

• WAN speed with services (IMIX): 150Mbps • Fixed ports：4 x GE LAN(PoE) » 1 x GE WAN,1 x VDSL2 » 1 x RS485/RS232/RS422 » 4 x USB » 1 x HDMI, 1 x VGA » 1 x 3.5mm Audio Output (Earphone) » 1 x 3.5mm Audio input(MIC) » 1 x Bluetooth • 802.11 b/g/n + 802.11ac • 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.)

AR169RW-P-M9

• WAN speed with services (IMIX): 150Mbps • Fixed ports：4 x GE LAN(PoE) » 1 x GE WAN,1 x VDSL2 » 1 x RS485/RS232/RS422 » 4 x USB » 1 x HDMI, 1 x VGA » 1 x 3.5mm Audio Output (Earphone) » 1 x 3.5mm Audio input(MIC) » 1 x Bluetooth » 1 x Zigbee • 802.11 b/g/n + 802.11ac • 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.)

AR650 Series Universal Computing Gateways

Huawei AR650 series universal computing gateways are designed to meet the requirements of cloud computing, Software-Defined Networking (SDN), and Network Functions Virtualization (NFV). The gateway is plug and-play and features high performance and high reliability. It is the universal customer premises equipment (uCPE) applicable to enterprise branches as well as small- and medium-sized enterprises.

Product Overview

Huawei AR650 series universal computing gateways use a universal computing platform, support virtualization functions and SDN architecture, and provide the virtualization environment and basic operating system (OS). The OS integrates some IP functions, for example, basic routing, switching, and IPSec. Huawei and third-party VNFs can be deployed on the AR650 to implement multiple services, such as routing, firewall, and WAN acceleration. The OS and VNFs of the AR650 are centrally managed by Huawei's Agile Controller, simplifying network deployment and management and reducing costs for enterprise branches. It also provides slots for extended storage and interface cards (such as 3G/LTE interface cards), allowing enterprise customers to easily expand service functions.

Models and Appearances

AR651W-X4

- WAN speed with services: 600 Mbit/s
- Processor: Intel 4-core Denverton-NS
- Fixed ports: : 2 *GE WAN(Combo)+4* GE LAN
- Memory: 16GB
- Hard Disk：M.2 SATA 64 GB (default)
- Slots：1*MIC
- The number of VMs：1 (Recommended)
- WiFi: 2.4G/5G dual-band, 802.11 a/b/g/n/ ac, 3x3 MIMO

AR651-X8

- WAN speed with services: 1Gbit/s
- Processor: Intel 8-core Denverton-NS
- Fixed ports: : 2 *GE WAN(Combo)+4* GE LAN
- Memory: 16GB
- Hard Disk：M.2 SATA 64 GB (default)
- Slots：1*MIC
- The number of VMs：2 (Recommended)

AR1600 Series Universal Computing Gateways

Huawei AR1600 series universal computing gateways are designed to meet the requirements of cloud computing, Software-Defined Networking (SDN), and Network Functions Virtualization (NFV). The AR1600 series universal computing gateways are flexible and open, and can provide services on demand. They provide network access for enterprise branches and headquarters and feature cost-effectiveness, service scalability, and simple O&M.

Product Overview

The traditional customer premise equipment (CPE) has a closed architecture, and different services are supported by different devices. With the growing number of enterprise services, the management and O&M of enterprise branch networks are becoming more complex. In addition, the provisioning of services by enterprise branch networks must keep up with the rate at which they are being developed.

The universal CPE (uCPE) uses the X86-based universal hardware platform to virtualize bearer services. The Agile Controller centrally deploys virtualized network functions (VNFs) (such as vFW, vWOC, and SD-WAN) on the uCPE as required, to implement fast service provisioning and reduce network deployment costs.

Huawei AR1600 series universal computing gateways use a universal computing platform, support virtualization functions and SDN architecture, and provide the virtualization environment and basic

operating system (OS). The OS integrates some IP functions, for example, basic routing, switching, and IPSec. Huawei and third-party VNFs can be deployed on the AR1600 to implement multiple services, such as routing, firewall, and WAN acceleration. The OS and VNFs of the AR1600 are centrally managed by Huawei's Agile Controller, simplifying network deployment and management and reducing costs for enterprise branches.

Models and Appearances

AR1610-X6

- Processor: Intel six-core Xeon Broadwell D-1500 series
- Fixed ports: : 2 *GE WAN(Combo)+8* GE LAN
- Memory: 32 GB (default)/64 GB (maximum)
- Hard Disk：2xSATA/SAS/NVMe, supporting RAID 0 and RAID 1
  Slots：1*SIC
- The number of VMs：4 (Recommended)
- Dual power backup

AR1000V Virtual Router

The AR1000V is a virtual router launched by Huawei to transform traditional enterprise networks into SD-WANs. Based on Network Functions Virtualization (NFV) technology, the AR1000V can be deployed on the server using the x86 hardware platform, private cloud, and public cloud. It is an access gateway for enterprise cloud applications, and its key features include application-based intelligent traffic steering, outstanding performance, and automatic O&M. It expands the enterprise WAN and provides ultimate cloud application experience for enterprises.

Product Overview

To address the preceding issues and cope with trends of network device cloudification and virtualization, Huawei launches the AR1000V virtual router that integrates routing, switching, security, VPN, and QoS functions. The AR1000V has features including software and hardware decoupling, easy service deployment, and intelligent O&M. The AR1000V can be deployed in the enterprise headquarters (hub), Point of Presence (PoP), and cloud environment to extend the enterprise network to the cloud. It implements the same security and management policies as those on the internal network of an enterprise. The AR1000V can use hybrid links to connect to a WAN. Based on application-based intelligent traffic steering, it optimizes the enterprise's cloud access path and improves the experience of enterprise access to cloud services. It plays an important role in the transformation from the traditional enterprise WAN to SD-WAN.(PoP), and cloud environment to extend the enterprise network to the cloud. It implements the same security and management policies as those on the internal network of an enterprise. The AR1000V can use hybrid links to connect to a WAN. Based on application-based intelligent traffic steering, it optimizes the enterprise's cloud access path and improves the experience of enterprise access to cloud services. It plays an important role in the transformation from the traditional enterprise WAN to SD-WAN.

Models and Appearances

AR1000V

- As a software product, based on x86 server hardware platform
- Compatible with mainstream virtualization platforms, such as VMWare/KVM/Amazon Machine Image/ FusionSphere
- Integrateing routing, switching, security, VPN, QoS, and other functions.
- Software-defined and flexible service deployment

Award and Certification

Huawei's SD-WAN uCPE AR650 Wins iF Design Award 2018

- [Munich, Germany, February 22, 2018] Recently, the world-renowned iF DESIGN AWARD, known as the "Design Oscar", unveiled its recipients. With its simple appearance, excellent performance, and open service platform, Huawei's SD-WAN uCPE (universal CPE) AR650 wowed 63 professional judges from around the world and saw off competition from 6402 candidates from 54 countries to take home the top design award. After winning Japan's Good Design Award in 2017, the AR650 was once again recognized by the industry for its design and quality.

Huawei SD-WAN Honored with Right Stuff Innovation Award by ONUG

- At the Open Networking User Group (ONUG) Fall 2017 conference in New York, USA, Huawei's SD-WAN solution won an 'ONUG Right Stuff Innovation Award.' This was achieved thanks to its innovative features including intelligent application-based full-path selection and acceleration, open service platform, and visualized cloud-based Operations and Maintenance (O&M).

Huawei Becomes the Only SD-WAN Solution Provider to Pass EANTC Testing

- Based on the key advantages and outstanding performance of the SD-WAN solution, such as application-based intelligent traffic steering, elastic scalability, and cloud-based visualized O&M, Huawei has become the only SD-WAN vendor to pass the strict testing of EANTC.

6 IoT Gateways AR Series Products

AR501 Series IoT Gateways.....101
AR502 Series IoT Gateways.....102
AR509 Series IoT Gateways.....103
AR530 Series IoT Gateways.....104
AR550 Series IoT Gateways.....105
AR2500 Series IoT Gateways.....106

Positioning Map of IoT Gateways

Industrial Switch Series	 AR550C-4GE	 AR550C-2C6GE	 AR550-8FE-D-H	 AR550-24FE-D-H	 AR2504-H/ AR2504-D-H	
Industrial Router Series	 AR502EG-L	 AR502EGW-L	 AR502CG-L	 AR502EGRz-L	 AR509G-L-D-H AR509GW-L-D-H	
	 AR509CGW-L	 AR509CG-Lc	 AR531-2C-H	 AR532		
Performance & Scalability → High						

AR501 Series IoT Gateways

Product Overview

The AR501 series IoT gateway is designed for industrial environments and supports communication in harsh environments such as extreme temperature, high humidity, and electromagnetic interference. The built-in industrial-grade communication module can support various local interfaces (PLC-IoT, RS485/RS422, RS232, Gigabit Ethernet and RF 6LoWPAN) for connecting serial interface devices, Ethernet devices. It can support AR530s or AR532 to complete the data communication channel switching, suitable for the applications where the space is limited and requires only transparent data transmission.

The AR501 Series comes in three models: AR501C1Pa, AR501L1Rc, and AR501L1Rz.

AR501C1Pa

- Fixed interfaces: RS485*1, DI*1, IRDA*1
- Support Huawei Broadband PLC
- IP51, dustproof, waterproof
- works at temperatures from -25°C to +70°C

AR501L1Rz

- Communication mode:
- IEEE802.15.4 (ZigBee, 2400 MHz to 2483.5 MHz)
- Operating temperature: –40°C to +65°C
- Encryption mode: AES-128
- Compliance with ANI C136.41-2013
- IP66 except for bottom side
- D= 83.5, H = 119, Cylinder-shaped (D: diameter, H: height)

AR501L1Rc

- Communication mode:
- IEEE802.15.4 (RF 6LoWPAN, 433.8Mhz/433.05Mhz-434.79Mhz)
- Operating temperature: –40°C to +65°C
- Encryption mode: AES-128
- Compliance with ANI C136.41-2013
- IP66 except for bottom side
- D= 83.5, H = 119, Cylinder-shaped (D: diameter, H: height)

AR502 Series IoT Gateways

Product Overview

The AR502 series IoT gateway is designed for industrial environments and supports communication in harsh environments such as extreme temperature, high humidity, and electromagnetic interference. The built-in industrial-grade LTE module supports high bandwidth, low-latency wireless access, and various local interfaces (RS485/RS422, RS232, Gigabit Ethernet and radio-frequency) for connecting serial interface devices, Ethernet devices. The AR502 applies to multiple IoT fields, such as smart grid and smart transportation.

The AR502 Series comes in three models: AR502EG-L, AR502EGW-L,AR502CG-L， AR502EGRz-L .

Models and Appearances

AR502EG-L

- Fixed interfaces: 2 x GE RJ45, 1 x RS485/422, 1 x RS232, and 6 x digital input/output (DI/DO), 1 x USB2.0
- LTE: LTE FDD
- Operating temperature: –25°C to +70°C
- Dimensions (W x D x H): 150 mm x 100 mm x 44 mm
- Power supplies: DC: 8 V to 36 V

AR502EGW-L

- Fixed interfaces: 2 x GE RJ45, 1 x RS485/422, 1 x RS232, and 6 x digital input/output (DI/DO), 1 x USB2.0
- LTE: LTE FDD
- WLAN: 802.11b/g/n
- Operating temperature: –25°C to +70°C
- Dimensions (W x D x H): 150 mm x 100 mm x 44 mm
- Power supplies: DC: 8 V to 36 V

AR502EGRz-L

- Fixed interfaces: 2xGE RJ45, 1xRS485/422, 1xRS232, 1xDI,1 x DO, 1 x USB2.0
- LTE: LTE FDD
- ZigBee: 2.4GHz
- Operating temperature: –25° C to +70° C
- Dimensions (W x D x H): 150 mm x 100 mm x 44 mm
- Power supplies: DC: 8 V to 36 V
- IP protection Rating: IP30

AR502CG-L

- Fixed interfaces: 2 x GE RJ45, 1 x RS232, 1 x DI, 1 x DO, 1 x USB2.0
- LTE: LTE FDD
- Operating temperature: –25oC to +60oC
- Dimensions (W x D x H): 150 mm x 100 mm x 44 mm
- Power supplies: DC: 8 V to 36 V

AR509 Series IoT Gateways

Product Overview

HUAWEI AR509 series IoT gateway, is designed to work in harsh environments. It provides a rapidly deployable, highly available, reliable, and secure solution into the Internet of Things (IoT) applications for finance, energy, and electric power industries, telemetry, retail, and other industrial automation scenarios.

The AR509 series is available in the models: AR509G-L-D-H,AR509GW-L-D-H,AR509CGW-L and AR509CG-Lc

Models and Appearances

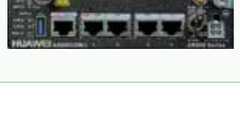
AR509G-L-D-H

- Fixed interface: 1xGE WAN , 4xGE LAN, 1xVDSL2
- FDD LTE (dual SIM slots)
- IP41, Waterproof and dustproof
- Dimensions (W x D x H): 190 x 220 x 44 mm

AR509GW-L-D-H

- Fixed interface: 1xGE WAN , 4xGE LAN, 1xVDSL2
- FDD LTE (dual SIM slots)
- 802.11a/b/g/n, dual-band AP, 2.4 GHz and 5 GHz, 2x2 MIMO
- IP41, Waterproof and dustproof
- Dimensions (W x D x H): 190 x 220 x 44 mm

AR509CGW-L



- Fixed interface: 4xGE LAN
- FDD LTE (dual Micro SIM slots)
- 802.11b/g/n
- Dimension (W x D x H): 150 x 100 x 44 mm

AR509CG-Lc

- Fixed interface: 4xGE LAN
- LTE TDD, LTE FDD(dual Micro SIM slots)
- Dimension (W x D x H): 150 x 100 x 44 mm

AR530 Series IoT Gateways

The AR530 series industrial IoT gateways, named industrial switching routers, are designed to work in harsh environments of Internet of Things (IoT) applications. They integrate routing, switching, security, and Advanced Metering Infrastructure (AMI) functions and provide various capabilities.

Product Overview

Compared with Access Router, industrial routers are more adaptable to harsh industrial environments because their components are more strictly selected. The AR530 handles a wider temperature range, a fanless design and provides Ingress Protection 51 (IP51). With these key technologies, the AR530 is high- and low-temperature resistant, dustproof, waterproof, and can resist electro-magnetic interference. The AR530 uses a modular design and integrates various types of interfaces, such as FE, GE, 3rd Generation (3G), Power Line Communication (PLC), ZigBee, Radio Frequency (RF) and RS485.

The AR530 provides AMI centralized meter reading services. It can automatically collect meter and status data, analyze and store data in a centralized manner, and send data to the management system. The AR530 provides uplink, downlink, and local networking, to meet the requirements for the Internet of Things (IoT) in the energy industry.

The AR530 is available in the following models: AR531-2C-H and AR532.

Models and Appearances

AR532

- Fixed interfaces: 1 GE,1 GE Combo,2 DI,2 DO,2 RS485,1 RS232,1 USB2.0, 1 Pulse out,1 Infrared, 6 Operation Keys
- Plastic, Float Equipment, Battery internal, AC 110/220V Power
- Support 1 SIM card for 3G/GPRS uplink
- Support Huawei PLC-IoT, Support 433M/915M RF(Optional)
- IP51, dustproof, waterproof
- Works at temperatures from -25°o to +70°t

AR531-2C-H

- Fixed interfaces: 6 x FE, 2 x FE combo, 2 x GE (SFP), 2 x RS485, 2 x DI
- IP51, dustproof, waterproof
- Fanless design, works at temperatures from -40°C to +70°C

AR550 Series IoT Gateways

Product Overview

AR550 series industrial IoT gateway are specially designed for network communication in challenging environments such as extreme temperature, high humidity, and electromagnetic interference. The AR550 series integrates routing, switching, IPSec VPN, and other functions, provides powerful application scalability, and widely applies to various industrial automation fields, such as electric power automation and transportation automation.

The AR550 series is available in four models: AR550C-4GE, AR550C-2C6GE, AR550-8FE-D-H and AR550-24FE-D-H.

Models and Appearances

AR550C-4GE

- Fixed interfaces: 2 x 2.5G SFP(compatible with GE), 4 x GE RJ45, 1 x USB2.0, 1 x DI, 1 x DO
- Working temperature: –40°C to +70°C
- Dimensions (W x D x H): 44 mm x 133 mm x 150 mm
- Redundant power supplies: 9.6V to 60V DC

AR550C-2C6GE

- Fixed interfaces: 2 x 2.5G SFP(compatible with GE), 2 x GE combo, 6 x GE RJ45, 1 x RS485, 1 x USB2.0, 1 x DI, 1 x DO
- Working temperature: –40°C to +70°C
- Dimensions (W x D x H): 44 mm x 133 mm x 150 mm
- Redundant power supplies: 9.6V to 60V DC

AR550-8FE-D-H

- Fixed interfaces: 4 x GE combo, 8 x FE RJ45, 1 x USB2.0, and 1 x digital output (DO)
- Working temperature: –40°C to +70°C
- Dimensions (W x D x H): 97 mm x 133 mm x 150 mm
- Redundant power supplies: 9.6 V to 60 V DC

AR550-24FE-D-H

- Fixed interfaces: 4 x GE combo, 24 x FE RJ45, 1 x USB2.0, and 1 x DO
- Working temperature: –40°C to +70°C
- Dimensions (W x D x H): 133 mm x 133 mm x 150 mm
- Redundant power supplies: 9.6 V to 60 V DC

AR2500 Series IoT Gateways

Product Overview

The AR2500 series IoT gateway is designed to work in challenging environments such as extreme temperatures, high humidity, and electromagnetic interference. The AR2500 uses the modular design and supports various types of communication interfaces such as Ethernet and serial interfaces to provide flexible networking modes.

The AR2500 provides the following functions:

- Line-rate switching at Layer 2 and Layer 3.
- Layer 2 functions such as VLAN, STP/MSTP, and SEP, and Layer 3 functions such as static and dynamic unicast routing, and multicast routing.
- Integration of firewall, NAT, and IPSec VPN to meet increasingly complex service requirements of industrial networks.

The AR2500 can be used in a wide range of industries, such as smart grid and intelligent transportation.

The AR2500 is available in two models: AR2504-H and AR2504-D-H.

Models and Appearances

AR2504-H

- Fixed interfaces: 4*GE combo, 4*GE RJ45, 1*USB2.0, and 1*DO
- Slots: 2*WSIC
- Operating temperatures: –40°C to +70°C
- Dimensions (W x D x H): 442 mm x 420 mm x 44 mm
- Redundant power module: 220 V AC

AR2504-D-H

- Fixed interfaces: 4*GE combo, 4*GE RJ45, 1*USB2.0, and 1*DO
- Slots: 2*WSIC
- Operating temperatures: –40°C to +60°C
- Dimensions (W x D x H): 442 mm x 420 mm x 44 mm
- Redundant power module: 24V DC ~ 48V DC

7

Enterprise Security Products

USG6305&6310S&6320 Series Desktop Next-Generation Firewall.....109
USG6300 Series Next-Generation Firewall.....110
USG6600 Series Next-Generation Firewall.....112
USG9500 Series Terabit-level Next-Generation Firewall.....114
USG6000V Virtual Integrated Service Gateway.....115
NIP6300&6600 Series Next-Generation Intrusion Prevention Systems.....116
FireHunter6000 Series Sandbox.....117
AntiDDoS1600 Series DDoS Protection System.....119
AntiDDoS8000 Series DDoS Protection System.....120
eLog Security Event Management Center.....122
Award and Certification..... 123

Positioning Map of Enterprise Security Products

USG9500 Series **DC Firewall**	 USG9520  USG9560  USG9580
USG6600 Series **Medium and Large** **Enterprise Firewalls**	 USG6620  USG6650  USG6670  USG6630  USG6660  USG6680
USG6300 Series **SME Firewalls**	 USG6305  USG6310S  USG6320  USG6305-W  USG6310S-W  USG6310S-WL-OVS  USG6330  USG6370  USG6350  USG6380  USG6360 USG6390
Performance → High	

USG6305&6310S&6320 Series Desktop Next-Generation Firewall

USG6305


USG6305-W


USG6310S


USG6310S-W


USG6310S-WL-OVS


USG6320

Overview

Huawei USG6305/6310S/6320 series desktop next-generation firewalls are security gateway products designed for small enterprises, branches, and chain businesses. This series of products integrate various security functions and support multiple IPv4/IPv6 routing protocols, applicable to all kinds of small network access scenarios. The USG6305/6310S/6320 series provides GE and WI-FI interfaces in the down link to directly provide WI-FI access services and provides GE uplink interfaces and 3G/4G LTE backup links for emergency Internet access services.

The USG6305/6310S/6320 series desktop next-generation firewalls can be deployed with the Agile Controller to form enterprise branch security access solutions, providing unified authentication of wired and wireless users, and portal customization services. Centralized service management can reduce branch management pressures and can also provide flexible service customization platforms for precise marketing in business shops.

It supports cloud-based management and enables Huawei Agile Controller-Campus to manage and configure the firewalls.

Specifications

Model	USG6305	USG6305 -W	USG6310S	USG6310S -W	USG6310S-WL-OVS	USG6320
Fixed port	4 x GE(RJ45)	4 x GE(RJ45)	8 x GE(RJ45)	8 x GE(RJ45)	8 x GE(RJ45)	8 x GE(RJ45)
USB2.0 port	Supported	Supported	Supported	Supported	Supported	Supported
WIFI	-	Supports 2.4G+5G dual-frequency. Supports 802.11a/b/g/n/ac .	-	Supports 2.4G+5G dual-frequency. Supports 802.11a/b/g/n/ac	Supports 2.4G+5G dual-frequency. Supports 802.11a/b/g/n/ac.	-
4G LTE	The USB port can house a 4G LTE data card.				The slot supports such standards as 4G LTE, 3G UMTS, and 2G GSM.	The USB port can house a 4G LTE data card.
Product model	Desktop					Desktop
Local storage	Optional, can house expandable 64 GB micro SD cards					-

USG6300 Series
Next-Generation Firewall(Box-shaped)

USG6330/6360 USG6350 USG6370 USG6380/6390

Product Overview

Enterprise networks are evolving into next-generation networks that feature mobile broadband, big data, social networking, and cloud services. Yet, mobile applications, Web2.0, and social networks expose enterprise networks to the risks on the open Internet. Cybercriminals can easily penetrate a traditional firewall by spoofing or using Trojan horses, malware, or botnets.

HUAWEI Secospace USG6300 series is designed to address these challenges, and providing a reliable and secure network for small and medium-sized enterprises. It analyzes intranet service traffic from six dimensions, including application , content, time, user, attack, and location and then automatically generates security policies as suggestions to optimize the security management and provide high-performance application-layer protection for enterprise networks.

It supports cloud-based management and enables Huawei Agile Controller-Campus to manage and configure the firewalls.

Note: USG6300 is next-generation firewall products series in USG (Unified Security Gateway) product family.

Specifications

Model	USG6330	USG6350	USG6360	USG6370	USG6380	USG6390
Firewall throughput[1] (1518byte, UDP)	1 Gbit/s	2 Gbit/s	3 Gbit/s	4 Gbit/s	6 Gbit/s	8 Gbit/s
FW + SA + IPS Throughput[2]	500 Mbit/s	950 Mbit/s	1.1 Gbit/s	2 Gbit/s	2 Gbit/s	2 Gbit/s
FW + SA + Antivirus Throughput[2]	500 Mbit/s	950 Mbit/s	1.1 Gbit/s	2 Gbit/s	2 Gbit/s	2 Gbit/s
Concurrent sessions (HTTP1.1)[1]	1,500,000	2,000,000	3,000,000	4,000,000	4,000,000	4,000,000
New sessions per second (HTTP1.1)[1]	30,000	30,000	30,000	60,000	70,000	80,000
IPsec VPN Throughput[1] (AES-128 + SHA1, 1420-byte)	400Mbit/s	800Mbit/s	900Mbit/s	3Gbit/s	3Gbit/s	3Gbit/s

Model	USG6330	USG6350	USG6360	USG6370	USG6380	USG6390
Virtual firewalls	50	50	50	100	100	100
Fixed port	4 × GE(RJ45)+2 × GE(Combo)			8 × GE(RJ45)+4 × GE(SFP)		
Expansion Slots	2 x WSIC					
Interface module	2 x 10GE (SFP+)+8 x GE (RJ45), 8 x GE (RJ45), 8 x GE (SFP), 4 x GE (RJ45) BYPASS					
HDD	Optional supports 300 GB or 600 GB or 1200 GB hard disks.					

USG6600 Series
Next-Generation Firewall

USG6620 USG6630 USG6650 USG6660/6670/6680

Overview

Enterprise networks are evolving into next-generation networks that feature mobile broadband, big data, social networking, and cloud services. Yet, mobile applications, Web2.0, and social networks expose enterprise networks to the risks on the open Internet. Cybercriminals can easily penetrate a traditional firewall by spoofing or using Trojan horses, malware, or botnets.

HUAWEI Secospace USG6600 series is designed to address these challenges of Carrier, large- and medium-sized enterprises and next-generation data centers. It analyzes intranet service traffic from six dimensions, including application , content, time, user, attack, and location and then automatically generates security policies as suggestions to optimize the security management and provide high-performance application-layer protection for enterprise networks.

Note: USG6600 is next-generation firewall products series in USG (Unified Security Gateway) product family.

Specifications

Model	USG6620	USG6630	USG6650	USG6660	USG6670	USG6680
Firewall throughput[1] (1518byte, UDP)	12 Gbit/s	16 Gbit/s	20 Gbit/s	25 Gbit/s	35 Gbit/s	40 Gbit/s
FW + SA + IPS Throughput[2]	5.8 Gbit/s	5.8 Gbit/s	8.8 Gbit/s	8.8 Gbit/s	8.8 Gbit/s	15 Gbit/s
FW + SA + Antivirus Throughput[2]	5 Gbit/s	5 Gbit/s	8 Gbit/s	8 Gbit/s	8 Gbit/s	13 Gbit/s
Concurrent sessions (HTTP1.1)[1]	6,000,000	6,000,000	8,000,000	10,000,000	10,000,000	12,000,000
New sessions per second (HTTP1.1)[1]	200,000	250,000	300,000	350,000	400,000	400,000
IPsec VPN Throughput[1] (AES-128 + SHA1, 1420-byte)	9 Gbit/s	12 Gbit/s	15 Gbit/s	18 Gbit/s	18Gbit/s	18 Gbit/s
Virtual firewalls	200	200	500	500	500	1,000
Fixed port	8 x GE(RJ45)+4 x GE (SFP)		2 x 10GE (SFP+)+8 x GE(RJ45)+8 x GE (SFP)		4 x 10GE (SFP+)+16 x GE(RJ45)+8 x GE (SFP)	
Expansion Slots	2 x WSIC		6 x WSIC		5 x WSIC	5 x WSIC
Interface module	WSIC: 2 x 10GE (SFP+)+8 x GE (RJ45), 8 x GE (RJ45), 8 x GE (SFP) ,4 x GE (RJ45) BYPASS					
HDD	Optional supports 300 GB or 600 GB or 1200 GB hard disks (RAID1 and hot swappable).					

1. Performance is tested under ideal conditions based on RFC2544, 3511. The actual result may vary with deployment environments.

2. Antivirus, IPS, and SA performances are measured using 100 KB HTTP files.

3. USG6680-DC doesn't support 600 GB and 1200 GB hard disk.

USG9500 Series Terabit-level Next-Generation Firewall

USG9520 USG9560 USG9580

In the dawn of cloud computing age, the cloud computing based on virtualization and high-speed network is considered as a revolution of the Internet. However, challenges arise to network security in the implementation of cloud computing and cause concerns.

- How can we control mass access in the cloud computing age?
- How can we ensure border security for cloud data centers?
- How can we ensure the security of dynamic virtualization in the cloud?

USG9500 is a security gateway developed for organizations deploying Cloud Data Centers such as cloud service providers, enterprises data centers, and organizations with large-scale core data networks. USG9500 delivers the impressive performance, dedicated security and dynamic policies required for a dynamic Cloud IT environment. Organizations with large-scale data centers can enjoy the benefits of increased capacity, high reliability and flexibility made possible by Cloud and have peace of mind with the Cloud security enabled by the Huawei USG9500.

Specifications

Model	USG9520	USG9560	USG9580
Hardware			
Expansion slot	3 (SPU + LPU)	8 (SPU + LPU)	16 (SPU + LPU)
MPU	2, HA mode		
SPU	Firewall SPU, IPS SPU		
Port type	12 × GE (SFP/RJ45), 20 × GE (SFP), 24 × GE (SFP), 1 × 10 GE (XFP), 2 × 10 GE (XFP), 5 × 10GE (SFP+), 6 × 10GE (SFP+), 12 × 10GE (SFP+), 1 × 40GE(CFP) , 3 × 40GE(QSFP+), 1 × 100GE(CFP)		

USG6000V Virtual Integrated Service Gateway

Product Overview

With the wide application of cloud computing technology, IT and CT are rapidly converged. Consequently, requirements increase sharply for public and private cloud deployment, quick service provisioning, on-demand service migration, and tailored attack defense. Conventional service gateways with dedicated hardware can hardly meet the deployment requirements of the cloud network architecture.

The USG6000V virtual integrated service gateway provides various gateway service capabilities, such as vFW, vIPsec, vLB, vIPS, vAV, and vURL filtering. All security functions are virtualized. Multiple tenants can share virtual resources. Therefore, you can deploy USG6000Vs flexibly based on tenants' demands, meeting the security compliance requirements.

Product Specifications

Model	USG6000V1	USG6000V2	USG6000V4	USG6000V8
Virtual Machine Resource Requirements[1]				
Hypervisor	Xen 4.4 VMware ESXi 5.5 and later Linux KVM, kernel 2.6.32 and later Huawei FusionSphere, kernel 2.6.32 and later			
vCPU[2]	1	2	4	8
Memory (GB)	2 GB	4 GB	8 GB	12 GB
Storage (min/max)	2 GB/2 TB	2 GB/2 TB	2 GB/2 TB	2 GB/2 TB
Interface number of vNICs (min/max)	2/16	2/16	2/16	2/16

1: Virtual Machine Resource Requirements refer to the requirements for resources provided for deployed VMs. The requirements cover vCPU, memory, disk, and virtual interface resources.

2: vCPU refers to a logical CPU virtualized from an Intel x86 64-bit CPU that supports VT technology. One core corresponds to two vCPUs.

NIP6300&6600 Series Next-Generation Intrusion Prevention Systems

Product Overview

HUAWEI NIP6300/6600 series is an advanced, new generation intrusion prevention system (NGIPS) designed to provide application and service security for enterprises, IDCs, campus networks, and carriers.

The NIP6000 provides context, application, and content awareness capabilities and defends against unknown threats to better protect network infrastructures, bandwidth performance, servers, and clients.

Appearance

NIP6330

NIP6650

NIP6610

NIP6620

NIP6680

Specifications

Model	NIP6610	NIP6330	NIP6620	NIP6650	NIP6680
Performance	Mid-range FE	Low-end Gigabit	Mid-range Gigabit	High-end Gigabit	Mid-range 10Gigabit
Scalability					
IPS throughput	500Mbit/s	1.0Gbit/s	2.0Gbit/s	6.0Gbit/s	15.0Gbit/s
Fixed ports	4GE+2Combo	8GE+4SFP	8GE+4SFP	8GE+4SFP	4 x 10GE +16GE+8SFP
Height	1U				3U
Dimensions (mm)	442 x 421 x 43.6				442 x 415 x 130.5
Weight	10 KG				24 KG
Hard disk	Optional. Supports one 300 GB hard disk (hot swappable).				Optional. Supports one 300 GB hard disk (RAID1 and hot swappable).
Redundant power supply	Optional				Standard
AC power supply	100 V to 240 V				
DC power supply	-			-48 V to -60 V	
Power consumption	170 W				350 W
Operating environment	• Temperature » 0°C to 45°C (without optional hard disk) » 5°C to 40°C (with optional hard disk) • Humidity » 10% to 90%				

FireHunter6000 Series Sandbox

Product Overview

Advanced Persistent Threats (APTs) often use social engineering to obtain contact information and send phishing emails to unsuspecting people. They exploit security vulnerabilities in Internet of Things (IoT) devices, and hide, without being detected, in high-value business assets to steal or compromise target information. Attacks are commonly seen in compromised infrastructure, such as the finance sector, resource suppliers, and government agencies, affecting people's livelihoods. Before launching attacks, perpetrators are usually well-prepared and wait patiently for their opportunity. Once attacks are launched, perpetrators usually use technologies, such as advanced evasion techniques in combination,

to exploit known vulnerabilities. This makes the security devices that detect attack traffic ineffective.

Huawei FireHunter 6000 series sandbox products (hereinafter referred to as Huawei FireHunter) are a family of APT detection systems. They reassemble network traffic mirrored by switches or traditional security devices, and detect files transferred over networks in virtualized environments to detect unknown malicious files. Through reputation-based scanning, real-time behavior analysis, big data-based correlation analysis, hypervisor-based detection, machine learning technologies and cloud reputation sharing, Huawei FireHunter collects and analyzes the behavior of target software programs to provide accurate detection results with the help of a unique behavior model library. Based on the results, Huawei FireHunter detects, blocks, and visualizes suspicious traffic streams, effectively preventing the spread of unknown threats and protecting business's core information assets. Huawei FireHunter has two deployment models, which are typical and cluster models. In the cluster mode, the higher processing performance and higher reliability can be provided. Huawei FireHunter is especially useful to finance and government agencies, resource providers, and high-tech enterprises.

Appearance

Specifications

Model	Model FireHunter 6300
Hardware configuration	• x86 server in a 2-U rack • Memory 256 GB • Two power modules for redundancy • Hard drive with a capacity of no less than 2 TB *4 • SSD drive with a capacity of no less than 200 GB • 8 x GE electrical ports • 2 x 10GE optical ports
Performance	• 70,000 files (non-web pages) per day or 36,000 web pages per hour • Average detection response time of less than 30 seconds

Model	Model FireHunter 6200
Hardware configuration	• x86 server in a 2-U rack • Memory 128 GB • Two power modules for redundancy • Hard drive with a capacity of no less than 2 TB*2 • SSD drive with a capacity of no less than 200 GB • 8 x GE electrical ports • 2 x 10GE optical ports
Performance	• 50,000 files (non-web pages) per day or 50,000 web pages per hour • Average detection response time of less than 30 seconds

AntiDDoS1600 Series DDoS Protection System

Precise Protection, Second-Level Response, In-Line Deployment, Layered Defense

AntiDDoS1650

AntiDDoS1680

Solution Overview

As the Internet and IoT thrive, DDoS attacks are developing new characteristics:

- Attacks increase in frequency and traffic volume.
- An era of reflection attacks emerges, and reflection amplification attacks, such as NTP, SSDP, and DNS attacks are devouring limited enterprise and data center bandwidths.
- IoT devices can be used to construct Botnets for initiating large-scale attacks.
- Targets of DDoS attacks are developed from large enterprises to various industries.
- Attacks become more diversified, with volumetric and application attacks mixed to invalidate defense at a single layer.

In response to these characteristics, Huawei rolls out the AntiDDoS1600 DDoS protection system, which employs the big data analytics technology and supports modeling for 60+ types of network traffic to offer second-level attack response and comprehensive defense against 100+ types of attacks. The AntiDDoS1600 can be deployed on a user network in in-line mode to defend against volumetric and application attacks in real time.

When attack traffic exceeds the bandwidth or defense capability of a local scrubbing device, the AntiDDoS1600 associates with the AntiDDoS device of the upstream carrier or ISP to defend against flood attacks and guarantee service continuity.

Interface and Hardware Parameters

Model	AntiDDoS1650	AntiDDoS1680
Protection performWance	Up to 5Gbps，3Mpps	Up to 8Gbps，7Mpps
Deploy mode	In-line; Out-of-path(static defense); Out-of-patch(Dynamic defense)	
Function	Options for detecting or cleaning	
Dimensions (H × W × D)	442 × 421 × 44.4 (1U)	442 × 470 × 130.5 (3U)

Model	AntiDDoS1650	AntiDDoS1680
Standard interface	8 × GE(RJ45)+4 × GE(SFP)	16 × GE(RJ45)+8 × GE(SFP)+4 × 10GE(SFP)
Expansion slot	2 × WSIC	5 × WSIC
Expansion interface subcard type	• 8 × GE(RJ45) • 8 × GE(RJ45)+2 × 10GE(SFP+) • 8 × GE(SFP) • 4 × GE(RJ45) Bypass card	• 8 × GE(RJ45) • 8 × GE(RJ45)+2 × 10GE(SFP+) • 8 × GE(SFP) • 4 × GE(RJ45) Bypass card
Power supply	Single AC power supply. Options for 2 × AC redundant, hot swap power supplies.	2 × AC redundant, hot swap power supplies 2 × DC redundant, hot swap power supplies
Power Consumption	170W	350W
External Bypass	• Multi mode or single mode GE link • Multi mode or single mode 10GE link	

AntiDDoS8000 Series DDoS Protection System

Terabit-Level Capacity, Second-Level Response, Precise Protection, Value-added Operation

AntiDDoS8030 AntiDDoS8080 AntiDDoS8160

Solution Overview

As the Internet and IoT thrive, DDoS attacks are developing new characteristics:

- Attacks increase in frequency and traffic volume, and the peak attack traffic is up to 1.35Tbps in 2018.
- Reflection amplification attacks spread across the world, congesting links.
- The SSL methods with which the attackers infiltrate into an organization’s network remain undetected.
- Low-rate application-layer attacks target precisely at service systems like e-finance or gaming. Reflection amplification, low-rate application-layer, and SSL-based DDoS attacks are gaining momentum, and layered defense becomes the first choice in anti-DDoS. are gaining momentum, and layered defense becomes the first choice in anti-DDoS. Huawei AntiDDoS8000 employs big data analysis to conduct modeling for 60+ types of traffic, offering Terabit-level protection, second-level response, and comprehensive defense against 100+ types of attacks. It works with Huawei cloud cleaning center to deliver layered cleaning, providing full-fledged protection that covers network link bandwidths and online services.

Interface and Hardware Parameters

Model	AntiDDoS8030	AntiDDoS8080	AntiDDoS8160
Protection performance	Up to 120 Gbps	Up to 960 Gbps	Up to 1920 Gbps
Protection performance of each slot	Up to 120 Gbps，30 Mpps	Up to 240 Gbps，60 Mpps	Up to 240 Gbps，60 Mpps
Expansion slot	3	8	16
Dimensions (H x W x D)	175 mm x 442 mm × 650 mm (DC, 4 U) 220 mm x 442 mm x 650 mm (AC, 5 U)	620 mm x 442 mm x 650 mm (14 U)	1420 mm x 442 mm x 650 mm (32 U)
Expansion LPU type	LPUF-120, 2 sub-slots LPUF-240, 2 sub-slots		
Expansion interface subcard type	24 x GE (SFP or RJ45); 5 x 10GE (SFP+); 6 x 10GE (SFP+); 12 x 10GE (SFP+); 1 x 40GE (CFP); 1 x 100GE (CFP)		
Power supply	DC: –48 V AC: 175 V to 264 V; 50/60 Hz		
Availability	Dual-MPU; 99.999% carrier-class high availability		

eLog Security Event Management Center

Product Overview

Security devices are deployed in an enterprise due to varying security device log formats, poor intelligibility, and difficulties in storing massive logs, major security risks cannot be promptly detected from logs.

Government agencies and industrial organizations provide guidance and use internal control laws and standards to impose higher requirements on the completeness, accuracy, and effectiveness of run logs and user logs.

eLog:

- Provides a platform for collecting, storing, and auditing multiple types of large-scale logs in a unified manner.
- Supports log management of Huawei .
- Provides industry-leading NAT tracing function and security event analysis.

Product Specifications

Performance			
Maximum log recording speed (standalone mode)	250,000 EPS		
Maximum number of NEs supported by the eLog	2000		
Recommended Server Model	eLog All-In-One	eLog Analyzer	eLog Collector
Height	2 U		
Dimensions (H x W x D) mm	86.1 mm (2 U) x 447 mm x 748 mm		
Weight (full configuration)	30 kg	27 kg	30 kg
Fixed ports	4 x USB, 1 x VGA, 1 x Console, 1 x MGT, 4 x GE		
Memory	32 GB		

Recommended Server Model	eLog All-In-One	eLog Analyzer	eLog Collector
Storage space	2*300GB SAS,12*2TB SATA 2*300GB SAS,12*6TB SATA	2*300 GB SAS, 6 x 2-TB SATA	2*300GB SAS,12*6TB SATA
RAID	RAID 1 & RAID 6		
Redundant power modules	Standard		
AC power supply	100 V to 240 V; 50/60 Hz; 9 A to 4.5 A		
DC power supply	–48 V to –60 V; 26 A		
Maximum power	750 W AC/800 W DC		
Operating environment	Operating temperature: 5°C to 45°C (41°F to 113°F) Operating humidity: 8% RH to 90% RH non-condensing		
Non-operating environment (storage environment)	Storage temperature: –40°C to +65°C (–40°F to 149°F) Storage humidity: 5% RH to 95% RH non-condensing		
Authentication	CCC, RCM, CE, VCCI, FCC, IC, UL, BIS		

Award and Certification

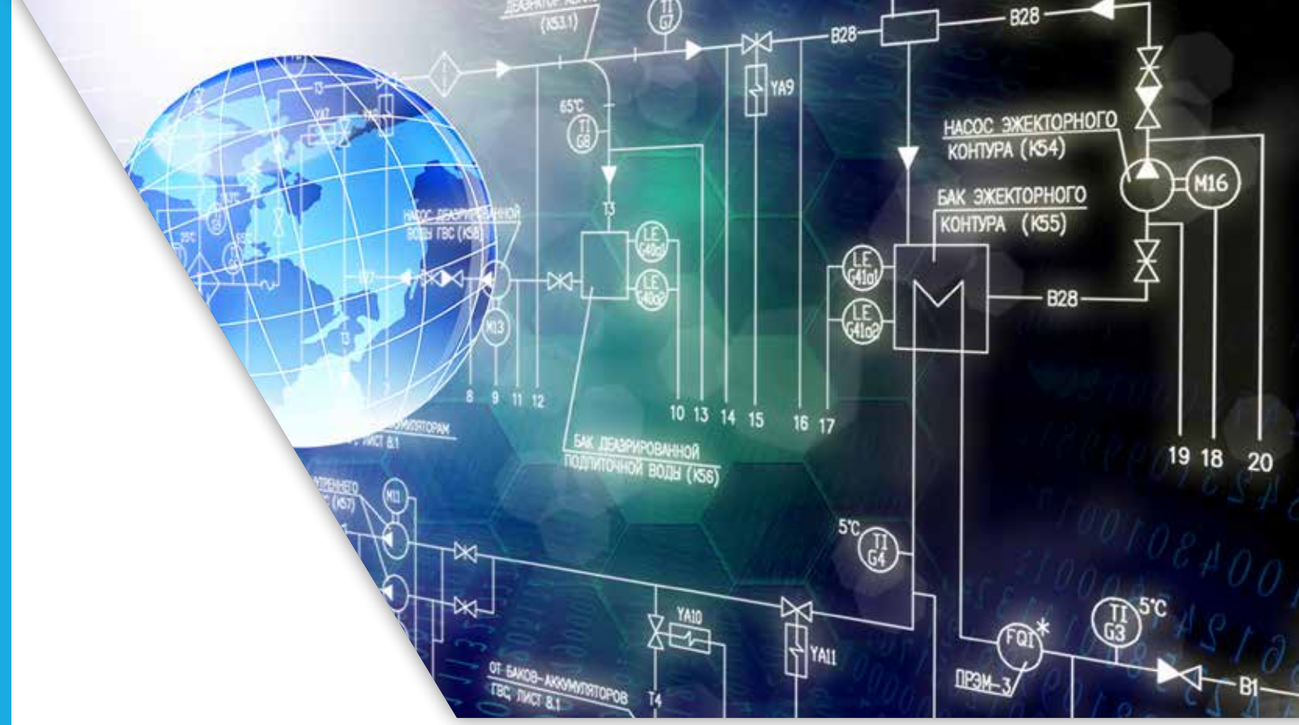

CCN

CERTIFICATE

The IT product identified in this certificate has been evaluated at an accredited and licensed/approved evaluation facility using the Common Methodology for IT Security Evaluation, version 3.1.R4 and CC Supporting Documents as listed in the Certification Report, for conformance to the Common Criteria for IT Security Evaluation, version 3.1.R4. This certificate applies only to the specific version and release of the product in its evaluated configuration and in conjunction with the complete Certification Report. The evaluation has been conducted in accordance with the provisions of the Spanish IT Security Evaluation and Certification Scheme, PRE/2740/2007 September the 19th, and the conclusions of the evaluation facility in the evaluation technical report are consistent with the evidence adduced. This certificate is not an endorsement of the IT product by the Spanish Scheme or by any other organisation that recognises or gives effect to this certificate, and no warranty of the IT product by the Spanish Scheme or by any other organisation that recognises or gives effect to this certificate, is either expressed or implied.

8

eSight Network



eSight Network

Product Overview

With the development of enterprise network applications and the expansion of network scale, a large number of routers, gateways, and wireless local area network (WLAN) devices are used on enterprise campus and branch networks. Enterprises must provide multiple mobile offices, rather than a fixed location, for their employees, and support diversified services, complicating network management. They urgently need a unified network management system to improve efficiency and ensure normal operation of enterprise services.

Huawei eSight Network is based on the following concepts: topology-centric, simplified management, and improved operation and maintenance (O&M) efficiency. eSight Network provides an all-round, open, and unified management platform, and various service components, to implement unified management of devices, services, and applications.

Product Features

1. Protecting enterprise investments

- eSight Network uniformly manages devices of various types from multiple vendors, bringing high-level ease of use for network administrators.
- eSight Network is composed of a unified platform and optional components that can be selected based on enterprise characteristics, facilitating fast expansion.

2. Improving O&M efficiency

- Fast network deployment
  - » Network administrators do not need to memorize commands but use the smart configuration tool instead to complete device configurations in batches. The configuration efficiency is improved.
  - » The group-based performance monitoring solution classifies devices with the same characteristics into the one group to monitor the same performance indicators. After a device is added to a group, eSight Network automatically applies matching monitoring policies to the device.
  - » eSight Network provides unified configuration templates and pages for wired and wireless users to improve configuration efficiency.
- Visualized routine maintenance
  - » Topology-centric all-round monitoring clearly displays key fault and performance information.
  - » Visualized service, traffic, and security trend allow users to obtain network status and quality.
- Efficient troubleshooting
  - » eSight Network quickly diagnoses users' network faults and provides troubleshooting suggestions based on Huawei best practices to help network administrators efficiently rectify the faults.
  - » eSight Network supports drill-down fault analysis to locate the root causes step by step.
  - » eSight Network uses the Packet Conservation Algorithm for Internet (iPCA) technology to timely measure network quality and accurately locate faults.

3. Improving network security

- Visualized network security
  - » eSight Network provides redundancy policy analysis, matching analysis, risk analysis, and comprehensive analysis to refine security policies, improving network security and firewall efficiency.
- System security hardening
  - » eSight Network improves system security by guaranteeing the access side, server side, and device communication security.
  - » eSight Network supports dual-node hot standby to ensure high availability.

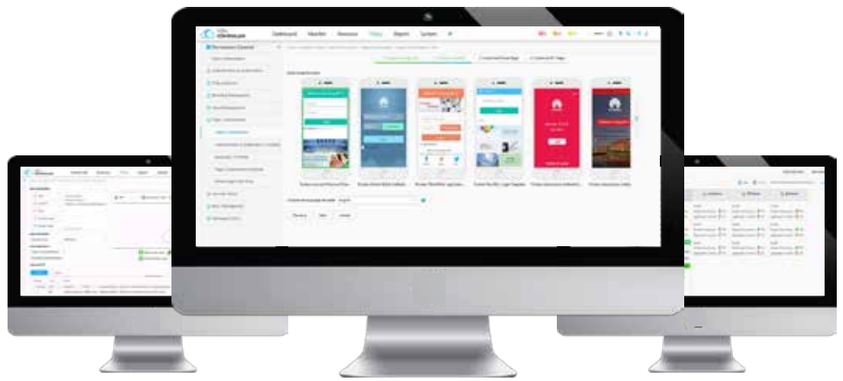
4. Full lifecycle WLAN management

- » Supports full lifecycle WLAN management including visible planning, three-step service provisioning, 360-degree WLAN monitoring, and search-centric one-click fault diagnosis, helping administrators effectively deploy and manage WLANs.
- » eSight Mobile uses the universal mobile information platform to manage and control WLANs anytime, anywhere. It can also interconnect with a third-party system to build a win-win ecosystem.
- » eSight Network provides terminal location and passenger traffic analysis functions and displays terminal positions in the heat map. It also supports the Bluetooth location software development kit (SDK) to provide an open precise location interface, helping shopping malls, supermarkets, and the educational industry to provide value-added services.

9 SDN Controller

Agile Controller-Campus.....128
Agile Controller-DCN.....129
Agile Controller-WAN.....130
Agile Controller-Transport.....131

Agile Controller-Campus



Product Overview

The Agile Controller-Campus is Huawei's next-generation controller for campus and branch networks to reduce operating expense (OPEX) and operations and maintenance (O&M) costs of enterprises, accelerates service cloudification and digital transformation, and makes network management more agile and network O&M more intelligent.

The Agile Controller-Campus supports 3 application scenarios including CloudCampus, SD-WAN, and user access management.

Product Description

CloudCampus	• Provides network service automation including planning, deployment, O&M, and PMI. • Supports multi-tenant management to help MSPs provide managed campus network services. • Provides open APIs to association with third-party applications and flexibly expand enterprise campus network services.
SD-WAN	• Helps enterprises build an application-aware, cost-effective, easy-to-maintain, and on-demand enterprise interconnection solution, facilitating fast innovations of enterprise service. • Supports zero touch provisioning, intelligent traffic steering, and visualized O&M.
User Access Management	• Provides unified user access management for employees, guests, and network administrators. • Supports multiple authentication protocols, such as 802.1x, Portal, MAC address, and TACACS. • Provides unified policy management to ensure user experiences, including rights, QoS, bandwidth, application and security.

Agile Controller-DCN

Product Overview

The Agile Controller-DCN is Huawei's next-generation controller for data centers, and the core component of the Huawei CloudFabric cloud data center network solution. It implements unified control and dynamic scheduling of network resources to rapidly deploy cloud services.

Product Description

The Agile Controller-DCN is an open system and provides various standard interfaces. It interconnects with Layer 2 to Layer 7 mainstream OpenStack platforms through northbound interfaces and connects to physical switches, virtual switches, and firewalls through southbound interfaces. The Agile Controller-DCN receives user-centric service requests through the northbound interfaces and converts them into network configurations, which then are distributed to the devices through southbound interfaces to achieve network automation.

If no cloud platform is used, the Agile Controller-DCN provides independent service distribution GUIs and supports connections to computing resource management systems such as VMware vCenter and Microsoft System Center in the east and west directions for network and computing collaboration.

The Agile Controller-DCN is a clustered controller, which provides high reliable capability. It supports the deployment of the main and backup cluster in different places to achieve the geographic redundancy.

The main features of the Agile Controller-DCN include the following

- Provides a multitude of Fabric networking capabilities.
- Distributes services in different scenarios.
- Manages multiple tenants.
- Flexibly orchestrates services from Layer 4 to Layer 7.
- Automatically distributes network resources based on demands.
- Provides the virtual perception solution and visualizes network resources.
- Provides mapping of physical, logical, and application topologies to visualize network services.
- Provides service quality checks to visualize network paths.
- Supports northbound RESTful interface to connect to mainstream cloud platforms and third-party applications.
- Supports NetConf, OpenFlow, OVSDB, and SNMP southbound interfaces to manage physical and virtual network devices.

Agile Controller-WAN

Product Overview

- The Agile Controller-WAN is Huawei's IP WAN network controller, mainly servicing carrier customers as well as OTT and IXP enterprise customers, enabling the IP network optimization and SDN IPRAN/SPTN enterprise leased line solutions.

Product Description

The Agile Controller-WAN, a core component of the Huawei IP WAN solution, enables cloud-based WAN solutions to maximize the value of networks. The Agile Controller-WAN has strong and flexible management capabilities that allow the rapid deployment and provisioning of VPN services on WANs. It can automate the monitoring, planning, and adjustment of network traffic based on set constraints, which improves network resource utilization. In addition, it provides differentiated SLA guarantees, makes network resources manageable and visualized, and greatly increases the efficiency of O&M. The Agile Controller-WAN uses an open architecture to support basic network services and northbound standardization, enables network northbound openness, this reduces the difficulty of interconnection. It also gives customers a ROADS experience.

Agile Controller-Transport

Product Overview

Agile Controller-Transport is a key part of the TSDN solution. This key part is applicable to backbone, metro, and enterprise access networking scenarios.

It provides a variety of functions and features, such as service agility, real-time resource visualization, and automatic network O&M, meeting new requirements on innovative service experience and flexible and efficient networks, which are proposed by enterprise private lines and Data Center Interconnect (DCI).

Product Description

Huawei Agile Controller-Transport uses component-based and loosely-coupled architecture, uses Lego-type service modules to provide the on-demand deployment capability, abstracts the device, network, and service models, and shields network technology details, simplifying the network model. It can also provide users with an intuitive and visualized view, communicate with WDM equipment in real time to obtain networking information, and provide functions such as centralized route computation and bandwidth on demand (BoD). The Agile Controller-Transport uses advanced algorithms to automatically map all service types to L2/L1/L0 and therefore can quickly provision all types of L2/L1/L0 services. It uses standard application programming interfaces (APIs) in the northbound direction to support automatic invocation by upper-layer services and build a fast end-to-end service provisioning system.

10

FabricInsight

FabricInsight

Product Overview

With continuous development and commercial use of technologies such as cloud computing, big data, and artificial intelligence, enterprise are deepening their digital transformation, covering various business forms including office, production, and testing. Traditional data centers can no longer catch up with development, and cloud-based transformation has become an inevitable trend. However, the current data center cloudification solutions in the industry focus on "Resource virtualization and resource utilization improvement" and "Automatic deployment and cloud-based strategies", and on the other hand overlook network management difficulties and challenges brought by the data center scale and traffic surge. Traditional manual O&M cannot effectively deal with complex application migration policies, unstable service experience quality, difficult fault locating, and large-scale security policy management.

Huawei data center network analyzer FabricInsight abandons the resource status-based traditional monitoring mode. It detects fabric and application status in real time, streamlines networks and applications, monitors networks from the perspective of applications, helps customers detect network and application problems in a timely manner, and ensures continuous and stable application running.

Product Features

DashBoard: multi-dimensional data analysis and graphical display

The FabricInsight provides multi-dimensional Top N statistical views for hosts to help users detect network quality through multi-dimensional analysis.

Management of mutual access relationship between applications (ADM) and visualization of network policies

The FabricInsight provides an application view, which can intuitively display the actual interaction relationships between services based on the network-wide real service flows.

Mutual visibility between applications and networks for quick fault analysis and demarcation

The FabricInsight provides the intra-application visibility function. In the application details view, you can view the nodes with abnormal interaction to locate performance problems and analyze specific bottlenecks through the association with networks. In addition, the FabricInsight provides the function of collecting statistics on and filtering abnormal events for users to quickly focus on abnormal events and quickly identify the service network health in the application based on the interaction diagram and heatmap of clusters in the application.

Live network quality evaluation and proactive detection of abnormal network flows

The FabricInsight provides the network view, performs intelligent analysis of TCP flow status and detects abnormal flows based on big data, displays network quality in real time through indicators such as delay and traffic, and quickly identifies and analyzes abnormal flows on the network.

Network behavior playback and ten billion data record search in seconds

The FabricInsight provides the Event view to displays ERSPAN mirroring packets after packet merging and request direction identification, filters data from multiple dimensions such as the source IP address, source port, destination IP address, and destination port, and allows users to view details about flow events and topology paths of specific flow events for historical network behavior playback.

CloudAPP Platform - mobile intelligent O&M

Users can log in to the FabricInsight on a PC or through the iPAD client application CloudAPP Platform. Application and network analysis can be performed on mobile terminals to quickly locate faults.