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ENTERPRISE PRODUCT PORTFOLIO

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LEADING NEW ICT

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Company Profile

Huawei is a global leader of ICT solutions. Founded in 1987, Huawei has grown into a Global Fortune 500 company with annual sales revenue of nearly CNY395 billion. Our telecom network equipment, IT products and solutions, and smart devices are used in more than 170 countries and regions. Looking ahead, we will continue to work closely with partners to build a better connected world.

We are committed to providing a holistic set of competitive, end-to-end ICT solutions and services for telecom carriers, enterprises, and consumers, helping them achieve success in this digital society. With the "focus" as our strategy, we invest heavily in the R&D of fields such as telecom carrier networks, cloud data centers, and smart devices, as well as make constant innovations driven by both customer needs and cutting-edge technologies. Leveraging our experience and expertise in the ICT sector, we help bridge the digital divide and promote high-quality broadband connectivity for all. As an advocate of socio-economic sustainability, we make every effort to support secure and stable network operations, and help customers and industries improve efficiency to drive low-carbon economic growth. By localizing our operations and building a global value chain, we help local innovators maximize their global value and share win-win outcomes.

Recent years have seen the growing maturity of emerging technologies, such as Cloud Computing, Big Data, Software-Defined Networking (SDN), the Internet of Things (IoT), and Mobility. Such maturity makes the new ICT architecture featuring Cloud, Pipe, and Device collaboration a reality and lays a solid foundation for digital transformation in enterprises. Depending on technical innovations, Huawei is committed to building an open, flexible, resilient, and secure platform to orchestrate a sustainable, multi-win ecosystem. Following the guiding principle of Business-Driven ICT Infrastructure (BDII), Huawei teams up with customers and partners in joint innovations. By doing so, we help customers from a variety of industries including government and public sectors, finance, energy, transportation, and manufacturing stay ahead in the new ICT era, and jointly build a Better Connected World.

For more information, please visit:

Huawei EBG website: http://e.huawei.com/en/ Or follow us on: Sina Weibo:.http://weibo.com/hwenterprise Facebook: http://facebook.com/huaweienterprise Twitter: http://twitter.com/huaweient LinkedIn: http://linkedin.com/company/huawei-enterprise YouTube: http://youtube.com/user/huaweienterprise

Enterprise Network

>>> Enterprise Network

Switch

Data Center Switch

CloudEngine 12800

The CloudEngine 12800 series switches are Huawei newgeneration cloud-oriented core switches designed for data center and high-end campus networks, helping build an elastic, open, and easy-to-use data center network.

- Switching Capacity: 40 Tbit/s to 160 Tbit/s
- Service Slots: 4 to 16
- Ports: (CE12816) 576 x 100 GE/576 x 40 GE/2,304 x 25 GE/2,3 04 x 10 GE
- Device Virtualization: Virtual System (VS) (1:16 virtualization), Cluster Switch System (CSS), Super Virtual Fabric (SVF)
- Network Virtualization: Multi-chassis Link Aggregation Group (M-LAG), Transparent Interconnection of Lots of Links (TRILL), Virtual Extensible LAN (VXLAN) routing, VXLAN bridging, Ethernet VPN (EVPN)
- Programmability: OpenFlow, Open Programmability System (OPS)

CloudEngine 8800

The CloudEngine 8800 series switches are 40G Ethernet switches designed for data centers and high-end campus networks.

- Model: CE8860-4C-EI
- Switching Capacity: 6.4 Tbit/s
- · Ports: 4 slots; different cards can be flexibly used in combinations to achieve a maximum of 32 x 100 GE QSFP28/ 64 x 40 GE QSFP+/128 x 25 GE SFP28/128 x 10 GE SFP+
- Device Virtualization: iStack
- Network Virtualization: M-LAG, TRILL, VXLAN routing, VXLAN bridging, EVPN
- Programmability: OPS



CE12816



CE12812



CE12808



CE12804



CE12808S



CE12804S



CloudEngine 7800

The CloudEngine 7800 series switches are next-generation 40G Ethernet switches designed for data centers and highend campus networks.

- Model: CE7850-32Q-EI
- Switching Capacity: 2.56 Tbit/s
- Ports: 32 x 40 GE OSFP+
- Device Virtualization: iStack, SVF
- Network Virtualization: M-LAG, TRILL, VXLAN routing, VXLAN bridging, EVPN
- Programmability: OpenFlow, OPS



CE7850-320-EI



The CloudEngine 6800 series switches are next-generation 10G Ethernet switches designed for data centers and highend campus networks.

- Switching Capacity: 640 Gbit/s to 1.44 Tbit/s
- Device Virtualization: iStack, SVF
- Network Virtualization: M-LAG, TRILL (CE6800HI & CE6800EI), VXLAN routing (CE6800HI), VXLAN bridging (CE6800HI), EVPN
- Programmability: OpenFlow (CE6800HI), OPS

CE6810-32T16S4Q-LI	CE6850U-4856Q-HI
CE6851-4856Q-HI	CE6850U-24S2Q-HI
CE6850-48T4Q-EI	CE6850-4856Q-HI
CE6810-48S-LI	CE6850-48T6Q-HI
CE6850-4854Q-EI	CE6810-4854Q-EI
CE6810-48S4Q-LI	CE6810-24S2Q-LI

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CloudEngine 5800

The CloudEngine 5800 series switches are next-generation, high-density Gigabit Ethernet switches designed for data centers and high-end campus networks.

- Switching Capacity: 128 Gbit/s to 336 Gbit/s
- · Device Virtualization: iStack, SVF
- Network Virtualization: M-LAG, TRILL (CE5855 & CE5850)

CE5850-48T4S2Q-EI	CE5855-24T4S2Q-EI
CE5810-48T4S-EI	CE5850-48T4S2Q-HI
E 11 200000 200000 200000 21 2	
CE5855-48T4S2Q-EI	CE5810-24T4S-EI

Campus Switch

S12700

The S12700 series Agile Switches are core switches 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 Huawei Ethernet Network Processor (ENP) and provides a native wireless Access Controller (AC) to help build a wired and wireless converged network. Its uniform user management capabilities deliver refined user and service management.
- The S12700 series runs Huawei Versatile Routing Platform (VRP), which provides high-performance L2/L3 switching services as well as rich network services, such as MPLS VPN, hardware IPv6, desktop cloud, and video conferencing.
- The S12700 series offers a variety of reliability technologies including in-service software upgrade, nonstop forwarding, CSS2 switch fabric hardware clustering that allows 1+N backup of MPUs, hardware Eth-OAM/ BFD, and ring network protection. These technologies help you improve productivity and maximize network operation time, and therefore reduce the total cost of ownership (TCO).

S9700

The S9700 series terabit routing switches (S9700 for short) are high-end switches designed for next-generation campus networks and data centers to implement service aggregation.

- Based on Huawei Versatile Routing Platform (VRP), the S9700 provides high L2/L3 switching capabilities and integrates diversified services such as MPLS VPN, hardware IPv6, desktop cloud, video conferencing, and wireless access.
- The S9700 also provides a variety of reliability technologies including in-service software upgrade, non-stop forwarding, hardware OAM/BFD, and ring network protection. These technologies improve customers' network operation efficiency, maximize the device running time, and reduce customers' total cost of ownership (TCO).
- An S9700 can be upgraded to an Agile Switch when it is equipped with X1E cards, the line cards with Huawei's first Ethernet Network Processor (ENP). Agile switches allow customers to make innovations on their networks.



S12712



S12708



S12704







S7700

The S7700 series enterprise switches (S7700s) are high-end smart routing switches, which can function either as an aggregation or core node on a campus network to provide integrated wireless access or as an aggregation node in a data center.

- Support up to 480 x 10 GE ports per switch, Super Virtual Fabric (SVF) design and CSS clustering provide scalability and ample bandwidth for video and surveillance applications
- Huawei's Packet Conservation Algorithm for Internet (iPCA) on X1E cards adds marks to service packets to actively monitor network quality, detecting temporary interruptions and faulty ports within seconds
- Native Access Controllers (ACs) let you build a wireless network quickly, without new hardware
- Unified user management supports 802.1X, MAC, and Portal authentication in a simple visual user interface











S7703

S6720

The S6720 series switches (S6720s) are next-generation 10G box switches. The S6720s can function as access switches in an Internet Data Center (IDC) or core switches on a campus network.

- Provide line-speed 10 GE access ports and line-speed 40 GE uplink ports, and long-distance stacking with 480 Gbit/s bi-directional stack bandwidth.
- Support comprehensive security policies, such as anti-DDoS, binding tables, and IPSG, plus reliability mechanisms.
- Provide enhanced QoS capabilities, strong MPLS service processing capabilities, and high scalability. Support 1+1 backup of AC and DC power modules that can be installed on the same device, as well as sFlow traffic monitoring technology.
- Support Easy Operation Commander, Zero-Touch Provisioning (ZTP) of new devices, batch device upgrades and patch installation, and faulty device replacement.



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

S6700

The S6700 series enterprise switches (S6700s) are nextgeneration 10G box switches, which can function as access switches in an Internet data center (IDC) or core switches on a campus network.

- Large-capacity and high-density: 48 x10 Gbit/s access
- Comprehensive security policies: DoS attack defense, DHCP snooping, strict ARP learning, and centralized MAC address authentication
- High reliability mechanism: Redundant power supplies, E-Trunk, SEP, and VRRP
- Enhanced QoS control mechanism: Complex traffic classification, and bi-directional ACLs
- High scalability: iStack
- Convenient management: Automatic configuration, SNMP v1/v2/v3, GVRP, multiplex VLAN, and BFD
- Various IPv6 features: IPv4/IPv6 dual stack, RIPng, and OSPFv3

S5720-HI

The S5720-HI series are advanced Gigabit Ethernet switches that provide rich agile features. 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 ubiquitous service function to ensure consistent user experience. In addition, the switches support flexible Ethernet networking, comprehensive VPN tunnel solutions, various security control methods, intelligent deployment, and simple operation and maintenance. The S5720-HI switches are the best choices for the branches of highquality large- and middle-sized campus networks, the core layer of small-sized campus networks, and the access layer of data center networks.

- Native Access Controllers (ACs) provide efficient, seamless support of converged, wired and wireless networks
- Super Virtual Fabric (SVF) parent that virtualizes wired switches and wireless APs into a single device, greatly simplifying network management
- Programmable Ethernet Network Processor (ENP) chip lets administrators provision new services and network features quickly, without replacing hardware
- Innovative Packet Conservation Algorithm for Internet (iPCA) technology enhances automatic monitoring and recovery from failures, for a more resilient and responsive user experience



S6700-24-EI



S6700-48-EI



S5720-56C-PWR-HI-AC S5720-56C-PWR-HI-AC1

S5720-EI

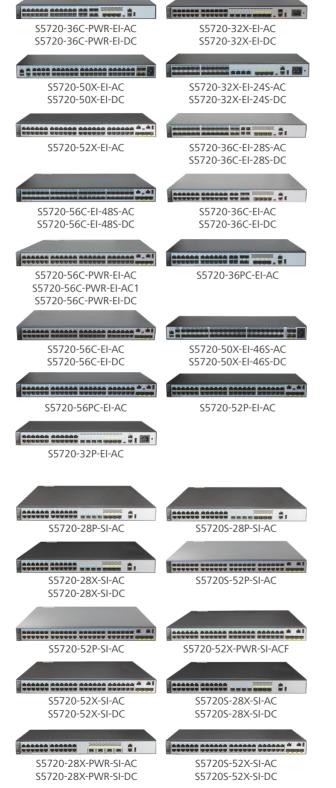
The S5720-El Series Gigabit Switches provide resilient, energy-efficient GE ports for access switching in data centers, and aggregation switching in enterprise campus networks. Performance enhancements include advanced processing hardware, 10 Gbit/s uplink ports, and large MAC address and routing tables; Super Virtual Fabric (SVF) support enables intelligent virtualization, iStack clustering, and operation in N + 1 backup mode for simplified O&M and high availability. Mature IPv6 features ensure smooth migration to next-generation IP networking.

- Provides up to 48 GE ports plus up to 6 x 10 GE uplink ports with intelligent iStack technology to virtualize multiple switches and provide fast fail-over switching
- Works as a Super Virtual Fabric (SVF) client that is plugand-play with zero configuration for simplified network management
- Comprehensive security features and Quality-of-Service (QoS) capabilities provide high-availability, low-latency forwarding performance
- Models with pre-positive power sockets are designed for installation in a 300 mm deep cabinet, saving space and simplifying O&M

S5720-SI

The S5720-SI series switches (S5720-SI for short) are nextgeneration standard gigabit Layer 3 Ethernet switches based on a new generation of high-performance hardware and Huawei Versatile Routing Platform (VRP). They provide large switching capacity and high-density GE and 10 GE uplink interfaces. With extensive service features and IPv6 forwarding capabilities, the S5720-SI can be used as access or aggregation switches on campus networks or access switches in data centers. The S5720-SI series integrates many advanced technologies in terms of reliability, security, and energy savings. Simple and convenient to install and maintain, reducing customers' O&M costs and helping enterprise customers build next-generation IT networks.

- Flexible networking ensures a high ROI: Provides fullgigabit ports and fixed GE/10 GE uplink ports
- Abundant service features: More powerful Layer 3 routing capability, support for multi-terminal, highdefinition video surveillance and video conferencing
- Easy O&M: Works as a Super Virtual Fabric (SVF) client that is plug-and-play with zero configuration for simplified network management
- High reliability: Multiple devices can be connected to set up a stack that functions as a virtual switch, reducing service interruption time



\$5720-52X-PWR-SI-AC \$5720-52X-PWR-SI-DC ----

S5720-14X-PWH-SI-AC

S5700-HI

The S5700-HI series (hereafter referred to as S5700-HI) are advanced gigabit Ethernet switches developed by Huawei, providing flexible gigabit access and 10G/40G uplink ports. Based on next-generation, high-performance hardware and Huawei Versatile Routing Platform (VRP), the S5700-HI provides excellent NetStream function, flexible Ethernet networking, comprehensive VPN tunneling technologies, diversified security mechanisms, mature IPv6 features, and are easy to manage and maintain. All these features make the S5700-HI the best choice as an access switch on large and medium-sized campus networks or data centers and aggregation switch on small campus networks.

- Smart Link and Rapid Ring Protection Protocol (RRPP) provide load balancing among links, optimizing bandwidth usage
- NetStream and sFlow support provide dynamic traffic analysis and management, simplifying O&M
- Multiple fault-detection mechanisms: both hardwareand software-based Bi-directional Forwarding Detection (BFD) and Operations, Administration, and Maintenance (OAM) features
- Combine multiple S5700-HI switches into a single stack with Huawei's intelligent iStack technology

S5700-EI

The S5700-EI series gigabit enterprise switches (S5700-EI) are next-generation energy-saving switches developed by Huawei to meet the demand for high-bandwidth access and Ethernet multi-service aggregation. Based on cuttingedge hardware and Huawei Versatile Routing Platform (VRP) software, the S5700-EI provides a large switching capacity and high-density GE ports to implement 10 Gbit/s upstream transmissions. The S5700-EI is for use in various enterprise network scenarios. For example, it can function as an access or aggregation switch on a campus network, a gigabit access switch in an Internet Data Center (IDC), or a desktop switch to provide 1,000 Mbit/s access for terminals. The S5700-EI is easy to install and maintain, reducing workloads for network planning, construction, and maintenance. The S5700-EI uses advanced reliability, security, and energy conservation technologies, helping enterprise customers build a next-generation IT network.

- Huawei iStack clustering technology virtualizes multiple switches into one, improving device reliability and simplifying configuration and management
- Comprehensive VPN tunneling technology support, including Multi-VPN-instance Customer Edge (MCE) and MPLS L2/L3 VPN tunnels
- Flexible ports: Gigabit downstream ports and 10 Gbit/ s upstream service ports configurable for different port densities
- Easy operation and maintenance: Zero-touch installation, configuration-free replacement, and support for remote batch-mode upgrades





S5700-SI

The S5700-SI series are gigabit Layer 3 Ethernet switches based on a new generation of high-performance hardware and Huawei Versatile Routing Platform (VRP). They provide a large switching capacity, high-density GE interfaces, and 10 GE uplink interfaces. With extensive service features and IPv6 forwarding capabilities, the S5700-SIs are applicable to various scenarios. For example, they can be used as access or aggregation switches on campus networks or access switches in data centers. The S5700-SIs integrate many advanced technologies in terms of reliability, security, and energy savings. They employ simple and convenient means of installation and maintenance to reduce customers' OAM cost and help enterprise customers build a next-generation IT network.

- Intelligent iStack technology virtualizes multiple switches into one logical switch, improving device reliability and simplifying configuration and management
- Flexible networking through STP, RSTP, and MSTP protocols, Smart Link and SEP technology
- Diversified security mechanisms: MAC address, 802.1x, and portal authentication mechanisms; dynamic provisioning of user access policies including VLAN, QoS, and ACL policies
- Huawei's Easy Operation enables zero-touch installation, configuration-free replacement, and remote batch-mode upgrades

S5700-LI

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The S5700-LI is a next-generation energy-saving gigabit Ethernet switch that provides flexible GE access ports and 10 GE uplink ports. Building on next-generation, high-performance hardware and the Huawei Versatile Routing Platform (VRP), the S5700-LI supports Advanced Hibernation Management (AHM), intelligent stack (iStack), flexible Ethernet networking, and diversified security control. It provides customers with a green, easy-tomanage, easy-to-expand, and cost-effective gigabit to the desktop solution.

- Device sleep mode provides three energy-saving states — standard, basic, and deep
- Industry-first built-in batteries with visual battery status management; ideal for environments facing frequent power failures at the access layer
- CSFP models support downlink CSFP ports, providing 2 Gbit/s bi-directional bandwidth; 24 downlink CSFP ports provide access capacity equivalent to 48 SFP ports
- Models with front power sockets can be installed in a 300 mm deep cabinet; maintainable through the front panel





S3700

The S3700 series enterprise switches (S3700s) are nextgeneration energy-saving 100M Layer 3 switches, that provide high-performance access and aggregation to an enterprise campus network.

- Powerful support for services: Multi-VPN-Instance CE (MCE) and multicast functions
- PoE function: Flexible configuration on when or whether a PoE port provides power
- Comprehensive QoS policies and security mechanisms: Complex traffic classification, DoS attack defense, DHCP snooping, strict ARP learning, centralized MAC address authentication, and 802.1x authentication
- Various routing and IPv6 features: IPv4/IPv6 dual stack, RIPng, and OSPFv3
- High scalability and excellent reliability: iStack, Smart Link, RRPP, and BFD
- Considerate, maintenance-free design and manageability: Remote batch upgrade, GVRP, MUX VLAN
- Unique fan-free and energy-saving design: Dramatic reduction of power consumption and noise elimination



The S2700 series enterprise switches (S2700s) are nextgeneration energy-saving 100M Ethernet intelligent switches, which can meet the demand for multi-service provisioning and access on Ethernet networks.

- Maintenance free, easy deployment, and easy management: Automatic configuration, plug-and-play
 Flexible service control: Various ACLs
- Excellent security features: DHCP snooping, centralized MAC address authentication, 802.1x authentication, and
- NAC

 POE function: PoE power supplies with different power
- levelsComprehensive QoS policies: Complex traffic classification
- Powerful surge protection capability: 7 kV of surge protection
- Noise free, energy conservation, and low radiation: Fanfree design and port sleep mode



S2700-9TP-(PWR)-EI/SI

S2750(1)-28TP-(PWR)-EI-AC

S2700-26TP-PWR-EI

S270(1)0-52P-(PWR)-SI/EI



S1700

The S1700 series enterprise switches (S1700s) are nextgeneration energy-saving Ethernet access switches, which are ideal for small-size and medium-size enterprises, Internet cafes, hotels, and schools

- New energy-saving design: EEE, and fan-free design
- Considerate, maintenance-free design: One-key operation button, Web-managed models, and SNMPbased S1700 models
- Outstanding security performance: 802.1x, RADIUS, NAC, and packet filtering based on MAC addresses or ports Powerful link expansion and backup: LACP, STP, RSTP. and MSTP



S1728GWR-4P

WLAN

WLAN Access Controller

AC6005-PWR

- Wireless forwarding rate: 4 Gbit/s
- Number of managed APs:256
- Number of access users: 2K
- PoE+ on 4 GE ports / PoE on 8 GE ports

AC6605-PWR

- Wireless forwarding rate: 10 Gbit/s
- Number of managed APs: 1K
- Number of access users: 10K
- PoE+ on 24 GE ports

ACU2

- Access Controller Unit (used on S7700/9700/12700)
- Wireless forwarding rate: 40 Gbit/s
- Number of managed APs per ACU2: 2K
- Number of access users per ACU2: 32K







Native AC

- Wireless forwarding rate of the S12700: 1 Tbit/s
- Number of APs managed by the device: 4K
- Number of users supported by the device: 64K

WLAN 802.11ac Wave 2 Indoor APs

AP4050DN-HD

- MU-MIMO, two spatial streams
- 400 Mbit/s at 2.4 GHz + 867 Mbit/s at 5 GHz
- Dual-band AP: 2.4 GHz & 5 GHz
- DC or PoE power supply, PoE Out
- Built-in smart directional antennas
- High-density application scenarios

AP4050DN-E

- MU-MIMO, two spatial streams
- 400 Mbit/s at 2.4 GHz + 867 Mbit/s at 5 GHz
- Dual-band AP: 2.4 GHz & 5 GHz
- DC or PoE power supply, PoE Out
- Built-in Bluetooth
- Extended support for RFID and ZigBee modules

AP6050DN

- MU-MIMO, four spatial streams
- 800 Mbit/s at 2.4 GHz + 1.73 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz & 5 GHz
- DC or PoE power supply
- Built-in antennas

AP6150DN

- MU-MIMO, four spatial streams
- 800 Mbit/s at 2.4 GHz + 1.73 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz & 5 GHz
- DC or PoE power supply
- External dual-band antennas

AP7050DE

- MU-MIMO, four spatial streams
- 800 Mbit/s at 2.4 GHz + 1.73 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz & 5 GHz
- DC or PoE power supply
- Built-in antennas
- Built-in Bluetooth

AP7050DN-E

- MU-MIMO, four spatial streams
- 800 Mbit/s at 2.4 GHz + 1.73 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz & 5 GHz
- DC or UPoE power supply, PoE Out
- Integration of Wi-Fi and LTE
- 2.5G uplink interface



WLAN 802.11ac Wave 1 Indoor APs

AP2030DN

- Wall plate AP
- 300 Mbit/s at 2.4 GHz + 867 Mbit/s at 5 GHz
- Dual-band AP: 2.4 GHz & 5 GHz
- DC or PoE power supply
- Built-in antenna

AP4030DN

- 300 Mbit/s at 2.4 GHz + 867 Mbit/s at 5 GHz
- Dual-band AP: 2.4 GHz&5 GHz
- DC or PoE power supply
- Built-in antenna
- iF Design Award

AP4130DN

- 300 Mbit/s at 2.4 GHz + 867 Mbit/s at 5 GHz
- Dual-band AP: 2.4 GHz& 5 GHz
- DC or PoE power supply
- External dual-band antenna

AP4030TN

- Triple-radio frequency design (one 5G and two 2.4G/5G), with a rate of up to 2.6 Gbit/s
- Software-defined radio frequencies
- Data backup on dual network ports
- USB interface for external power supply or storage
- Built-in antennas

AP5030DN

- 450 Mbit/s at 2.4 GHz + 1.3 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz&5 GHz
- DC or PoE power supply
- Data backup on dual network ports
- Built-in antenna
- iF Design Award
- High-density application scenarios

AP5130DN

- 450 Mbit/s at 2.4 GHz + 1.3 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz&5 GHz
- DC or PoE power supply
- Data backup on dual network ports
- External dual-band antenna
- High-density application scenarios













WLAN 802.11ac Wave 1 Outdoor APs

AP8030DN

- 450 Mbit/s at 2.4 GHz + 1.3 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz&5 GHz
- PoE power supply
- Optical port, dual Ethernet ports
- Data backup on dual network ports
- Built-in antenna
- IP67 protection level
- Built-in surge protection

AP8130DN

- 450 Mbit/s at 2.4 GHz + 1.3 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz&5 GHz
- 2.4G-to-5G switching technology, 2.6 Gbit/s at dual 5 GHz radio frequencies
- PoE power supply
- Optical port, dual Ethernet ports
- Data backup on dual network ports
- External antenna
- IP67 protection level
- Built-in surge protection

AT815SN

- 300 Mbit/s per radio frequency
- Single-band AP: 5 GHz
- PoE power supply
- Built-in antenna
- IP55 protection level
- Built-in surge protection

WLAN Rail Transportation Series

AP9130DN

- 450 Mbit/s at 2.4 GHz + 1.3 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz&5 GHz
- DC or PoE power supply
- Purpose-built for train-ground communications
- External antenna
- Anti-vibration M12 connectors









AP9131DN

- 450 Mbit/s at 2.4 GHz + 1.3 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz & 5 GHz
- DC or PoE power supply
- · Purpose-built for train-ground communications and compartment coverage
- IEC61373 standards compliance
- One M12 anti-vibration port and one SFP port
- Three dual-band QMA ports

AP9132DN

- 450 Mbit/s at 2.4 GHz + 1.3 Gbit/s at 5 GHz
- Dual-band AP: 2.4 GHz & 5 GHz
- DC or PoE power supply
- Purpose-built for train-ground communications and compartment coverage
- IEC61373 standards compliance
- One M12 anti-vibration port and one SFP port
- Three 2.4G QMA ports and three 5G QMA ports

WLAN Agile Distributed AP

AD9430DN-24

- Maximum number of concurrent users: 1024
- Maximum number of associated users: 4096
- Four uplink combo ports, 24 downlink standard PoE ports
- Number of managed Remote Radio modules: 24

AD9430DN-12

- Maximum number of concurrent users: 512
- Maximum number of associated users: 2048
- Tow uplink GE ports, 12 downlink PoE ports
- Number of managed Remote Units: 12

R240D & R230D (Remote Units)

- 300 Mbit/s at 2.4 GHz + 867 Mbit/s at 5 GHz
- Dual-band AP: 2.4 GHz & 5 GHz
- DC or PoE power supply
- Four FE ports and one phone port in R240D
- Built-in antennas









Router

NetEngine

NE5000E

The NetEngine 5000E cluster router is a super-core router used in WAN core network and data center.

- Port density per slot: 48 x 10 GE, 24 x 40 GE and 8 x 100 GE
- Slots: 22 slots in which 16 for LPUs
- Cluster mode: B2B/2+2/2+4/2+8 and maximum 16 + 64
- Supported Interfaces: 155M POS, 622M POS, 2.5G POS, 10G POS, 40G POS, GE, 10 GE, 40 GE and 100 GE etc.
- Innovative ISHE: Smooth expansion without service interruption
- Reliability: ISSU, NSR/NSF, key component redundancy designed, system reliability over 99.999%

NE40E

The NetEngine 40E is a high-end core router used in IP backbone, IP metro areas, and other large-scale IP networks.

- Models: NE40E-X16, NE40E-X8, NE40E-X3, NE40E-X16A, NE40E-X8A, NE40E-X3A
- Large capacity Line-card: 1T commercial, scalable to 2T
- Virtualization & SDN: Service isolation, easy O&M, SDN commercial deployment
- High reliability: ISSU,NSR, BFD detection packet interval 3.3 ms
- Value-added service: IPSec, GRE, NAT, and NetStream • Multiple interface types: E1/T1, CE1/CT1, E3/CT3, POS,
- CPOS, ATM, FE/GE, 10 GE, 40 GE, 100 GE, WDM
- Innovation technology: IP hard pipe, IP FPM



NE5000E





NE40E-X16A/X8A/X3A





NE40E-X16/X8/X3



NE20E

The NetEngine 20E serves as an aggregation node for IP backbone networks, a core node on small and medium enterprise networks, an edge node on campus networks, or an access node on small and medium education networks.

- Models: NE20E-S16, NE20E-S8, NE20E-S4, NE20E-S2E/F
- Powerful routing capability: Maximum BGP routes 25M
- Multiple interface types: E1, POS, CPOS, FE, GE, 10 GE and 40 GE etc.
- High reliability: NSR, NSF, and ISSU
- Innovation technology: IP hard pipe, IP FPM
- In-line services: NAT, GRE, IPSec and NetStream etc. • Extended temperature: -40°C to + 65°C

NE05E&08E

The NetEngine08E/NetEngine05E series is the cloud era ENP-Based Mid-Services Router which can be flexibly applied to IP/MPLS network edge access scenarios, to meet the diverse needs of users for future business development.

- Models:NE08E-S6, NE05E-S2, NE05E-SE/SG, NE05E-SJ/ SM
- Perfect E2E MPLS solution: L2VPN, MPLS/BGP L3VPN, Seamless MPLS
- Comprehensive clock synchronization solution: IEEE1588v2 OC, BC and TC all mode, 1588 ACR, Synchronous Ethernet
- Multiple interface types: 10 GE/GE/FE, E1, Channelized STM-1, STM-1, RS232, RS485, E&M, X.21, V.35, FXO/ FSO etc.
- Innovation technology: IP hard pipe, IP FPM
- High reliability: ISSU/NSF/NSR, Hardware OAM
- Extended temperature: -40°C to + 65 °C

ME60

20 LEADING NEW ICT

The ME60 is perfect as a Service Point of Presence (SPOP) of an IP/MPLS network, a BRAS node of broadband service access, or a core node of campus networks, as it delivers excellent service evolution to boost customers' service development.

- Large capacity: 240G subscriber access line card, 160G CGN service board
- Leading Performance: 64K subscribers per slot, 256K subscribers per chassis
- Abundant authentication methods: PPPoE, IPOE, 8021.X, etc
- High reliability: 1:1 or 1+1 service hot backup
- Supports Destination Address Accounting (DAA) technology
- Abundant IPv6 access technologies: NAT64, NAT444, DS-Lite, etc.
- Five-level H-QoS scheduling





NE20E-S16

NE20E-S8



NE20E-S4

NE08E-S6

NE20E-S2E/F

NE05E-S2





AR G3

AR3260

- WAN speed with services: 5.5 Gbit/s
- Fixed ports: 3 x GE (2 x Combo)/2 x 10 GE + 4 x GE Combo/4 x GE Combo + 2 x GE SFP
- Slots: 4 x SIC + 2 x WSIC + 4 x XSIC
- Dual main control board
- Hardware-level QoS, high forwarding performance
- Dual main control board, high reliability
- Hot swapping cards, ensure service reliability
- Multi-core Architecture, high performance and service processing capability
- Built-in AC function, reducing Wi-Fi deployment costs
- Rich VPN technology

AR Series Enterprise Router Portfolio-AR2200 Series

AR2240C

- WAN speed with services: 1 Gbit/s
- Fixed ports: 4 x GE + 4 x GE SFP + 2 x GE Combo
- Slots: 4 x SIC + 2 x WSIC + 2 x XSIC
- Dual power backup

AR2240

- WAN speed with services: 4.5 Gbit/s
- Fixed ports: 3 x GE (2 x Combo)/2 x 10 GE + 4 x GE Combo/4 x GE Combo + 2 x GE SFP
- Slots: 4 x SIC + 2 x WSIC + 2 x XSIC
- Dual power backup

AR2220E

- WAN speed with services: 800 Mbit/s
- Fixed ports: 3 x GE (1 x Combo)
- Slots: 4 x SIC + 2 x WSIC
- Support RPS power backup

AR2204-27GE

- WAN speed with services: 200 Mbit/s
- Fixed ports: 3 x GE (1 x Combo) WAN, 24 x GE LAN
- Slots: 4 x SIC

ME60-X8

ME60-X16





Headquarters/Large-scale Branch Application Router



AR2240C



AR2240



AR2220E



AR2204-27GE-P

- WAN speed with services: 200 Mbit/s
- Fixed ports: 3 x GE (1 x Combo) WAN , 24 x GE (8 x GE support PoE) LAN
- Slots: 4 x SIC
- Support RPS power backup
- PoE: Compliance with IEEE 802.3af and 802.3at

AR Series Enterprise Router Portfolio-AR2200 Series

AR2204-51GE

- WAN speed with services: 200 Mbit/s
- Fixed ports: 3 x GE (1 x Combo) WAN, 48 x GE (8 x GE support PoE) LAN
- Slots: 4 x SIC

AR2204-51GE-P

- WAN speed with services: 200 Mbit/s
- Fixed ports: 3 x GE (1 x Combo) WAN, 48 x GE (8 x GE support PoE) LAN
- Slots: 4 x SIC
- Support RPS power backup
- PoE: Compliance with IEEE 802.3af and 802.3at

AR2220

- WAN speed with services: 400 Mbit/s
- Fixed ports: 3 x GE (1 x Combo)
- Slots: 4 x SIC + 2 x WSIC

AR2201-48FE

- WAN speed with services: 200 Mbit/s
- Fixed ports: 2 x GE (1 x Combo) WAN, 48 x FE LAN
- Support RPS power backup



AR2204-51GE-P

AR2220



AR2201-48FE

- High density FE/GE access, integration of routing and switching
- Rich VPN technology
- Built-in AC function, reducing Wi-Fi deployment costs
- · Hot swappable cards, ensuring service reliability

AR Series Enterprise Router Portfolio-AR1200 Series

AR1220EVW

- WAN speed with services: 400 Mbit/s
- Fixed ports: 2 x GE Combo WAN, 8 x GE (4 x GE support PoE) LAN
- PoE: Compliance with IEEE 802.3af and 802.3at
- Slots: 2 x SIC
- WiFi: Compliance with 802.11b/g/n

AR1220EV

- WAN speed with services: 400 Mbit/s
- Fixed ports: 2 x GE Combo WAN, 8 x GE (4 x GE support PoE) LAN
- PoE: Compliance with IEEE 802.3af and 802.3at
- DSP: 32 channels supported
- Slots: 2 x SIC

AR1220E

- WAN speed with services: 400 Mbit/s
- Fixed ports: 2 x GE Combo WAN, 8 x GE LAN
- Slots: 2 x SIC

AR1220C

- WAN speed with services: 200 Mbit/s
- Fixed ports: 4 x GE WAN, 1 x GE SFP WAN, 8 x GE LAN
- Slots: 2 x SIC

Small-scale Branch Application Router

AR1220F

- WAN speed with services: 400 Mbit/s
- Fixed ports: 2 x GE (1 x Combo) WAN, 8 x FE LAN
- Slots: 2 x SIC

AR1220

- WAN speed with services: 200 Mbit/s
- Fixed ports: 2 x GE WAN, 8 x FE LAN
- Slots: 2 x SIC



AR2204-51GE







AR1220E







AR1220-D

- WAN speed with services: 200 Mbit/s
- Fixed ports: 2 x GE WAN, 8 x FE LAN
- Slots: 2 x SIC

AR1220VW

- WAN speed with services: 200 Mbit/s
- Fixed ports: 2 x GE WAN, 8 x FE (4 x FE support PoE) LAN
- PoE: Compliance with IEEE 802.3af and 802.3at
- DSP: 32 channels supported
- Slots: 2 x SIC
- Wi-Fi: Compliance with 802.11b/g/n

AR1220-D



AR1220VW

Small-scale Branch Application Router

AR1220V

- WAN speed with services: 200 Mbit/s
- Fixed ports: 2 x GE WAN, 8 x FE (4 x FE support PoE) LAN
- PoE: Compliance with IEEE 802.3af and 802.3at
- DSP: 32 channels supported
- Slots: 2 x SIC

AR1220W

- WAN speed with services: 200 Mbit/s
- Fixed ports: 2 x GE WAN, 8 x FE (4 x FE support PoE) LAN
- PoE: Compliance with IEEE 802.3af and 802.3at
- Slots: 2 x SIC
- Wi-Fi: Compliance with 802.11b/g/n



AR1220W

3G/LTE wireless uplink, wired and wireless link backup Various interfaces: E1/Serial/ADSL/POS etc Rich VPN technology Built-in AC function, reducing Wi-Fi deployment costs Hot swappable cards, ensuring service reliability

AR Series Enterprise Router Portfolio-AR200/160/150/120 Series

SOHO&SMB Router

AR169W

WAN speed with services: 150 Mbit/s

• Fixed ports: 4 x GE LAN, 1 x VDSL2, 802.11 b/g/m



AR169G-L

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x VDSL2, FDD LTE

AR169

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x VDSL2

AR161W

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE WAN, 802.11 b/g/n

AR161G-L

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE WAN, FDD LTE

AR161FV-1P

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE Combo WAN
- Fixed Voice ports: 1 x VE1

AR161

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE WAN

AR169F

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x VDSL2, 1 x GE Combo WAN

AR169FVW

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE Combo WAN, 1 x VDSL2, 802.11 b/g/n
- Fixed Voice ports: 4 x FXS, 1 x FXO





AR169FGW-L

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE Combo WAN, 1 x VDSL2, LTE FDD, 802.11 b/g/n

AR161FG-L

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE Combo WAN, FDD LTE

AR169FGVW-L

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE Combo WAN, 1 x VDSL2, LTE FDD, 802.11 b/g/n
- Fixed Voice ports: 4 x FXS, 1 x FXO



- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE Combo WAN, FDD LTE, 802.11 b/g/n

AR161FW

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE Combo WAN, 802.11 b/ g/n

AR168F

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x G.SHDSL 4-pair, 1 x GE Combo WAN

AR162F

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE Combo WAN, 1 x SA

AR161F

- WAN speed with services: 150 Mbit/s
- Fixed ports: 4 x GE LAN, 1 x GE Combo WAN

AR129W

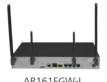
- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x VDSL2, 802.11 b/g/n







AR169FGVW-L



AR161FGW-L



-









AR121W

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x FE WAN, 802.11 b/g/n

AR129

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x VDSL2

AR121

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x FE WAN

AR201

- WAN speed with services: 150 Mbit/s
- Fixed ports: 8 x FE LAN, 1 x FE WAN

AR207

- WAN speed with services: 150 Mbit/s
- Fixed ports: 8 x FE LAN, 1 x ADSL2+ Annex A/M

AR208E

- WAN speed with services: 150 Mbit/s
- Fixed ports: 8 x FE LAN, 1 x G.SHDSL 4-pair

AR207G-HSPA+7

- WAN speed with services: 150 Mbit/s
- Fixed ports: 8 x FE LAN, WCDMA HSPA+7, 1 x ADSL2+ Annex A/M

AR157VW

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x ADSL2+ Annex A/M, 802.11 b/g/n
- Fixed Voice ports: 4 x FXS, 1 x FXO

AR151

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x FE WAN

AR157

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x ADSL2+ Annex A/M





AR158E

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x G.SHDSL 4-pair

AR157G-HSPA+7

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x ADSL2+ Annex A/M, WCDMA HSPA+7

AR151G-HSPA+7

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x FE WAN, WCDMA HSPA+

AR158EVW

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x G.SHDSL 4-pair, 802.11 b/g/n
- Fixed Voice ports: 4 x FXS, 1 x FXO

AR156

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x ADSL2+ Annex J

AR157W

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x ADSL2+ Annex A/M, 802.11 b/g/n

AR156W

- WAN speed with services: 100 Mbit/s
- Fixed ports: 4 x FE LAN, 1 x ADSL2+ Annex J, 802.11 b/g/n

AR158E AR151G-HSPA+7 AR151G-HSPA+7







- Multiple VPN support, up to 20 Mbit/s to 25 Mbit/s IPSec performance
- 3G/LTE uplink support, wired and wireless links backup
- Two uplink WAN FE ports (FEO can be used as WAN interface)
- Rich types, supporting voice, Wi-Fi, Ethernet, 3G, LTE, xDSL etc.
- Built-in AC function, reducing Wi-Fi deployment costs

IoT Gateway

AR3600 Series ICT Converged Gateway

AR3670

- 5 Gbit/s line speed service performance
- Built-in Intel processor, maximum 1T disk and 24G memory
- Flexible IT application integration
- Dual main control boards hot-standby, 1+1 redundant power

AR160-M Series ICT Converged Gateway

AR169RW-P-M9

- Ethernet, ZigBee, Bluetooth, Wi-Fi, RS485, video, audio interface
- Built-in 64G storage, scalable
- X86 architecture, support VMs

AR169W-P-M9

- Ethernet, Bluetooth, Wi-Fi, RS485, video, audio interface
- Built-in 64G storage, scalable
- X86 architecture, support VMs

AR161FW-P-M5

- Ethernet, ZigBee, Bluetooth, Wi-Fi, RS485, video, audio interface
- Built-in 32G storage, scalable
- Android OS

- Ethernet, ZigBee, Bluetooth, Wi-Fi, RS485/RS232, video, audio interfaces
- All-in-one gateway, support for routing, switching,
- firewall, and storage functions
- applications
- SDN- and NFV-based architecture for integration of IT · Built-in open platform, support secondary development





AR3670

- Support for routing, switching, firewall, and storage functions
- SDN- and NFV-based architecture for integration of IT
- applications
- Built-in open platform, support secondary development



AR510 Series ICT Converged Gateway

AR511GW-LAV2M3

- Fixed ports: 1 x GE + 2 x USB 2.0
- Video ports: 2 x Video output (HDMI, YPbPr or CVBS)
- Audio ports: 2 x Audio output, 1 x Audio input
- Wireless ports: FDD LTE, compatible with 3G; supports GPS
- Wi-Fi: 802.11 a/b/g/n; Dual-band AP
- Built-in Open Service Platform (OSP), supports secondary development

AR513W-V3M8

- Fixed ports: 2 x GE + 3 x USB 2.0
- Video ports: 2 x HDMI, 1 x VGA
- Audio ports: 1 x Audio output
- Data interface: 1 x eSATA
- Wi-Fi: 802.11 a/b/g/n; Dual-band AP
- Built-in Open Service Platform (OSP), supports secondary development



· Industry-standard design, dust-proof and waterproof

AR513W-V3M8

- Up to -10°C to +60°C wide operating temperature
- Suitable for vehicle deployment
- Built-in Open Service Platform (OSP) meets the needs of secondary development

Industrial PoE Midspan

- Fixed Ports: 8x GF RI45
- AC Input: 90V to 264V
- PoE Output: 48V DC (PoE)
- DC Output: 12V

AR530 Series Industrial Router

AR531-2C-H

- Ethernet ports: 6 x FE LAN + 2 x FE Combo LAN + 2 x GE (SFP) WAN
- Other ports: 2 x RS485 + 2 x DI
- Working temperature: -40°C to +70°C

AR531GPe-U-H

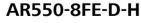
- Ethernet ports: 6 x FE LAN + 2 x GE (SFP) WAN
- Wireless ports: 3G (WCMDA)
- Other ports: 2 x RS485 + 2 x DI + PLC
- Working temperature: -40°C to +60°C

AR550 Series Industrial Switch

AR550-24FE-D-H

- Fixed Ports: 4 x GE combo, 24 x FE RJ45, 1 x USB 2.0, 1 x DO
- Rich routing service
- Dual DC Power Supply: 9.6V to 60V





- Fixed Ports: 4 x GE combo, 8 x FE RJ45, 1 x USB 2.0, 1 x DO
- Rich Routing Service
- Dual DC Power Supply: 9.6V to 60V

AR550-8FE-D-H

- Industry standard design, fanless, working temperature: -40°C to +70°C
- Complies with substation environment standards: IEC61850-3/IEEE1613
- Complies with railway environment standards: EN50121, EN50155, IEC61373
- IPSec VPN, 802.1x, port lock

- Integrates routing and data collection functions and provides various types of interfaces, such as FE, GE, 3G, PLC, ZigBee, RF, and RS485
- millisecond-level protection switchover
- Supports Smart Ethernet Protection (SEP), implementing
- Built-in, zone-based firewall, ensuring production security
- Complies with substation environment standards: IEC61850-3/IEEE1613
- Meets dustproof and waterproof standard IP51
- Uses a fanless design





AR531-2C-H



AR531GPe-U-H

AR500 Series Industrial Router

AR503GW-LM7

- Fixed ports: 1 x GE + 1 x USB HOST + 1 x USB OTG
- Wireless ports: TDD/FDD LTE, compatible with 3G; Supports GPS
- Wi-Fi: 802.11 a/b/g/n; Dual-band AP
- Data interface: 1 x mSATA

AR509G-L-D-H

- Fixed Ports: 1 x VDSL + 5 x GE + 1 x USB
- Wireless ports: LTE FDD, compatible with 3G
- PoE: 4 Ports



AR503GW-LM7



AR509G-L-D-H

- Compact form factor
- Industry standard dustproof, waterproof design
- Working temperature: -25°C to +60°C

Security

Middle to Low-End Next-Generation Firewall

USG6300 Series for SMEs

USG6305

- Fixed ports: 4 GE
- Desktop (can be rack installed)
- External adapter

USG6310s

- Fixed ports: 8 GE
- Desktop (can be rack installed)
- External adapter

USG6320

- Fixed ports: 8 GE
- Desktop (can be rack installed)
- External adapter

USG6330

- Fixed ports: 4 GE + 2 Combo
- Expansion slots: 2
- 1U
- Optional redundant power supplies









USG6350

- Fixed ports: 4 GE + 2 Combo
- Expansion slots: 2
- 10
- Optional redundant power supplies

USG6360

- Fixed ports: 4 GE + 2 Combo
- Expansion slots: 2
- 1U
- Optional redundant power supplies

USG6370

- Fixed ports: 8 GE + 4 SFP
- Expansion slots: 2
- 1U
- Optional redundant power supplies

USG6380

- Fixed ports: 8 GE + 4 SFP
- Expansion slots: 2
- 1U
- Optional redundant power supplies

USG6390

- Fixed ports: 8 GE + 4 SFP
- Expansion slots: 2
- 1U
- Optional redundant power supplies

T-level Next-Generation Firewall

USG9500 series

USG9520

- Expansion slots: 3, dual MPUs
- Maximum number of interfaces: 48 x 10 GE/96 x GE
- DC: 4U; AC: 5U
- Two power modules work in 1+1 backup mode
- Maximum throughput: 120 Gbit/s

USG9560

- Expansion slots: 8, dual MPUs
- Maximum number of interfaces: 168 x 10 GE/336 x GE
- DC: 14U; AC: 16U
- Four power modules work in 2+2 backup mode
- Maximum throughput: 720 Gbit/s













USG9580

- Expansion slots: 16, dual MPUs
- Maximum number of interfaces: 360 x 10 GE/720 x GE
- DC: 32U; AC: 34U
- Eight power modules work in 4+4 backup mode
- Maximum Throughput: 1,440 Gbit/s



- White list, ACL, ASPF, Security Zone
- Virtual Private Network: IPSec NAT Traversal, L2TP, GRE
- NAT/CGN: Destination NAT, Source NAT, NAT Server, Bi-Directional NAT
- DDoS Attack Defense, Threat Defense, Service Awareness

- n n n n
- Network and Route: Policy-Based Routing, IPv4/IPv6
 Dynamic Routing, Multiple Links Aggregation
- Virtual System: VLAN, Security Zone, Virtualized Management, Multiple Tenants
- PKI: Obtain the Certificate Online, CRL, Multiple CA Certificates

Virtual Universal Service Gateway

USG6000V

1VCPU, 2VCPU, 4VCPU, 8VCPU Virtualized router, Firewall, VPN, LB, IPS, AV all in one



- 1 VCPU, 2 VCPU, 4 VCPU, 8 VCPU
- Router, Firewall, VPN, LB, IPS, AV all-in-one

USG6600 Series for Large Enterprises and Data Centers

USG6620

- Fixed ports: 8 GE + 4 SFP
- Expansion slots: 2
- 1U
- Optional redundant power supplies

USG6630

- Fixed ports: 8 GE + 4 SFP
- Expansion slots: 2
- 1U
- Optional redundant power supplies



USG6650

- Fixed ports: 2 x 10 GE + 8 GE + 8 SFP
- Expansion slots: 6
- 3U
- Redundant power supplies (standard configuration)

USG6660

- Fixed ports: 2 x 10 GE + 8 GE + 8 SFP
- Expansion slots: 6
- 3U
- Redundant power supplies (standard configuration)

USG6670

- Fixed ports: 4 x 10 GE + 16 GE + 8 SFP
- Expansion slots: 5
- 3Ú
- Redundant power supplies (standard configuration)

USG6680

- Fixed ports: 4 x 10 GE + 16 GE + 8 SFP
- Expansion slots: 5
- 3U
- Redundant power supplies (standard configuration)

Note: There is a limitation for the expansion slot quantity of USG6680 DC models. For more details, please refer to Huawei USG6600 Next-Generation Firewall Data Sheet

- ACTUAL awareness: Application-, Content-, Time-, User-, Attack-, and Location-based access control
- Visualized and intelligent management: Unified security policies for comprehensive network risk analysis
- Comprehensive protection: IPS, defense against unknown threats, and APT attack defense
- Note: For different USG6000 series models, there are different supported features.

DDoS Prevention System

AntiDDoS8000 Series

AntiDDoS8030

- + 3 slots in total, the LPU and SPU share slots
- Maximum expansion for each slot: 12*10GE
- DC: 4U; AC: 5U
- Hot-swappable dual power supplies





Data security: Content-aware data leak prevention, file reassembly, and data filtering
NAT/CGN: Static and dynamic NAT, 3-tuple and 5-tuple NAT, NAT ALG, NAT Server, and NAT logs
IPv4/IPv6 routing



AntiDDoS8080

- 8 slots in total, the LPU and SPU share slots
- Maximum expansion for each slot: 24 x 10 GE
- DC: 14U
- Hot-swappable dual power supplies

AntiDDoS8160

- 16 slots in total, the LPU and SPU share slots
- Maximum expansion for each slot: 24 x 10GE
- DC: 32U
- Hot-swappable dual power supplies





- Up to T-bit defense performance and response within seconds
- Multiple fingerprint technologies, which defend against mobile DDoS attacks
- Defense against over 100 DDoS attacks, which secures service availability
- Customized, value-added operation management
- Anti-Large-DDoS: Heavy traffic DDoS Attack defense to protect link availability.
- Anti-App-DDoS: Application DDoS Attack Defense to protect service availability
- Anti-Mobile-DDoS: Mobile DDoS Attack Defense to protect mobile service availability
- Anti-Outbound-DDoS: Prevents DDoS attacks at the source.
- Managed-Anti-DDoS: Increases VIP service stickiness by providing Portal-based self-service functions for VIP

Next Generation Intrusion Prevention System

NIP6330

- Fixed ports: 8 GE + 4 SFP
- Expansion slots: 2
- 1U
- One year free Knowledge-Base Update Service license

NIP6610

- Fixed ports: 4 GE + 2 Combo
- Expansion slots: 2
- 1U
- One year free Knowledge-Base Update Service license



NIP6620

- Fixed ports: 8 GE + 4 SFP
- Expansion slots: 2
- 1U
- One year free Knowledge-Base Update Service license

NIP6650

- Fixed ports: 8 GE + 4 SFP
- Expansion slots: 2
- 1U
- One year free Knowledge-Base Update Service license

NIP6680

- Fixed ports: 4 x 10 GE + 16 GE + 8 SFP
- Expansion slots: 5
- 3U
- One year free Knowledge-Base Update Service license

Security Access Gateway

SVN5800 Series

SVN5830

- Max 6,000 SSL concurrent users
- Fixed ports: 8 GE + 4 SFP
- Expansion Slots: 2
- 1U

SVN5850

- Max 12,000 SSL concurrent users
- Fixed ports: 8 GE + 4 SFP
- Expansion Slots: 2
- 1U

SVN5860

- Max 40,000 SSL concurrent users
- Fixed ports: 4 x 10 GE + 16 GE + 8 SFP
- Expansion Slots: 5
- 3U Redundant power supply



 Comprehensive asset environment awareness for automatic security policy tuning and intelligent intrusion prevention

 Severity-based threat log management to filter out 85%+ of invalid logs and improve management efficiency

• In-depth content and application awareness to protect asset security

 Interworking with the sandbox and reputation systems to respond to unknown/APT attacks within seconds
 Interworking with the IP and C&C reputation systems

for rapid threat detection and prevention



SVN5880

- Max 50,000 SSL concurrent users
- Fixed ports: 4 x 10 GE + 16 GE + 8 SFP
- Expansion Slots: 5
- 3U Redundant power supply



- Flexible access supports 50,000 concurrent users, 7 operating systems, and 5 VPN types
- Enforce comprehensive, end-to-end protection with10 authentication modes and identification of over 6,000 applications
- Agile access enables five access methods, smart gateway selection, and bandwidth management



FireHunter 6300

- Fixed ports: 4 x GE
- 2U



- Detect unknown advanced malwares
- Support 20+ of malicious file types detection, including PE, office documents, etc.;
- Block the malwares rapidly through interworking with other security devices

Enterprise Mobile Management

AnyOffice App

- MDM
- AnyMail
- Secure SDK
- Secure Web

AnyOffice Entry

EMM Server

Security Management

UMA Unified Maintenance Audit

- Comprehensive account management mechanism
- All-around recording of IT O&M
- The industry-leading APPBOX application and OCR image identification technology are incorporated





RH2288H



LogCenter

- Unified log management
- Professional NAT tracing
- Million-level log processing per second
- Rich security event analysis reports showing network security status

BYOD (Bring Your Own Device)

Software components

MDM

Mobile Device Management Manage devices throughout the lifecycle, including the management of devices, policies, applications, and data.

Secure SDK

App security hardening

Integrate various Huawei and third-party applications to wrap them with such security capabilities as encryption of data transmission and encryption/decryption of local files.

AnyMail

Secure email client

Supports SMTP, IMAP4, EAS, and other standard protocols. Supports real-time mail push, encryption of data transmission and storage, and control over saving, forwarding, and viewing of mail attachments.

Secure Web

Secure web browsing Initiate a per-App tunnel to the mobile access network of an enterprise and protect data transmission when a user runs a web application on the mobile device.

Hardware gateway

SVN5000-M

Mobile security access gateway Provides HTTPS proxy, per-App tunnels, authentication, and secure access for mobile devices. A single gateway can manage up to 20,000 devices.





* The license determines the maximum allowed number of registered devices.



*Optional component (for hardware gateway deployment)

Server and storage

RH2288

EMM server

Install AnyOffice components, including software gateway, control unit, management backend, and database. The number and configuration of servers are determined according to the actual number of registered devices, business type, and networking.

S2600T

Disk array Disk array is used for deployment of highly reliable Oracle databases.





*Optional component: Both can be provided by customers.

Solution component

WPS Office

Secure document reader

Provides commonly used functions like editing, table creation, and presentation. Compatible with Microsoft Office formats, WPS also supports PDF reading and export. Integrated AnyOffice secure SDK ensures document security throughout the lifecycle, such as during generation, collaboration, and sharing.

Android tablets

T1 10

4G LTE Wi-Fi 9.6-inch HD IPS screen 1,280 x 800 pixels 2 megapixel front-facing camera 5 MP rear-facing camera 1.2 GHz quad-core CPU

T1 8 Pro

4G LTE Wi-Fi 8-inch HD IPS screen 1,280 x 800 pixels 2 megapixel front-facing camera 5 megapixel rear-facing camera 1.2 GHz quad-core CPU

T1 7

3G Wi-Fi 7-inch LED screen 1,024 x 600 pixels 2 megapixel front-facing camera 2 megapixel rear-facing camera 1.2 GHz quad-core CPU









M2 8

4G LTE Wi-Fi 8-inch HD IPS screen 1,920 x 1,200 pixels 2 megapixel front-facing camera 8 megapixel rear-facing camera 2.0 GHz octa-core CPU

M2 10

4G LTE Wi-Fi 10.1-inch UHD screen 1,920 x 1,200 pixels 5 megapixel front-facing camera 13 megapixel rear-facing camera 2.0 GHz octa-core CPU

T2 10

4G LTE Wi-Fi 10.1-inch HD IPS screen 1,920 x 1,200 pixels 2 megapixel front-facing camera 8 megapixel rear-facing camera 1.5 GHz octa-core CPU

PC Secure

Windows tablets

MateBook

12'-inch 2,160 x 1,440 IPS LCD Screen Intel M5/M7 CPU 4 GB/8 GB RAM 256 GB/512 GB SSD Storage Portfolio Keyboard/MatePen/MateDock 33.7 Wh High-Density Lithium Battery

Software component

Secure Space

Sandboxed secure working space Create secure space on devices, provide secure sandbox space, and execute secure space policies.

The license dete mines the maxim m allowed number of concurrent u ers





Hardware gateway

SVN5560-M

Secure Space access gateway Provides user authentication control and device compliance checks. Implement control policies on a secure space for devices. A single gateway supports up to 20,000 concurrent users.





Agile Controller — Campus

The Agile Controller is a user- and application-based network resource auto control system developed by Huawei. As the centralized control core for campus networks, the Agile Controller dynamically schedules network resources on the entire campus network, enabling networks to be more agile for services. The Agile Controller centrally controls users, services, and other policies of campus networks. The Agile Controller provides Access Control Manager, Guest Manager, Free Mobility Manager, and Service Chain Manager for enterprises.

Access Control Manager

Provides unified network access policies and supports multiple authentication methods such as 802.1X, Portal, MAC address, and SACG authentication. This creates unified access management for users from wired, wireless or VPN networks.

Supports refined authorization based on user identity, access time, access location, device type, device source, and access mode. This ensures unified maintenance and management on all terminals that access the enterprise network in different modes.

Guest Manager

Provides full lifecycle guest management, including account application, approval, distribution, authentication, auditing, and deregistration.

Supports accounts of mainstream social media such as WeChat and Facebook.

Provides built-in Portal page templates and the graphical editing interface to push different pages based on the location, time, and terminal type.



Free Mobility Manager

Works with Huawei Agile Switches, NGFWs, and SVN gateways to provide security group-based policies as well as traditional NAC, and implements unified policy deployment and automatic policy synchronization. This ensures that users receive the same service experience when they move on the network.

Provides user group-based QoS policy configuration to preferentially forward VIP users' data traffic when there are few network resources, delivering high QoE for VIP users.

Service Chain Manager

Forms a security resource center by virtualizing physical security devices to shield device models and locations. Directs service flows to the security resource center based on service requirements to improve the utilization efficiency of physical resources and reduce costs.

Terminal Security Manager

Strictly controls end user network access, and enforces security policies to users connected to the network. Supports terminal health checks, software distribution, patch management, and asset management to ensure that terminals connected to the network possess self-defense capabilities and comply with enterprise security policies.

Agile Controller — DCN

The Data Center Agile Controller is the core component of Huawei's cloud network data center. Based on the hierarchical decoupling capability of the SDN architecture, it provides automatic mapping from applications to physical networks, resource pool deployment, and visualized O&M for customers to build their serviceoriented capabilities through dynamically scheduling network services. Additionally, the Data Center Agile Controller can seamlessly interoperate with mainstream cloud

platforms. Relying on the open and standard northbound and southbound interfaces, highly reliable cluster loadbalancing capability, as well as elastic scalability, the Data Center Agile Controller allows customers to flexibly deploy and schedule network resources according to their service development, enabling the data center network to be more agile for cloud services.

- Automatic network deployment enables more agile service provisioning.
- Visible network experience enables fine-grained tenant O&M.
- Network application platforms make the industry ecosystem more open.
- Modular system architecture enables high network scalability.

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Integrated Enterprise NMS

eSight

With the development of enterprise network applications and the expansion of network scale, a large number of routers, gateways, Wireless Area Network (WLAN) devices, UC devices, video surveillance devices, and telepresence 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 is based on the following concepts: Topology-centric, simplified management, and improved Operation and Maintenance (O&M) efficiency. eSight provides an all-round, open, and unified management platform, and various service components, to implement unified management of devices, services, and applications. Huawei eSight provides more than 17 components, here are some of them:

eSight Management Platform

- Provides a hierarchical network management solution to implement unified monitoring and integrated O&M of lower-layer NMSs on the upper-layer NMS.
- The upper-layer NMS provides unified topology, resource, alarm, and Portal management, as well as user authentication functions, and can display aggregated data of lower-layer NMSs.
- Provides lower-layer NMSs of the compact, standard, and professional editions for enterprise users.
- Supports unified management of devices from various vendors, topology management, fault management, performance management, and user right management.

eSight Network Device Manager

- Manages network devices from multiple vendors.
- Provides the IP topology and link management functions for monitoring the network topology and changes in real time.
- Provides Zero-Touch Provisioning (ZTP) to quickly deploy

eSight Agile Reporter

 Analyzes report data from multiple dimensions and allows users to flexibly drag required content to be contained in reports, enabling complex Big Data queries. and power-on devices.

Provides the smart configuration tool, configuration
file management, and device software management to update configuration files and software versions.



eSight SLA Manager

- Implements visible monitoring of network quality by a combination of the following methods: Simulation flow-based and real service flow-based network quality detection.
- Monitors network quality using simulation flows by integrating with devices' Network Quality Analysis (NQA) function to diagnose and measure link performance between network devices 24/7 and displays Quality of Service (QoS) statistics. eSight notifies administrators remotely when QoS reaches the threshold set by them. Administrators can use the quick diagnosis function to monitor link performance in real time and diagnose faults, which improves management efficiency.
- Implements network quality detection based on iPCA, which is the industry's first multiple-input-multipleoutput quality measurement technology and solves the N2 connection problem in traditional point-to-point quality measurement technologies. iPCA technology uses the enhanced area-based packet conservation mechanism to monitor the quality on a connectionless network and also provides accurate fault location capabilities.

eSight Network Traffic Analyzer

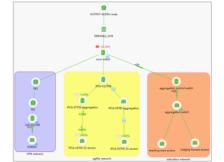
 Analyzes network traffic based on NetFlow, NetStream, and sFlow protocols. This helps network administrators monitor traffic and bandwidth usage on enterprise campus egress and wireless campus networks, generate traffic analysis reports, and detect network bottlenecks in a timely manner, providing evidence for network planning and fault diagnosis.

eSight WLAN Manager

- Provides integrated management of wired and wireless networks.
- Supports full lifecycle WLAN management, including visible planning (highly-efficient WLAN planning with professional tools), fast service provisioning in three steps, active O&M, all-round quality awareness regionally or globally.
- Provides search-centric E2E one-click fault diagnosis, interference source locating, and spectrum analysis to implement highly efficient troubleshooting.
- Provides position-based terminal location, behavior analysis, and northbound interfaces to achieve mutual benefits from the wireless network.

eSight Mobile Manager

- Allows administrators to manage WLANs using mobile terminals with the 360-degree WLAN monitoring and fault diagnosis, ZTP, and advertisement push Apps.
 With eSight Mobile, administrators can manage WLANs anytime, anywhere.
- Provides open SDK to allow third parties to develop various industrial applications, building a win-win ecosystem.









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eSight Open SDK

• Provides Simple Network Management Protocol (SNMP) and Hypertext Transfer Protocol (HTTP) interfaces to integrate with third-party systems.

Transmission

OSN-WDM

OSN 9800

OSN 9800 is Huawei's next-generation core packetoptical OTN platform for 100G and beyond. It integrates Huawei advanced Packet, OTN, Optics and Transport SDN Technologies, and offers a class-leading high-density architecture with ultra-low power consumption per bit.

- Number of Slots: 14/32/64
- Cross-Connect Capacity: U16: 5.6 Tbit/s ODUk, 2.8 Tbit/s PKT, 1.12 Tbit/s VC4 U32: 12.8 Tbit/s ODUk, 6.4 Tbit/s PKT, 2.56 Tbit/s VC4 U64: 25.6 Tbit/s ODUk, 12.8 Tbit/s PKT, 5.12 Tbit/s VC4
- Channel Spacing: 50/100 GHz (fixed), 37.5 GHz to 400 GHz (flex-grid)
- Service Types: SDH, SONET, Ethernet, SAN, OTN, video
- Rate per Channel (max.): 100G, 200G, 400G, 1T, 2T
- T-SDN: IP + Optical, BOD, OVPN, Automation

OSN 8800

OSN 8800 is a widely deployed 100G product and applied on backbone and metro WDM/OTN networks. It is T-SDN oriented and adopts industry-leading technologies, such as the 2nd generation SD-FEC, 100G, OTN, CDCG ROADM,POTS/MS-OTN technologies.

- Number of Slots: 16/16/32/64
- Cross-Connect Capacity:
- T16: 1.6 Tbit/s ODUk, 800 Gbit/s PKT, 640 Gbit/s VC4 & 20Gbit/s VC3/VC12
- T32: 3.2 Tbit/s ODUk, 1.6 Tbit/s PKT, 1.28 Tbit/s VC4 & 80Gbit/s VC3/VC12
- T64: 6.4 Tbit/s ODUk, 1.28 Tbit/s VC4 & 80Gbit/s VC3/VC12
- Service Types: SDH, SONET, Ethernet, SAN, OTN, video
- Rate per Channel (max.): 100G, 200G
- T-SDN: BOD, Automatic maintenance

OSN 9800/8800 UPS

OSN 9800/8800 universal platform subrack is widely used to deploy optical platforms and 100G WDM transponders/ muxponders.

- Number of Slots: 16
- Optical Switching: 1 to 20-degree ROADM
- Service Types: SDH, SONET, Ethernet, SAN, OTN, video
- Rate per Channel (max.): 100G
- Enhanced Features: Optical Doctor and Fiber Doctor



OSN 9800 U16/U32/U64



OSN 8800 T16/T32/T64



OSN 9800/8800 UPS

OSN 1800

OSN 1800 series provide a truly seamless integration of technologies, serving high-bandwidth packet, OTN and TDM transport application at the edge/aggregation point for metro networks.

- Number of Slots: 4/8/15(DC), 2/6/12(AC)
- Switching Capacity:
- I: N/A
 - II: 60 Gbit/s PKT, 20 Gbit/s VC4 & 5Gbit/s VC3/VC12 V: 700 Gbit/s ODUk, 700 Gbit/s PKT, 280 Gbit/s VC4 & 40Gbit/s VC3/VC12
- Number of Wavelengths (max.): 40λ DWDM, 8λ CWDM
- Service Types: Full service access rate from 2M to 10G, including E1, STM-1/4/16/64, FE, GE, FC, FICON, ESCON, DVB-ASI, HDTV, 3G-SDI, SDI, 10 GE, and CPRI1-CPRI7
- Power Supply: 1+1 AC/DC power supply

OSN 810

OSN 810 full outdoor CPRI multiplexer equipment is WDMbased, full outdoor, and active transport equipment. It is applicable to service transmission on metro C-RAN.

- Interface: 12 x CPRI X (X=2,3,4,5,6,7)
- Line Transport Capacity: 50 Gbit/s
- Protection: 1+1 OLP on line side
- Power Supply: AC/DC
- Power Consumption: 80W
- Dimensions: 400 mm x 300 mm x 90 mm
- Weight: 9.7kg
- Working Environment: -40°C to +50°C

OSN 850

OSN 850 WDM optical transmission equipment is a desktop transport device that implements client-side GE or 10GE LAN service access and transmission. The device can be remotely managed and maintained.

- Size: Less than 220 mm x 200 mm x 44 mm
- Power Source: 100V to 240V AC
- Client SFP: GE: SFP, 10G: SFP+
- Line SFP: OTU1 (GE): SFP OTU2e (10G): SFP+
- Power Consumption: Less than 17W (max.)
- Environment: Temperature: 0°C to 45°C Humidity: 5% to $\sim 95\%$
- Management Interface: $1 \times RJ45$ port interface (Ethernet), Maintenance applications offline
- Weight: 1.6kg

OSN902

OSN902 is mainly used in Data Center Interconnect (DCI) solutions. Featuring a highly integrated design, OSN902 has low power consumption, supports large bandwidths and Plug and Play (PnP), and provides various management interfaces, making them ideal for data center interconnection applications.

- Number of Slots: 6
- Maximum Single-channel Rate: 200 Gbit/s
- Service Types: 10 GE/40 GE/100 GE
- Installation Mode: 19-inch or 23-inch subrack
- Power Supply: 110V to 260V AC



OSN 1800 I/II/V



OSN 810



OSN 850



OSN902

Hybrid MSTP

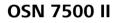
OSN 7500

OSN 7500 is a next-generation Hybrid MSTP product based on a unified platform that can support SDH/PDH, Ethernet, Packet, ATM/IMA, built-in WDM, SAN, and Microwave services.

- Switching Capacity: Packet: 160 Gbit/s and TDM: 360 Gbit/s (higher order), 40 Gbit/s (lower order)
- Service Slots: 22 slots for processing boards and 8 slots for interface boards
- Packet Transport Interfaces: E1, ch STM-1, ATM STM-1, FE/ GE/10 GE
- MSTP Interfaces: STM-1/4/16/64, E1/E3/E4/T1/T3, FE/ GE/10 GE, DDN, ATM/IMA, FEC/EFEC interface, E1 optical interface, SAN, video
- Networking Modes: Supporting pure packet, hybrid (packet+ SDH), and pure SDH networking



OSN7500



OSN 7500 II is a next-generation Hybrid MSTP product based on a unified platform that can support SDH/PDH, Ethernet, Packet, ATM/IMA, built-in WDM, and SAN services.

- Switching Capacity: Packet: 320 Gbit/s and TDM: 360 Gbit/s (higher order), 40 Gbit/s (lower order)
- Service Slots: 16 slots for processing boards and 16 slots for interface boards
- Packet Transport Interfaces: E1, ch STM-1, ATM STM-1, FE/ GE/10 GE
- MSTP Interfaces: STM-1/4/16/64, E1/E3/E4/T1/T3, FE/ GE/10 GE, DDN, IMA/ATM, FEC/EFEC interface, SAN, video
- 40G Smart Line Card: Packet and TDM multi-services universal transport in one port
- Networking Modes: Supporting pure packet, hybrid (packet+ SDH), and pure SDH networking



OSN7500II

OSN 3500

OSN 3500 is a next-generation Hybrid MSTP product based on a unified platform that can support SDH/PDH, Ethernet, Packet, ATM/IMA, built-in PCM, built-in WDM, SAN, and Microwave services.

- Switching Capacity: Packet: 160 Gbit/s and TDM: 200 Gbit/s (higher order), 20 Gbit/s (lower order)
- Service Slots: 15 slots for processing boards and 16 slots for interface boards
- Packet Transport Interfaces: E1, ch STM-1, ATM STM-1, FE/ GE/10 GE
- MSTP interfaces: STM-1/4/16/64, E1/E3/E4/T1/T3, FE/ GE/10 GE, DDN, IMA/ATM, FEC/EFEC interface, E1 optical interface, PCM, SAN, video
- Networking Modes: Supporting pure packet, hybrid (packet+ SDH), and pure SDH networking



OSN3500

OSN 3500 II

OSN 3500 II is a next-generation MSTP product based on a unified platform that can support SDH/PDH, Ethernet, ATM/ IMA, built-in WDM, SAN, and Microwave services.

- Switching Capacity: 110 Gbit/s (higher order), 20 Gbit/s (lower order)
- Service Slots: 15 slots for processing boards and 20 slots for interface boards
- MSTP Interfaces: STM-1/4/16/64, E1/E3/E4/T1/T3, FE/ GE/10 GE, DDN, IMA/ATM, FEC/EFEC interface, SAN, video
- Networking Mode: Supporting pure SDH networking

OSN 2500

OSN 2500 is a next-generation MSTP product based on a unified platform that can support SDH/PDH, Ethernet, ATM/ IMA, built-in WDM, SAN, and Microwave services.

- Switching Capacity: 60 Gbit/s (higher order), 20 Gbit/s (lower order)
- Service Slots: 12 slots for processing boards and 8 slots for interface boards
- MSTP Interfaces: STM-1/4/16, E1/E3/E4/T1/T3, FE/GE, DDN, IMA/ATM, FEC/EFEC interface, SAN, video
- Network Mode: Supporting pure SDH networking

OSN 1500A/1500B

OSN 1500A/1500B are next-generation Hybrid MSTP products based on a unified platform which can support SDH/PDH, Ethernet, Packet, ATM/IMA, built-in PCM, built-in WDM, and SAN services.

- Switching Capacity: Packet: 8 Gbit/s and TDM: 60 Gbit/s (higher order), 20 Gbit/s (lower order)
- Service Slots: OSN 1500A supports 8 slots for processing boards; OSN 1500B supports 12 slots for processing boards and 4 slots for interface boards
- Packet Transport Interfaces: E1, FE/GE
- MSTP Interfaces: STM-1/4/16, E1/E3/E4/T1/T3, FE/GE, DDN, IMA/ATM, FEC/EFEC interface, E1 optical interface, PCM, SAN, video
- Networking Modes: Supporting pure packet, hybrid (packet+ SDH), and SDH networking

OSN 580

OSN 580 is a mini-Hybrid MSTP product based on a unified platform that can support SDH/PDH, Ethernet, Packet, ATM/ IMA and built-in WDM services.

- Service Slots: 15 service interface slots
- Switching Capacity: Packet: 560 Gbit/s and TDM: 280Gbit/ s (higher order), 20 Gbit/s (lower order)
- Packet Transport Interfaces: FE/GE/10 GE
- MSTP Interfaces: STM-1/4/16/64, E1/T1/E3/T3, FE/GE
- 40G Smart Line Card: Packet and TDM multi-services
 universal transport in one port
- Networking Modes: Supporting pure packet, hybrid (packet+ SDH), and SDH networking



OSN 3500 II



OSN 2500





OSN1500A/1500B



OSN 580

OSN 550

OSN 550 is a mini-Hybrid MSTP product based on a unified platform that can support SDH/PDH, Ethernet, Packet, ATM/ IMA, and built-in WDM services.

- Service Slots: 6 service interface slots
- Switching Capacity: Packet: 64 Gbit/s and TDM: 20 Gbit/s (higher order), 5 Gbit/s (lower order)
- Packet Transport Interfaces: E1, ch STM-1, ATM STM-1, FE/ GE/10 GE
- MSTP Interfaces: STM-1/4/16, E1/E3/T1/T3, FE/GE
- Networking Modes: Supporting pure packet, hybrid (packet+ SDH), and SDH networking

OSN 500

OSN 500 is a mini-Hybrid MSTP product based on a unified platform that can support SDH/PDH, Ethernet, and Packet services.

- Switching Capacity: Packet: 7.2 Gbit/s or TDM: 20 Gbit/s (higher order), 5 Gbit/s (lower order)
- Packet Transport Interfaces: E1, ch STM-1, ATM STM-1, FE/ GE
- MSTP Interfaces: STM-1/4, E1/E3/T1/T3, FE/GE
- Networking Mode: Supporting pure packet and pure SDHnetworking

MicroWave

RTN 980L

RTN 980L is a long-haul IP radio transmission system developed by Huawei. It provides a large capacity and supports long-haul radio transmission. It mainly applies to long-haul trunk and metropolitan backbone networks.

- Frequency Bands: 6/7/8/11 GHz
- Modulations: QPSK, 16 QAM, 32 QAM, 64 QAM, 128 QAM, 256 QAM, 512 QAM,1,024 QAM
- Packet Switching Capacity: 43 Gbit/s
- TDM Cross-connection Capacity: 128 x 128 VC-4, 2,016 x 2,016 Vc12
- RF Direction: 5U height ,maximum of 14 RF directions
- Interfaces: E1, STM-1/4 (e/o), FE, GE (e/o) , 10 GE

RTN 980

RTN 980 is a unified microwave platform providing TDM/ Packet/Hybrid services for the customer. It supports a maximum of 20 RF directions and provides several types of service interfaces.

- Frequency Bands: 6/7/8/10/10.5/11/13/15/18/23/26/28/32 / 38/42GHz
- Modulations: QPSK, 16 QAM, 32 QAM, 64 QAM, 128 QAM, 256 QAM, 512 QAM, 1,024 QAM, 2,048 QAM, 4,096 QAM
- Packet Switching Capacity: 43 Gbit/s
- TDM Cross-connection Capacity: 128 x 128 VC-4, 2,016 x 2,016 Vc12
- RF Direction: 5U height, maximum of 20 RF directions
- Interfaces: STM-1/4, E1, FE, GE, 10 GE



OSN 550



OSN 500



RTN 980L



RTN 980

RTN 950A

RTN 905 is a unified microwave platform providing TDM/ Packet/Hybrid services for the customer. The IDU of RTN 905 is 1U high, integrated, and case-shaped

- Frequency Bands: 6/7/8/10/10.5/11/13/15/18/23/26/ 28/32/38/42 GHz
- Modulation: QPSK, 16 QAM, 32 QAM, 64 QAM, 128 QAM,256 QAM, 512 QAM, 1,024 QAM, 2,048 QAM, 4,096 QAM
- Packet Switching Capacity: 8 Gbit/s
- TDM Cross-connection Capacity: 8 x 8VC-4, full timeslot cross connections at the VC-12/VC-3/VC-4 levels
- RF Direction: 1U height, maximum of 2 RF directions
- Interfaces: STM-1, E1, FE, GE, USB port

RTN 950

RRTN 950 is a unified microwave platform providing TDM/ Packet/Hybrid services for the customer. It supports a maximum of 10 RF directions and provides several types of service interfaces.

- Frequency Bands: 6/7/8/10/10.5/11/13/15/18/23/ 26/28/32/38/42 GHz
- Modulation: QPSK, 16 QAM, 32 QAM, 64 QAM, 128 QAM,256 QAM, 512 QAM, 1,024 QAM. 2,048 QAM, 4,096 QAM
- Packet Switching Capacity: 10 Gbit/s
- TDM Cross-connection Capacity: 32 x 32VC-4, full timeslot cross connections at the VC-12/VC-3/VC-4 levels
- RF Direction: 2U height, maximum of 10 RF directions
- Interfaces: STM-1, E1, FE, GE

RTN 910A

RTN 910 is a new-generation TDM/Hybrid/Packet integrated microwave transmission system developed by Huawei. It provides a seamless microwave transmission solution for mobile communication network or private networks.

- Frequency Bands: 6/7/8/10/10.5/11/13/15/18/23/ 26/28/32/38/42 GHz
- Modulation: QPSK, 16 QAM, 32 QAM, 64 QAM, 128 QAM,256 QAM, 512 QAM, 1,024 QAM. 2,048 QAM, 4,096 QAM
- Packet Switching Capacity: 10 Gbit/s
- TDM Cross-connection Capacity: 8 x 8VC-4, full timeslot cross connections at the VC-12/VC-3/VC-4 levels
- RF Direction: 1U height, maximum of 6 RF directions
- Interfaces: STM-1, E1, FE, GE



RTN 950A



RTN 950



RTN 910A

RTN 905

RTN 905 is a unified microwave platform providing TDM/ Packet/Hybrid services for the customer. The IDU of RTN 905 is 1U high, integrated, and case-shaped.

- Frequency Bands: 6/7/8/10/10.5/11/13/15/18/23/26/ 28/32/38/42 GHz
- Modulation: QPSK, 16 QAM, 32 QAM, 64 QAM, 128 QAM, 256 QAM, 512 QAM, 1,024 QAM, 2,048 QAM, 4,096 QAM
- Packet Switching Capacity: 8 Gbit/s
- TDM Cross-connection Capacity: 8 x 8VC-4, full timeslot cross connections at the VC-12/VC-3/VC-4 levels
- RF Direction: 1U height, maximum of 2 RF directions
- Interfaces: STM-1, E1, FE, GE, USB port

RTN 380

RTN 380 is the 2nd-generation E-band, satisfying the carrier network. The RTN 380 can provide large-capacity backhaul microwave links on a mobile communications network or a private network

- Up to 4 Gbit/s throughput
- Full-outdoor radio equipment, and integrate all functions in a chassis and does not need an extra installation site
- Frequency Bands: 71 GHz to 86 GHz
- Modulation: QPSK, 16Q AM, 32 QAM, 64 QAM
- Packet Switching Capacity: 5.5 Gbit/s
- 250/500/750/1,000 MHz Channel Spacing
- One/two GE port, one COMBO port, one P&E port, one
- USB port, RSSI/NMS port, and one antenna port

RTN 360

RTN 360 is a full-outdoor radio transmission product that operates at the V-band (a frequency band ranging from 59 GHz to 64 GHz). RTN 360 is tailored for service backhaul for small cell base stations that are deployed on buildings or at the street level.

- Up to 400 Mbit/s throughput
- Antenna: Built-in panel antenna
- Operating Frequency Bands: 59 GHz to 64 GHz
- Duplex mode: TDD
- Modulation: QPSK, 16 QAM, 32 QAM
- Channel Spacing: 200 MHz
- Maximum Transmission Distance: 300m
- Service Ports: Two GE electrical service ports



RTN 905



RTN 380L



RTN 360

RTN 310

RTN 310 is a highly integrated full-outdoor radio transmission product. All its modules are integrated into an outdoor unit that supports zero-footprint installation, providing carriers with cost-effective full-outdoor radio solutions.

- Frequency Bands: 26/28/32 GHz
- Modulation: QPSK, 16 QAM, 32 QAM, 64 QAM, 128 QAM,256 QAM, 512 QAM, 1,024 QAM, 2,048 QAM
- Channel Spacing: 7 MHz to 56 MHz
- Up to 2 Gbit/s throughput on a single radio channel
- 12 Grade hitless Adaptive Modulation
- One/two GE port, one COMBO port, one P&E port, one USB port, RSSI/NMS port, and one antenna port

PMP 450(i)

PMP 450(i) is a point-to-multi-point access backhaul network product. All its modules are integrated into an outdoor unit that supports zero-footprint installation, free frequency and support nLOS/NLOS transmission solution.

- Frequency Bands: 2.4, 3.5, 3.65, 4.9, 5.4, 5.8 GHz
- Modulation: QPSK, 16 QAM, 64 QAM, 256 QAM
- Channel Spacing: 5 MHz, 10 MHz, 20 MHz
- AP: Central site equipment, up to 125 Mbit/s throughput
- SM: Remote site equipment, up to 55 Mbit/s throughput.
- One AP can support up to 238 SM maximum.
- Distance: Supports a maximum distance of 64 km
- One FE port, one sync port, one H-polarization & one
- V-polarization antenna port

ePMP 1000

ePMP 1000 is a point-to-multi-point access backhaul network product. All its modules are integrated into an outdoor unit that supports zero-footprint installation, free frequency and support nLOS/NLOS transmission solution.

- Frequency Bands: 2.4 GHz, 4.9 GHz to 5.8 GHz
- Modulation: QPSK, 16 QAM, 64 QAM
- Channel Spacing: 5 MHz, 10 MHz, 20 MHz, 40 MHz
- AP: Central site equipment, up to 220 Mbit/s throughput
- SM: Remote site equipment, up to 100 Mbit/s throughput.
- One AP can support up to 120 SM maximum.
- Distance: Supports a maximum distance of 34 km
- One FE/GE port, one sync port, one H-polarization & one
- V-polarization antenna port



RTN 310





PMP450(i)



ePMP1000

Access

Smart NG OLT — MA5800

The MA5800 multi-service access module is the industry's first smart NG-OLT. As a next-generation OLT that employs a distributed architecture, MA5800 provides GPON, XG-PON, TWDM-PON, WDM-PON, GE and 10GE access and supports FTTH, FTTD, FTTB, FTTC and D-CCAP network applications.

- Switch Capacity: 7 Tbit/s
- MAC Addresses: 256K
- ARP/Router Table: 64K
- Service Slots: 17/7 slots
- Services Ports: Up to 272/112 x GPON ports or 136/56 x NGPON ports or 816/336 x GE/FE ports or 136/56 x 10 GE ports
- SDN-based smart service support
- Dual-stack IPv4 and IPv6, IPv6 Layer2 and Layer 3 forwarding, DHCPv6 relay

Integrated fiber-copper OLT---MA5600T/MA5603T/MA5608T

The MA5600T/MA5603T/MA5608T is a series of integrated fiber-copper access devices. They support ADSL2+, VDSL2, SHDSL, POTS, GPON, 10G GPON, and P2P access modes and provide Internet access, voice, and video services to subscribers. As a series of large-/medium-/small-capacity devices, they share the same software platform and service boards.

- Switch Capacity: 3.2/1.5/720 Tbit/s
- Service Slots: 16/6/2 slots
- Services Ports: Up to 256/96/32 x GPON ports or 128/48/16 x NGPON ports or 1,024/384/128 x ADSL2+ ports or 1,024/384/128 x VDSL2 ports
- Integrated fiber-copper access and access-aggregation integration
- Aggregation management for remote sites

MA5616

The MA5616 is an industry-leading remote Multi-Dwelling Unit (MDU), which supports flexible configurations and provides broadband services on FTTB and FTTC networks.

- Network-side port: 1 x 10G GPON/2 x GPON/2 x GE
- Service Slots: 4 slots and supports flexible configuration
- Service ports: Up to 256 x POTS/256 x ADSL2+/256 x Vectoring or VDSL2/192 x Vectoring combo/128 x VDSL2 combo/128 x ADSL2+ combo/64 x FE users
- Operating temperature: -40°C to 65°C; startup at -25°C
 Power supply: AC power (110V or 220 V)/DC power
- (-48V)





- - - -



MA5600T





MA5608T



MA5616

MA5671

The MA5671 Multi-service Access Module is an indoor Optical Network Unit (ONU) developed for Small Office and Home Office (SOHO), Small- and Medium-sized Enterprise (SME) users.

- Network-side port: 1 x GPON
- User-side port: 1/4 x GE POE
- Operating temperature: -40°C to 55°C (metallic shell), 0°C to 40°C (plastic shell)
- Power supply: 12V DC

MA5626

The MA5626 multi-service access module is an Optical Network Unit (ONU) that mainly applies to Fiber-To-The-Building (FTTB) scenarios. It can provide broadband services and IP voice services for family users and small to medium enterprises.

- Network-side ports: 2 x GPON/2 x GE
- User-side ports: 8/16/24 x FE, 4 x GE + 4 x FE
- Supports obverse POE and reverse POE
- Operating temperature: -40°C to 55°C; startup at -25°C
- Power supply: 110V or 220V AC

MA5621

The MA5621 is the first Multi-Dwelling Unit (MDU) specifically designed for Smart Grid and transportation telecommunications in the industry. The MA5621 allows terminal units to remotely collect and transmit the required information.

- Network-side ports: 2 x EPON
- User-side ports: 4 x FE + 4 x RS485/232
- Hand-in-hand PON protection
- Operating temperature: -40°C to +65°C,
- Supports 6 kV surge protection capability, applicable to thundery and rainy areas

MA5821

The MA5821 multi-service access module is a 10G PON Optical Network Unit (ONU) that mainly applies to the Fiber-To-The-Building (FTTB) scenarios. It can provide broadband services and IP voice services for family users and small to medium enterprises.

- Network-side ports: 1 x GPON/10G PON
- User-side ports: 8/16/24 x FE, 24 x GE
- Operating temperature: -40°C to 55°C; startup at -25°C
- Power supply: 110V or 220V AC



MA5671



MA5626



MA5621



MA5821

MA5633

The MA5633 launched by Huawei is a Distributed-Converged Cable Access Platform (D-CCAP) head-end device to face the rapid development of telecommunication and broadcast technologies that promotes the traditional Cable Television (CATV) network to evolve into the nextgeneration broadcast network.

- Network-side Ports: 1 x GPON/1 x GE (optical)/1 x 10G GPON and 1 x GE (electrical)
- RF Ports: 4 x RF OUT (splitter by default)/2 x RF OUT (jumper)
- Channel Capacity: D3.0; 10 US x 32 DS + D3.1; 2 US x 2 DS
- Maximum Throughput:
- DOCSIS 3.0: Downstream; 1,600 Mbit/s @ 256 QAM; Upstream: 400 Mbit/s @ 256 QAM
- DOCSIS 3.1; Downstream: 3.6G @ 4K QAM; Upstream: 1.5G @ 1K QAM
- CM Number: 1,023 DOCSIS 3.0-compliant/ DOCSIS
 3.1-compliant CMs
- High Integration and inner modular design with built-in optical receiver or transceiver, WDM and EQAM
- Power supply: 110V or 220V AC (local power)/60V or 90V AC (remote power)



MA5633



MA5694S



HG8010H

HG8040H

The HG8040H is an indoor Optical Network Terminal (ONT) in Huawei's FTTH solution. By using GPON technology, ultra-broadband access is provided for home and SOHO users.

- Network-side Port: 1 x GPON
- User-side Ports: 4 x GE
- Plug-and-play: Services can be deployed by one click on the NMS, and on-site configuration is not required.
- Link Monitoring: E2E link detection is achieved using 802.1ag Ethernet OAM.
- · High-speed Forwarding: GE line rate forwarding.

HG8247H

The HG8247H is a routing-type Optical Network Terminal (ONT) in Huawei's FTTH solution. By using GPON technology, ultra-broadband access is provided for home and SOHO users. The HG8247H features high-performance forwarding capabilities to ensure excellent experience with voice, Internet and HD video services.

- Network-side Port: 1 x GPON
- User-side Ports: 4 x GE + 2 x POTS + 1 x USB + Wi-Fi + CATV
- Supports both SIP and H.248 in one software version
- IPv4/IPv6 dual stack, Ds-Lite
- L2/L3 forwarding capability up to 1 Gbit/s upstream , and 2 Gbit/s downstream
- Any port, any service

HG8245Q

The HG8245Q is an intelligent routing-type Optical Network Terminal (ONT) in Huawei's FTTH solution. The HG8245Q supports 11ac dual-frequency bands and ensures excellent experience with voice, Internet and HD video services.

- Network-side Port: 1 x GPON
- User-side Ports: 4 x GE + 2 x POTS + 2 x USB + 2.4G/5G Wi-Fi
- Supports both SIP and H.248 in one software version
- IPv4/IPv6 dual stack, Ds-Lite
- L2/L3 forwarding capability up to 1 Gbit/s upstream, and 2 Gbit/s downstream
- Any port, any service
- Smart pipe, smart hotspot

HN8245Q

The HN8245Q is an intelligent XG-PON routing-type Optical Network Terminal (ONT) in Huawei's FTTH solution. The HN8245Q supports 11ac dual-frequency bands and XG-PON uplink, which ensures the excellent experience with voice, Internet and HD video services.

- Network-side Port: 1 x XG-PON
- User-side Ports: 4 x GE + 2 x POTS + 2 x USB + 2.5G/5G Wi-Fi
- Supports both SIP and H.248 in one software version
- IPv4/IPv6 dual stack, Ds-Lite
- Any port, any service
- Smart pipe, smart hotspot

designed specifically for enterprise leased line and Mobile Backhaul (MBH).

MA5694S

 Network-side Ports: 1 x GPON/1 x GE (optical)/4 x VDSL2 bonding

The MA5694S is an integrated Optical Network Unit (ONU)

- User-side Ports: 3 x GE electrical + 1 x GE optical (PON uplink), 2 x GE electrical + 1 x GE optical (DSL/GE uplink)
- Metallic shell and passive cooling, Anti-condensation design, 6 kV lightening proof capability. Supports IP65 protection.
- Electrical GE ports support POE: Maximum 210W output, maximum 150W single GE port

HG8010H

The HG8010H is an indoor Optical Network Terminal (ONT) in Huawei's FTTH solution. By using GPON technology, ultra-broadband access is provided for home and SOHO users.

- Network-side Port: 1 x GPON
- User-side Port: 1 x GE
- Plug-and-play: Services can be deployed by one click on the NMS, and on-site configuration is not required.
- Link Monitoring: E2E link detection is achieved using 802.1ag Ethernet OAM.
- High-speed Forwarding: GE line rate forwarding.



HG8040H



HG8247H



HG8245Q



HN8245Q



Cloud Enterprise Communications

Applications

Enterprise Communications

The Enterprise Communications (EC) solution provides an impressive set of UC functions, including instant messaging, presence, group, multimedia conferencing, corporate directory and mobile applications. Enterprise employees can send and receive messages, view the status of colleagues, and join multimedia conferences anytime anywhere, enhancing communication efficiency. It can be flexibly deployed to meet differentiated enterprise requirements.

- Supports a maximum of 50,000 users
- Supports dual deployment to ensure high reliability
- Supports cluster deployment, smooth expansion

CCS9000

The CCS9000, deployed with the Huawei ICT server FusionEngine, adopts virtualization technology. Based on the Huawei Cloud Enterprise Communications solution, the CCS9000 provides enterprises with one-stop service collaboration. Communication between employees is no longer restricted by the time, region, or endpoints maximizing communication and work efficiency. In addition, centralized maintenance and management decrease communication costs, helping enterprises advance towards informatization.

- Highly intergrates IPT/conference in one platform, onestop App shopping
- Any device access, such as POTS endpoint PCs, mobile phones, tablets, HD video endpoints, software clients, and web Apps
- Fully open and cloud-based architecture, easy integration with business processes and vertical Apps
- 3-level disaster redundancy ensures 99.999% high reliability





Gateways

Unified Gateway U1981

Unified Gateway U1981 is a core voice gateway for high capacity in the Huawei Enterprise Communications solution. It works with Huawei IP endpoints and UC applications to provide professional IP Telephony (IPT) and UC services. U1981 supports up to 20,000 users, can be flexibly deployed according to different needs, and can be quickly deployed and easily maintained with the assistance of deployment and maintenance tools.

- Supports a maximum of 20,000 users and 24 E1 or T1 ports.
- Provides a built-in voice mailbox, an audio conference bridge, and a web configuration tool that is easy to use.
- Supports main control board and power module backup, dual-host redundancy, and local regeneration.
- Supports multiple signaling and protocols such as SIP, PRI, SS7 (ISUP/TUP), R2, QSIG and BRI.
- Supports local management and remote centralized management.



Unified Gateway U1981

Unified Gateway U1960

Unified Gateway U1960 is a core voice gateway for medium-capacity in the Huawei Enterprise Communications solution. It works with Huawei IP terminals and UC applications to provide professional IP Telephony (IPT) and UC services. U1960 supports up to 1,000 users, can be flexibly deployed according to different needs, it can be quickly deployed and easily maintained with the assistance of deployment and maintenance tools.

- Supports a maximum of 1,000 users and 28 E1 or T1 ports.
- Provides a built-in voice mailbox, an audio conference bridge, and a web configuration tool that is easy to use.
- Deploys two AC or DC power modules in 1+1 redundancy mode.
- Supports multiple signaling and protocols such as SIP, PRI, SS7 (ISUP/TUP), R2, QSIG and BRI.
- Supports local management and remote centralized management.



Unified Gateway U1960

Unified Gateway U1911

Unified Gateway U1911 is a core voice gateway for small capacity in the Huawei Enterprise Communications solution. It works with Huawei IP endpoints and UC applications to provide professional IP Telephony (IPT) and UC services. U1911 supports up to 100 users, can be flexibly deployed according to different needs, it can be quickly deployed and easily maintained with the assistance of deployment and maintenance tools.

- Supports a maximum of 100 users and 12 E1 or T1 ports.
- Provides a built-in voice mailbox, an audio conference bridge, and a web configuration tool that is easy to use.
- Supports multiple signaling and protocols such as SIP, PRI, SS7 (ISUP/TUP), R2, QSIG and BRI.
- Supports local management and remote centralized management.

IAD Series

Integrated Access Devices (IADs) allow users in small and medium-sized branches of enterprises or SOHO users to remotely access IP PBXs to implement VoIP, Fax over IP (FoIP), and data access services.

- Provides a series of products and diversified choices.
 IAD104H provides four FXS ports.
- IAD132E(T) provides two formats: 16FXS and 32FXS. • IAD196 can use multiple analog user interface boards
- that can provide 32 to 96 FXS ports. • IAD1224 can use multiple analog user interface boards
- that can provide 32 to 224 FXS ports.
- Allows an IAD to register with a Next-Generation Network (NGN), IP Multimedia Subsystem (IMS), or IP PBX, providing supplementary services.
- Supports triple homing, local switch, and QoS policies, ensuring high reliability and excellent user experience.
- Supports flexible deployment, simple maintenance, and centralized management through eSight.



Unified Gateway U1981







IAD196



IAD132E(T)



IAD1224

Endpoints

Video Phone 8950

Video Phone 8950 is a smart, sleek video phone that integrates voice, video, and UC applications. It delivers more engaging communication and collaboration, with unmatched security, High-Definition (HD) audio and video, simplicity, and smooth operation.

- 8-inch, IPS touch screen with 1,280 x 800-pixel high-resolution display
- Two high-fidelity audio speakerphones, full-band voice codec with a sampling rate of 48 kHz
- 2-megapixel HD camera
- Android OS, supports Wi-Fi, Bluetooth, HDMI port

IP Phone 7900 Series

IP Phone 7900 series are full-featured multi-line phones that provide excellent user experience. They provide user-friendly User Interfaces (UIs) on a color LCD screen and support multiple lines of high-quality call services. This makes the IP Phone 7900 series a good choice for enterprise employees.

- High-fidelity voice quality with the help of a high-quality handle, speaker, and headset
- Supports Opus audio codec, and has 20% packet loss tolerance
- Dual GE network ports available for Power over Ethernet (PoE)
- Association with the Desktop Client
- The IP Phone 7950 supports Bluetooth



Video Phone 8950





IP Phone 7950



IP Phone Expansion Module 7903X

Desktop Client

Desktop Client is a UC client installed on a PC that allows easy access to multimedia applications. It enables users to enjoy diversified UC services on unified UIs, enhancing collaboration efficiency.

- Instant messaging, group, presence, and corporate directory
- High quality audio and video communication
- Effective collaboration modes, for example, data and video conferencing
- Voice message notifications and quick access to voice messages
- Self-Service functions, for example, personal information maintenance and service management
- Enterprise bulletin



Desktop Client

Mobile Client

Mobile Client is a UC client installed on a mobile phone and allows users to quickly and securely access an enterprise's UC system. It enables users to conveniently obtain contact information and place calls anywhere and anytime.

- Instant messaging, group, presence, and corporate directory
- Click-To-Dial (CTD) and audio and video calls over a 3G, 4G, or Wi-Fi network
- Effective collaboration modes such as desktop sharing and video conferencing
- Supports TLS/SRTP, AES256 to ensure secure access

SoftConsole

Secretaries or receptionists at front desks in enterprises usually receive a massive numbers of incoming calls. The SoftConsole provides intuitive and simple operation and information query interfaces, which helps these personnel efficiently distribute calls.

- Incoming call query, Automatic Call Distribution (ACD), and night service
- Multi-call holding and call transfer (blind or consult transfer)
- Contact query in the corporate directory

SBC

SBC easily enables enterprise VoIP services with 25 to 5,000 concurrent sessions and helps address communications for different parts of the network, such as the shift to mobile office, interconnection, and converged networks. SBC fully leverages Huawei's extensive industry experience in core networks, IP, and security protection.

 Provides a series of products and diversified choices: SE1000-E300: capacity: < 300 sessions.
 SE1000-E600: capacity: < 5,000 sessions.
 SE1000-E800 is the video gateway, supports video transcoding.

SE1000-SW is the software SBC, capacity: < 500 sessions. SE2900 is the high-end SBC, capacity: > 5,000 sessions.

- High security with TLS/SRTP-enabled data encryption ensures secure data transmission for all users. The builtin firewall is capable of defending against DDoS attacks at a rate of 500,000 pps.
- A user behavior analysis tool defends against smart attacks, such as ultra-short calls and toll fraud, which occur more frequently across all-IP networks.
- Comprehensive support of all protocols assures interworking with all types of networks and User Equipment (UE).
- Programmable SIP, SDP, and diameter message correction enables interworking with devices of leading vendors.
- Audio/video transcoding simplifies interworking across networks and for mobile office.
- IP-PBX redundancy ensures high service availability. This series leads the industry with its unique cross-region dual-system hot backup.





Mobile Client (iOS)

Mobile Client (Android)



SoftConsole



Telepresence and Video Conferencing

Immersive Telepresence

MAX PRESENCE

Huawei launched the world's first HUAWEI MAX PRESENCE, which is designed for large-and medium-sized conference rooms. It delivers cinema-level conferencing experiences with its ultra-wide panoramic display, and is integrated with a videoconferencing, surveillance, and data information system, which provides a full view of the conference and assists in decision-making.

- Broad field of view: 48:9 panoramic display, cinemalevel conferencing experience
- Full integration: Integration of conferencing, surveillance and data, multi-pane display to deliver a panoramic view and assist in decision-making
- Powerful capability: The world's first 3x 1080p60 panoramic camera, the industry-leading three-in-one codec
- Ultra-HD resolution: The 10 x 70-inch screens provide ultra-HD display
- Extensive display modes: Reporting mode, panoramic mode, full-HD mode, and integration mode



MAX PRESENCE

TP3206-55

TP3206-55 is the new generation of panoramic Telepresence with a brand new codec, panoramic camera, and 55-inch display with ultra-narrow bezel. It provides a panoramic view of the conference, which is an ideal option for dedicated conference rooms.

- The new generation of immersive Telepresence with Huawei-patented panoramic camera
- The industry-leading Telepresence engine: Three-inone integrated codec, powerful encoding and decoding capability, ultra-low bandwidth, and resilience to packet loss
- 3 x 55-inch displays provide a panoramic and ultra-HD experience
- 3 x 22-inch tabletop displays support 1080p60 HD content
- Supports up to six people in a video conference and ten people in a local conference
- Easy-to-use 10-inch PAD with GUI



TP3206-55

TP3106-70

TP3106-70 is a new immersive Telepresence with more powerful codecs, that brings people together in a bestever virtual meeting experience, with simplicity and style. This system enables people thousands of miles away to collaborate face to face as personal as being in the same room, resulting in reduced cost and accelerated decision making.

- The new generation of immersive Telepresence with Huawei-patented panoramic camera
- The industry-leading Telepresence engine: Three-inone integrated codec, powerful encoding and decoding capability, ultra-low bandwidth, and resilience to packet loss
- 3 x 70-inch displays provide life-size and ultra-HD experience
- 3 x 22-inch tabletop displays support 1080p60 HD content
- Supports up to six people in a video conference and ten people in a local conference
- Easy-to-use 10-inch PAD with GUI

Room Telepresence

RP200 Series

Room Presence (RP) series are compact systems with HD codec, camera, display, and microphone array. RPs bring people together in a best-ever virtual meeting experience and enable face to face collaboration as personal as being in the same room. It is a cost-effective solution that helps reduce costs and accelerate decision-making for enterprises.

- All-in-one design
- Flexible choice: 48/55-inch dual screen
- Flexible deployment: Pedestal stand, pedestal stand with wheels
- 1080p HD video creates face-to-face video communication
- CD-quality audio with AAC-LD
- High quality with up to 20% of packet loss and low bandwidth requirement (1080p @ 512k)
- Remote control or easy-to-use 10-inch PAD with GUI





RP100 Series

Flexible Telepresence systems save costs for different conference room setups.

- All-in-one design
- Flexible choice: 48/55-inch single screen
- Flexible deployment: Pedestal stand, pedestal stand with wheels
- 1080p HD video creates face-to-face video communication
- CD-quality audio with AAC-LD
- High quality with up to 20% of packet loss and low bandwidth requirement (1080p @ 512 k)
- Remote control or easy-to-use 10-inch PAD with GUI

Endpoints

TX50

TX50 brings state-of-the-art H.265 technology to HD video conferencing. The TX50 endpoint's dual 1080p video and AAC-LD audio deliver face-to-face communication so lifelike as if you are all in the same room.

- H.265 1080p60
- VME2.0 + H.265: 1080p @ 384 Kbit/s
- SEC 3.0: Resilience to packet loss reaches 20%
- Voice dialing, triple view, VGA bypass, air content sharing, USB auto configuration
- SiteCall, Microsoft OCS2007R2/Lync2010/Lync2013 integration, IMS convergence
- IPv6/IPv4, Wi-Fi access, up to 8 Mbit/s, video interface: 6 in, 6 out
- AAC-LD, H.239 and BFCP, H.235 and AES encryption, H.460, WEB configuration

TE60

Flagship HD videoconferencing endpoint with dual-stream 1080p60, offering the largest array of audio/video interfaces and Wi-Fi connections with fully featured multi-view image delivery, it brings lifelike experiences to large integrated video conferences.

- Up to H.264 1080p @ 50/60fps and dual-stream @ 1080p60
- VME2.0 + H.264 HP: 1080p @ 512 Kbit/s Bandwidth 50%□
- SEC 3.0 + H.264 SVC: Resilience to packet loss reaches 20%
- Voice dialing, triple view, VGA bypass, air content sharing, USB auto configuration
- SiteCall, Microsoft OCS2007R2/Lync2010/Lync2013
 integration, IMS convergence
- IPv6/IPv4, Wi-Fi access, up to 8 Mbit/s, video interface: 8 in, 6 out
- AAC-LD, H.239 and BFCP, H.235 and AES encryption, H.460, WEB configuration
- Embedded MCU, supports up to 9 video conferencing sites and 3 audio sites



RP100 Series



TX50

TE60



Professional, full-HD videoconferencing endpoint with dualstream 1080p60 for large- and medium-sized conferences.

- Up to H.264 1080p @ 50/60 fps and dual-stream 1080p60
- VME2.0 + H.264 HP: 1080p @ 512 Kbit/s bandwidth 50%
- SEC 3.0 + H.264 SVC: Resilience to packet loss reaches 20%
- Voice dialing, Dual view, VGA bypass, air content sharing, USB auto configuration
- SiteCall, Microsoft OCS2007R2/Lync2010/Lync2013 integration, IMS convergence
- IPv6/IPv4, Wi-Fi access, up to 8 Mbit/s, video interface: 5 in, 5 out
- AAC-LD, H.239 and BFCP, H.235 and AES encryption, H.460, WEB configuration
- Embedded MCU, supports up to 6 video conferencing sites and 3 audio sites

TE40

Commercial, full-HD videoconferencing endpoint with dualstream 1080p60 for small- and medium-sized conferences.

- Up to H.264 1080p @ 50/60 fps and dual-stream 1080p60
- VME2.0 + H.264 HP: 1080p @ 512 Kbit/s bandwidth 50% ↓
- SEC 3.0 + H.264 SVC: Resilience to packet loss reaches 20%
- Voice dialing, Dual view, VGA bypass, air content sharing, USB auto configuration
- SiteCall, Microsoft OCS2007R2/Lync2010/Lync2013 integration, IMS convergence
- IPv6/IPv4, Wi-Fi access, up to 8 Mbit/s, video interface: 3 in, 3 out
- AAC-LD, H.239 and BFCP, H.235 and AES encryption, H.460, WEB configuration
- Embedded MCU, supports up to 6 video conferencing sites and 3 audio sites

TE30

Cost-effective, 3-in-1 HD videoconferencing endpoint; Easy to deploy and install in small-sized conference rooms.

- 3-in-1 design: codec, camera, microphone
- Up to 1080p30 @ 512 Kbit/s, 1080p dual-stream
- Voice dialing, air content sharing, 20% of packet loss tolerated
- IPV6/IPV4, LAN/Wi-Fi access, Up to 4 Mbit/s
- SiteCall, Microsoft OCS2007R2/Lync2010/Lync2013
 integration, IMS convergence
- Embedded MCU, supports up to 4 video conferencing sites and 3 audio sites



TE50



TE40



TE30

DP300

High-definition, desktop videoconferencing endpoint with an elegant design for executive desktop communication.

- Dual 1080p60, 27-inch touch screen, can be used as VC endpoint/PC display
- Built-in camera with 80° viewing angle, microphones and stereo loudspeakers
- Voice dialing, resilience to packet loss reaches 20%, 1080p30 @ 512 Kbit/s
- Embedded universal transcoding MCU, 4 video conferencing sites and 3 audio sites
- Wi-Fi access, Bluetooth, and document camera supported

TE Desktop&Mobile

Easily connects to your company's videoconferencing system and provides high-quality video, audio, and content sharing.

- Protocols: SIP, TLS, SRTP
- Multiple Platforms: Windows PC, MAC, Android (Phone, Pad), IOS (iPad, iPhone)
- Video: H.264 BP, H.264 HP, Up to 720p @30 fps (TE Desktop) & VGA @ 15 fps (TE Mobile), resilience to packet loss reaches 20%
- Audio: G.711 a/u, G.722, G.729A, iLBC, PLC, AEC, ANS, AGC
- Content: BFCP, Up to 1080p
- License authorization: According to the number of online
- registered users



DP300



TE Desktop&Mobile

Peripherals

VPC800

Coupled with Huawei videoconferencing systems, the VPC800 provides ultra-HD video up to 4K resolution.

- Higher quality with 1/1.7-inch 12.4M-effective pixels, 4K x 2K @ 60 fps ultra-HD CMOS
- Environmental adaptability with enhanced AAA
 processing
- 12x optical zoom plus 12x digital zoom, 80° viewing angle
- Inverse installation, setting button, OLED display
- One cable for power and signal with control and media
- 3G-SDI for extra-long video transmission



VPC800

VPC620 / VPC600

Full-HD video cameras workswith Huawei HD Series endpoints to provide 1080p60 high-definition video.

- Higher quality with 1/2.8-inch 2.38M-effective pixels, 1080p60 HD CMOS
- Environmental adaptability with enhanced AAA
 processing
- 12x optical zoom plus 12x digital zoom, 72° viewing angle
- Inverse installation, setting button, OLED display
- One cable for power and signal with control and media
- 3G-SDI for extra-long video transmission (only for VPC620)

VPM220W / VPM220

Microphone arrays work with Huawei TE series HD video endpoints to deliver a brand-new audiovisual experience.

- Compact, elegant, low power consumption
- Plug-and-play
- Dual-channel audio, 6-meter pickup distance, 360° pickup angle
- Higher-quality audio with enhanced AAA technologies
- Built-in lithium battery lasts up to 8 hours on a single charge (only for VPM220W)
- Wireless connection (only for VPM220W)

Infrastructure

Universal Transcoding MCU VP9660

Cutting-edge, highest-capacity MCU features flexible port utilization and high scalability. Designed for CSP and large enterprises.

- Industry's first MCU to support up to 1080p60 universal transcoding and personal continuous presence
- 192 x 1080p30 universal transcoding ports
- Highest stability in the industry; six-level hot spare
- Open standards: Supports H.320, H.323, SIP, and TIP; integrated with multiple UC systems
- Content-sharing format of up to 1080p60
- Multichannel/level cascading and IMS-ready



VPC620 / VPC600



VPM220W Wireless Microphone



VPM220 Wired Microphone



VP9660

VP9650

High-capacity and cost-effective MCU with flexible port utilization and high scalability — designed for large enterprises.

- Industry's first MCU to support up to 1080p60 universal transcoding; high capacity with personal continuous presence
- 72 x 1080p30 universal transcoding ports
- Provides high stability with five-level hot spare
- Open standards: Supports H.320, H.323, SIP, and TIP; integrated with multiple UC systems
- Content-sharing format of up to 1080p60
- Embedded Web interface and gatekeeper
- Multichannel/level cascading and IMS-ready



VP9650



Cost-effective, and cutting-edge MCU with flexible port utilization — designed for small- and medium-sized enterprises.

- Industry's first MCU to support up to 1080p60 universal transcoding and personal continuous presence
- 24 x 1080p30 universal transcoding ports
- Provides high stability with four-level hot spare
- Open standards: Supports H.323, SIP, and TIP; integrated with multiple UC systems
- Embedded Web interface and gatekeeper
- Content-sharing format of up to 1080p60
- Multichannel/level cascading and IMS-ready

Management System

A next-generation, videoconferencing service management system. It is designed to assist medium or large organizations with the management of their videoconferencing and Telepresence assets.

- Centralized management of all video communication resources
- Refined management with various statistical reports
- Hierarchical and role-based management of multiple users
- Efficient conference initiation, powerful conference control and monitoring functions
- Embedded gatekeeper and SIP server
- Provides firewall traversal function
- Integrated with Microsoft Lync2010/2013 and Huawei UC
- Third-party API integration



VP9630



SMC2.0

SC

SwitchCenter (SC) is a firewall traversal server for seamless video communication and collaboration. It enables users within the Intranet, from the remote branches, and across the organization, plus mobile users, to communicate seamlessly over the public network.

- Supports H.323/SIP dual stack protocols, Gatekeeper/SIP Server/SIP proxy functions
- Powerful firewall traversal functions to meet customers' requirements across different networks
- Unified management, easy to maintain and use

Recording & Streaming

RSE6500 is the world's most powerful recording server, which provides concurrent recordings, on-demand video streams and simultaneous live streams, up to 1080p60 HD video.

- Up to 30 simultaneous 1080p60 HD recordings, and 3-screen Telepresence recording
- Up to 5 live streams of 1080p60/1080p30 HD dual stream
- Up to 2000 on-demand HD viewers, easy access with mobile WEB play based on HTML5
- 3-level backup(power supply, hard disk and chip), high security with media stream encryption
- High flexibility with local recording, network recording and third-party integration functionalities

Telemedicine Solution

RP200-H

RP200-H is an all-in-one ICT device specifically designed for healthcare applications

- All-in-one design (with camera, videoconferencing terminal, displays, microphone, medical workstation, graphical medical data collector, battery, speakers, etc.)
- Applicable to multiple clinical scenarios, including mobile ward round, bedside consultation, remote visit, telemonitoring, specialty consultation, etc.
- 3 types of displays for selection
- Interoperable with medical peripherals (patient monitor, ultrasound, ECG, electronic stethoscope, etc.) to collect graphical medical data
- Voice dialing enables you to initiate a teleconsultation by simply saying the name of a specialist or a hospital
- Built-in battery available to support 2.5 to 3 hours' continuous operation
- Wi-Fi/IP network access, flexible deployment
- Embedded battery for medical use is compliant with medical safety certifications
- Proprietary low bandwidth and packet loss concealment technology ensures service continuity



SwitchCenter



RSE6500



RP200-H

RP100-H

RP100-H is an all-in-one ICT device specifically designed for healthcare applications

- All-in-one design (with camera, videoconferencing terminal, displays, microphone, medical workstation, battery, speakers, etc.)
- Applicable to multiple clinical scenarios, including mobile ward round, bedside consultation, remote visit, telemonitoring, specialty consultation, etc.
- Voice dialing enables you to initiate a teleconsultation by simply saying the name of a specialist or a hospital
- Built-in battery available to support 3 to 5 hours' continuous operation
- Wi-Fi/IP network access, flexible deployment
- Embedded battery for medical use is compliant with medical safety certifications
- Proprietary low bandwidth and packet loss concealment technology ensures service continuity



RP100-H

Contact Center

Automatic Call Distribution

U2980

U2980 is an "all-in-one" ACD platform specifically designed for contact centers. It can connect to PSTN/ IMS networks using PRA, ISUP, and SIP protocols. Meanwhile, it is a media resource center that can record agent conversation without third-party system integration.



U2980

Applications

Contacts Routing Server

Intelligent routing platform is the core component in Huawei Contact Center solution. It supports unified routing for multimedia channels. The platform provides a rich second development interface, and users can connect to the Contact Center with multimedia such as video calls, emails, websites, faxes, and social media. Enterprise can integrate the Contact Center with their DB, CRM, or other applications.



Automated Experience Portal

Automated experience portal is an Interactive Voice Portal. It can provide 24/7 services without an agent. Through integration with the application system, many incoming calls can be handled by the IVR. This can reduce agent workload and agent staffing.

Internet Customer Service

Along with Internet development, customers will not just be satisfied with simple voice services. Customers also want to use the Internet to connect to enterprise. Huawei's ICS system can help enterprise to build an online Contact Center.

Proactive Outbound Platform

The traditional Contact Center only provides inbound calls and is used for service consultation and complaints. As a bridge between customers and enterprise, the Contact Center should proactively provide more outbound functions, like telephone marketing, service quality surveys, etc.

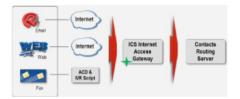
Performance Optimization Management

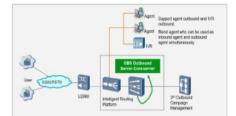
For Contact Center operation and management, how supervisors can know about real-time situations quickly is very important. With performance optimization management, supervisors can respond rapidly to sudden situations. Huawei provides a full series management suites, including voice call record, video call record, agent screen record, record retrieval, quality control, etc. All these products adopt B/S architecture that is very easy to use.

Basic Report System

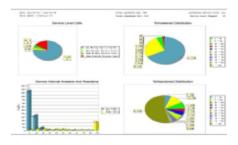
Statistical reporting is essential for Contact Center operations. Huawei's Basic Report System provides diversified basic reports as well as an open data dictionary which can be integrated with third-party reporting tools.

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Endpoints

IP Phone 7900 Series

IP Phone 7900 series are full-featured, multi-line phones with excellent user experience. They provide a user-friendly User Interface (UI) on a color LCD screen and support multiple lines of high-quality call services, making them a good choice for enterprise employees.

Agent Client Demo

Agent Client is a uniform interface for agent. Agent can handle voice, email, web, and social media contacts using this uniform tool. It provides OCX and web service interfaces, which can be used by the ISV to develop a uniform multimedia interface for emails, websites, faxes, and social media.

IoT Platform

IoT Platform

Built on a ubiquitous connection management platform, the Huawei IoT connection management platform integrates industry services and provides open APIs, service orchestration, and Big Data to implement a cost-effective and short product-development cycle. The IoT connection management platform also provides people- and thingsoriented SDKs to provide real-time communication, data collection, and device control capabilities.

Connected Car

The Connected Car solution is planned and designed by Huawei, with joint efforts from auto-makers, On-Board Equipment (OBE) manufacturers, Telematics Service Providers (TSPs), and telecom carriers. The solution provides an integrated Connected Car system that features digitization, integrated networking, intelligence, and personalization.

Smart Home

Huawei's E2E Smart Home solution covers market analysis, business model design, product and network design, and backend services. It meets requirements for full connection between people and things as well as between things and things.

From Ubiquitous Connections To Infinite Possibilities HUAWEI IOT PLATFORM





Video Surveillance

Video Big Data Analytics Platform

Video Content Management Platform

Based on Huawei's industry-leading technologies of intelligent image processing and Big Data analytics, the Huawei Video Content Management (VCM) platform is a structured Big Data analytics platform that provides structure analysis algorithms and high-performance hardware. It improves the efficiency of video investigation, enhances the capability of service collaboration, and helps police to crack cases.

High performance, high density, easy networking

- Applies to large-scale Safe Cities, providing high-density and large-scale intelligent analysis solutions.
- Plug-in (14U), high-density design
- Cloud-based cluster
- Support for a maximum of 816 channels of intelligent analysis (in a single subrack)
- Redundant fans, power supplies, and interfaces
- Support for a maximum of 200 Gbit/s switching bandwidth for service slots and zero configuration required for networking
- Integrated deployment of video access, forwarding, and intelligent analysis

Small size, high density, easy networking

- · Applies to small-sized Safe Cities, providing flexible,
- scalable, and intelligent analysis solutions.
- Small-sized (3U), plug-in, and high-density design
- Cloud-based cluster
- Support for a maximum of 96 channels of intelligent analysis (in a single subrack)
- · Redundant fans, power supplies, and interfaces
- Support for a maximum of 120 Gbit/s switching bandwidth for service slots and zero configuration required for networking



IP Phone 7910



IP Phone 7950





VCM5020



VCM5010

Cloud Surveillance Platform

Video Cloud Node

Designed based on video surveillance service requirements, a Huawei VCN3000 series product is an all-in-one intelligent video surveillance product that integrates professional storage devices. The VCN3000 series product offers customers a video surveillance solution with high definition, reliability, performance, and compatibility and is easy to maintain, manage, and deploy. VCN3000 series products include VCN3010, and VCN3020.



VCN3010 & VCN3020

- VCN3010 (40 disk slots): A single device supports a maximum of 256 (512 Mbit/s) video storage channels, 256 (512 Mbit/s) live video forwarding channels, and 128 Mbit/s Video on Demand (VoD) channels.
- VCN3020 (40 disk slots): A single device supports a maximum of 512 (1,024 Mbit/s) video storage channels, 512 (1,024 Mbit/s) live video forwarding channels, and 1,024 Mbit/s VoD channels.
- A maximum of 16 VCN3000s can be stacked. A maximum of 128 VCN3000s can be deployed in a single domain.
- Supports automatic reconstruction of RAID groups after replacing the faulty disks and dynamic hot spare disks.

Video Cloud Node

Provides flexible and elastic video surveillance solutions for small- and medium-scale campus and multi-level Safe City projects.



VCN500 Series

- A single device supports a maximum of 32 concurrent video storage channels with a total throughput of 160 Mbit/s.
- Small-scale and high-density design with a 2 U height and 12 hard disks
- Support for product transportation with disks
- Redundant fans and optional redundant power supplies
- Single-disk indicator and hot-swappable disks
- Local Display Unit (LDU), reducing costs for purchasing PCs
- Support for stacking of up to 16 VCN500s and VCN3000 networking management

HD Box Network Camera

2 MP WDR Day/Night Box Network Camera

Applicable to scenes requiring high sensitivity and wide dynamic range, such as city surveillance, industrial park, metro, highway, and airports.

- 1/2.8" progressive scan CMOS
- 1920 x 1080 @ 60 fps
- H.265, H.264, and MJPEG video compression standards
- Ultra-low Light: Multi-color: 0.005 lux (F1.2, AGC ON), B/W: 0.002 lux (F1.2, AGC ON)
- Highlight suppression of vehicle headlights
- 120 dB WDR for strong contrast scenes
- Image stabilizer
- Auto defogging
- Intelligent analysis
- Acousto-optical assisted manual focus

2 MP WDR Day/Night Box Network Camera

Applicable to scenes requiring fiber interface, high sensitivity and wide dynamic range, such as city surveillance, industrial park, metro, highway, and airports. • 1/2.8" progressive scan CMOS

- 172.8 progressive scart
 1920 x 1080 @ 60 fps
- H.265, H.264, and MJPEG video compression standards
- Ultra-low Light: Multi-color: 0.005 lux (F1.2,
- 50 IRE), B/W: 0.002 lux (F1.2, 50 IRE)
- Highlight suppression of vehicle headlights
- 120 dB WDR for strong contrast scenes
- Gyroscopic Image stabilizer
- Auto defogaina
- Intelligent analysis
- Auto Back Focus (ABF)
- Acousto-optical assisted manual focus
- Fiber interface supports one optical fiber shared by two IPCs



IPC6125-WDL-P/-D



IPC6125-WDL-FA

HD Infrared Bullet Network Camera

2MP Motorized-zoom IR Bullet Network Camera

With IP66 protection rating, applicable to High-Definition and waterproof scenes with low light conditions such as intelligent buildings and banks.

- 1/2.8" progressive scan CMOS
- 1920 x 1080 @ 60 fps H.265, H.264, and MJPEG video compression standards
- 2.8 mm to 12 mm motorized lens, auto focus
- Intelligent infrared lamp and a maximum infrared radiation distance of 50 meters
- Highlight suppression of vehicle headlights Self-cleaning lens by use of unique lens cladding material
- Auto defogging
- Intelligent analysis
- Image stabilizer
- 120 dB WDR
- IP Protection Class: IP66
- -40°C to +60°C working temperature
- Anti-corrosion: Satisfies the ISO9223 C4 environment and complies with the IEC60068-2-11 standard

2MP Motorized-zoom Invisible IR Bullet Network Camera

Unique invisible IR light results in professional monitoring for sensitive locations such as casinos and prisons.

- 1/2.8" progressive scan CMOS
- 1920 x 1080 @ 60 fps
- H.265, H.264, and MJPEG video compression standards
- 2.8 mm to 12 mm motorized lens, auto focus
- Intelligent and invisible infrared lamp and a maximum infrared radiation distance of 30 meters
- Highlight suppression of vehicle headlights
- Self-cleaning lens by use of unique lens cladding material
- Auto defogging
- Intelligent analysis
- Image stabilizer
- 120 dB WDR
- IP Protection Class: IP66
- -40°C to +60°C working temperature
- Anti-corrosion: Satisfies the ISO9223 C4 environment and complies with the IEC60068-2-11 standard.



IPC6225-VRZ

2 MP Fixed Focus IR Bullet Network Camera

Compact camera body design with powerful features such as ultra-low sensitivity, IP66, and up to 20m IR light distance.

- 1/2.7-inch progressive-scan CMOS
- 1920 x 1,080 @ 30 fps
- H.265, H.264, and MJPEG video compression standards
- 3.6 mm, 6 mm, and 12 mm fixed focal lens (optional)
- Intelligent infrared lamp and a maximum infrared radiation distance of 20 meters
- Auto defogging
- 120 dB WDR
- IP Protection Class: IP66
- -30°C to +60°C working temperature

2 MP Motorized-zoom IR Bullet Network Camera

Compact camera body design with powerful features such as ultra-low sensitivity, IP66, and up to 30m IR light distance.

- 1/2.7-inch progressive-scan CMOS
- 1920 x 1080 @ 30 fps
- H.265, H.264, and MJPEG video compression standards
- 2.8 mm to12 mm motorized lens, auto focus
- Intelligent infrared lamp and a maximum infrared radiation distance of 30 meters
- Auto defogging
- 120 dB WDR
- IP Protection Class: IP66
- -30°C to +60°C working temperature

HD Dome Network Camera

2MP WDR Vandal-proof IR Dome Network Camera

With IK10 vandal-proof rating, IP66 protection rating, and IR light, applicable to high-definition and vandal-proof scenes with low light such as prisons and airports.

- 1/2.7-inch progressive-scan CMOS
- 1920 x 1080 @ 30 fps
- H.265, H.264, and MJPEG video compression standards
- 2.8 mm to 12 mm vari-focal lens
- Corridor mode (aspect ratio 9:16)
- 120 dB WDR
- Intelligent analysis
- Acousto-optical assisted manual focus
- Three Power Supplies: DC, AC, and PoE
- IP Protection Class: IP66
- Vandal-proof Class: IK10
- Maximum IR Distance: 30m



IPC6225-VRZ-SP



IPC6224-IR



IPC6224-VRZ





IPC6325-WD-VR

2MP WDR Vandal-Proof Dome Network Camera

With IK10 vandal-proof rating and IP66 protection rating, applicable to high-definition and vandal-proof scenes with low light such as intelligent buildings.

- 1/2.7-inch progressive-scan CMOS
- 1920 x 1080 @ 30 fps
- H.265, H.264, and MJPEG video compression standards
- 2.8 mm to 12 mm vari-focal lens
- Corridor mode (aspect ratio 9:16)
- 120 dB WDR
- Intelligent analysis
- Acousto-optical assisted manual focus
- Three Power Supplies: DC, AC, and PoE
- IP Protection Class: IP66
- Vandal-proof Class: IK10

2 MP Mini Fixed Focus IR Dome Network Camera

Compact body design with IK10 vandal-proof rating, up to 10m IR light distance, applicable to small space scenes such as groceries and elevators.

- 1/2.7-inch progressive-scan CMOS
- 1920 x 1080 @ 30 fps
- H.265, H.264, and MJPEG video compression standards
- 2.8 mm, 3.6 mm, and 6 mm fixed focal lenses
- Corridor mode (aspect ratio 9:16)
- 120 dB WDR
- Vandal-proof Class: IK10
- IR Distance: 10m

2 MP Mini Fixed Focal Dome Network Camera

Compact body design with IK10 Vandal-proof rating, applicable to small space scenes such as hotels, groceries, and elevators.

- 1/2.7-inch progressive-scan CMOS
- 1920 x 1080 @ 30 fps
- H.265, H.264, and MJPEG video compression standards
- 2.8 mm, 3.6 mm, 6 mm fixed focal lenses
- Corridor mode (aspect ratio 9:16)
- 120 dB WDR
- Vandal-proof Class: IK10



IPC6325-WD-VF

H.265

IPC6324-MIF

2 MP 30x WDR Intelligent Network IR Speed Dome

Up to 150m IR light distance, both indoor/outdoor design, with 30x optical zoom capability, applicable to scenes requiring wide range monitoring and low light such as city surveillance.

- 1/2.8-inch progressive-scan CMOS
- 1920 x 1080 @ 60 fps
- H.265, H.264, and MJPEG video compression standards
- Gyroscopic Image stabilizer
- Intelligent analysis
- 120 dB WDR
 - Highlight suppression of vehicle headlights
 - Auto defogging
 - IP Protection Class: IP66
 - -40°C to +60°C working temperature
 - Dual Power Supply: AC/DC
 - Anti-corrosion: Satisfies the ISO9223 C4 environment and complies with the IEC60068-2-11 standard
 - Maximum IR Distance: 150m

2 MP 30x WDR Intelligent Network Speed Dome

Both indoor/outdoor design, with 30x optical zoom capability, applicable to scenes requiring wide range monitoring, high-definition images and low light such as public security.

- 1/2.8-inch progressive-scan CMOS
- 1920 x 1080 @ 60 fps
- H.265, H.264, and MJPEG video compression standards
- Gyroscopic Image stabilizer
- Intelligent analysis
- 120 dB WDR
- Highlight suppression of vehicle headlights
- Auto defogging
- IP Protection Class: IP66
- Vandal-proof Class: IK10
- -40°C to +60°C working temperature
- Three Power Supplies: DC, AC, and PoE
- Fiber interface supports one optical fiber shared by two IPCs
- Anti-corrosion: Satisfies the ISO9223 C4 environment and complies with the IEC60068-2-11 standard



IPC6324-MIR



IPC6625-Z30





IPC6525-Z30

Cloud Data Center

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>>> Cloud Data Center

Cloud Computing

FusionSphere Cloud OS

FusionSphere is a cloud OS based on OpenStack architecture and consists of FusionCompute, FusionStorage, FusionNetwork, and FusionSphere OpenStack components. It is ideal for server virtualization, data center consolidation, private cloud, public cloud, and hybrid cloud applications. Convergency:

Centrally manages VMs and physical servers, making service deployment more flexible.

- Supports centralized management of multiple data centers across regions and cascading of up to 100 DCs.
- Uses FusionStorage that integrates computing and storage resources and supports high-performance and linear capacity expansion.
- Centrally manages software and hardware resources, as well as efficiently dispatches resources.

Openness:

Based on OpenStack architecture, it allows for private and public clouds to be interconnected.

- Supports heterogeneous virtualization and protects customers' investments.
- Supports industry chain cooperation and more than 5000 applications.
- eSDK simplifies integration of third-party systems and secondary development.

High Reliability:

Supports hardware failure detection and HA-triggered service switchover within milliseconds.

- Zeroes out each physical bit on logical volumes to completely delete user information.
- Uses agent-free antivirus mechanism to effectively reduce VM performance loss.
- Supports TPM2.0 international specifications, meeting compliance requirements.

FusionStorage Distributed Storage System

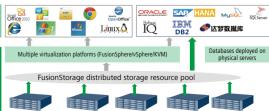
FusionStorage is a server SAN solution developed by Huawei with full intellectual property rights. It provides high performance and supports storage capabilities such as snapshot, linked clone, and thin provisioning. These features enable FusionStorage to become the best choice for the key businesses in industries including finance, telecommunications, securities, electricity, and oil.

- High scalability: Distributed architecture, up to 4,096 nodes for a cluster, and 192 PB capacity
- High performance: tens of millions of IOPS, 56 Gbit/s
- Infiniband network supported
- High reliability: 99.99999% reliability with three data copies
- · Open: Convergence of virtual and physical environments, OpenStack and mainstream virtualization platforms, mainstream x86 server hardware and database



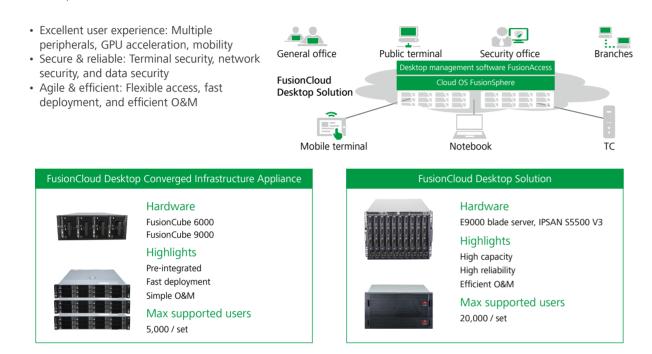


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a-Compute Driver	Cinder-Volume Driver		Cinder-Volume Driver Neutron Plug-in		Cloud	storage management	
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Server		Storage Net			vork &	security	



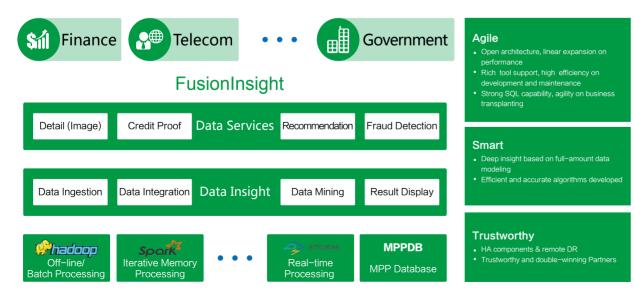
FusionCloud Desktop Solution

FusionCloud desktop solution is a virtualization desktop application based on Huawei's cloud platform FusionSphere. Terminal users can access the desktop across platforms by deploying the desktop cloud software FusionAccess on FusionSphere



FusionInsight Big Data Platform

FusionInsight is an enterprise-class, Big Data platform optimized according to the requirements of industry customers. It features enhanced reliability, security, and usability based on open-source architecture. FusionInsight helps customers store, query, and analyze mass data. It is ideal for historical data retrieval, precision marketing, users forecast, and business decision support.



Storage

OceanStor 18000 V3 Series

OceanStor 18500/18800 V3 mission-critical storage systems are dedicated to setting a new benchmark for the high-end enterprise storage field and providing the best data services for enterprises' mission-critical businesses. With the industry-leading SmartMatrix 2.0 system architecture, HyperMetro gateway-free active-active feature, flash-oriented convergence technology, nextgeneration hardware platform, and a full range of efficiency improvements and data protection software, the OceanStor 18500/18800 V3 is the best choice for missioncritical applications.

- Scalable to 16 controllers, 9,600 disks, 16 TB of cache, and 384 host ports
- 3 million IOPS and less than 1 ms stable latency
- Double-fault tolerance offered by industry-leading SmartMatrix 2.0 system architecture, and gateway-free active-active deployment for service continuity

OceanStor 5300/5500/5600/5800/6800 V3

Next-generation of unified storage products specifically designed for enterprise-class applications with an operating system built on a cloud-oriented architecture, a powerful new hardware platform, and a suite of intelligent management software.

- Convergence for simplicity:
- SAN and NAS convergence, heterogeneous convergence, all-level convergence, SSD and HDD convergence, and backup convergence. All to help users build secure, reliable, simple, and efficient storage systems on demand, providing thinner systems and more agile businesses.
- Industry-leading specifications:
- A maximum of 8 controllers, 4 TB of cache, and 25.6 PB of storage
- 16 Gbit/s Fibre Channel and 56 Gbit/s InfiniBand host ports, PCIe 3.0 buses, 12 Gbit/s SAS 3.0 disk ports, and SmartIO cards
- Simple management:
- A unified O&M platform manages multiple product models on a graphical interface
- Compatible with Windows, iOS, and Android operating systems





OceanStor 9000

A scale-out NAS storage system that employs a symmetrically distributed architecture and delivers cuttingedge performance, large-scale horizontal expansion, and a super-large single file system that provides shared storage for unstructured data.

- Outstanding performance: 400 GB/s system throughput, exclusive InfoTurbo acceleration technology achieves up to 2.5 GB/s in bandwidth over a single client
- Flexible scalability: Fully symmetric and distributed architecture, accommodation of up to 288 nodes, 100
- PB of storage space
- Open convergence: All-IP network topology to reduce complexity, and supporting various data types, such as file and object



OceanStor Dorado2100 G2/ Dorado5100

All-flash arrays that deliver ultra-high performance for applications involving large databases, Virtual Desktop Infrastructure (VDI), or high-performance computing.

- High performance: Achieves 600,000 SPC-1 IOPSTM at 1 ms latency.
- Easy-to-use: Replaces traditional disk arrays without affecting existing applications.
- Reliable: Ensures a 10-year lifetime, no single point of failure, and 99.999% availability for 24/7 service continuity.

OceanStor S2200T/S2600T

Entry-level, easy-to-use storage tailored to the needs of small- and medium-sized enterprises. It helps you flexibly and cost-effectively streamline IT systems, efficiently utilize storage space, and guickly deploy services.

- Dual controllers
- 8 Gbit/s FC, 1 Gbit/s iSCSI, 10 Gbit/s iSCSI (TOE) frontend ports
- 4 GB to 16 GB cache capacity
- 276 disk drives



OceanStor SNS2124/2224/2248/3 096/5192/5384

A full range of fibre channel switches ideal for storage networking.

- Flexible expansion: Provides "pay-as-you-grow" flexibility and Ports-on-Demand (PoD) capabilities for port expansion, with speeds up to 16 Gbit/s.
- Simplified deployment: Comprehensive diagnostics, monitoring, and automation enables centralized end-toend SAN management.
- Inter-Switch Link (ISL) aggregation: Frame-based link aggregation combines multiple ISLs into one logical link for efficient bandwidth use and load balancing.

OceanStor DJ

Service-driven storage control software, supporting unified management of storage resources, flexible orchestration of service catalogs, and automatic deployment of storage and data applications to improve operation efficiency of data centers.

- Storage Resource Virtualization: OpenStack-based OceanStor DJ centrally manages heterogeneous storage devices and consolidates resources into a pool
- Automatic Service Deployment: Automatic service deployment based on service catalogs that contain service workload-oriented best practices
- Data Application Services Availability: A wide range of data services via third-party applications available in AppStore

eSight Storage Software

A component of Huawei eSight management software, which integrates the management of server, storage, and related resources. The eSight Storage Manager component provides centralized O&M of storage devices in enterprise data centers to:

- Simplify device management by centrally managing over 30 storage devices from different vendors
- Facilitate fault location with end-to-end storage path analysis
- Manage Fibre Channel switches (Brocade and QLogic)
- Deliver capacity analysis reports to facilitate space planning and reduce storage costs
- Provide storage health assessment and system diagnosis improve system stability







Server

KunLun Mission-Critical Server







KunLun 9016

KunLun 9008

- Up to 8 CPUs, 144 cores, 6 TB • Up to 16 CPUs, 288 cores, 12 TB memory capacity (32 GB DIMMs) • Delivered with or without a cabinet
 - memory capacity (32 GB DIMMs) Delivered as a whole cabinet



KunLun 9032

- Up to 32 CPUs, 576 cores, 24 TB memory capacity (32 GB DIMMs)
- Delivered as a whole cabinet

Application Scenarios



Database

Compatible with mainstream databases such as Oracle DB/IBM DB 2/SQL Server, 30% lower TCO and 40% higher performance



In-memory computing



HPC fat node transmission latency for higher service processing efficiency



Cloud computing & virtualization Elastic computing resources, unified management, and strong interoperability, simplifying O&M complexity

Highlights

Stable and reliable RAS 2.0 proactive fault management for service continuity

- · Multi-layer fault-tolerant architecture: Fault-tolerant chips, firmware, and OSs, fully-redundant architecture, avoiding single points of failure
- Proactive Failure Analysis Engine (PFAE): OS-independent fault information collection and analysis, component-level proactive fault warning, locating, isolation, and replacement
- Online CPU and memory module maintenance: Core components such as CPUs and memory modules can be maintained without shutting down the server, maximizing server uptime.
- Modular design for easy maintenance without opening the chassis cover: Tool-free maintenance, 8-inch touch-LCD for efficient diagnosis and maintenance, greatly improving O&M efficiency.

Ultimate performance High-speed CPU interconnections, faster transaction response

- NC interconnect chip: Enables interconnections among up to 32 CPUs, far exceeding the industry standard of eight CPU interconnections. A single KunLun server delivers up to 576 cores and 32 TB of memory capacity to cater to ultra-large applications. Its transmission rate is improved by two orders of magnitude and can quickly respond to, and efficiently handle, surging online transactions.
- KL-Par partitioning: K-Par physical partitioning and L-Par logical partitioning, allowing flexible partitioning from a single core to 32 CPUs, maximizing resource utilization.
- Industry-leading performance: Industry-leading performance proven in SPEC CPU2006 and online transaction processing capability, 40% higher than closed mission-critical servers

Open ecosystem

Comprehensive industry chain support, E2E solution capabilities

- Complete, mature industry chain: Compatible with mainstream databases (Oracle DB/IBM DB2/SQL Server/SAP HANA), middleware, and OSs (Red Hat Linux/SUSE Linux/Windows Server). Cooperates with partners to promote industry chain development and meet enterprises' core requirements.
- · Comprehensive solution capabilities: Huawei has a professional solution development team that provides onestop services from consulting, planning, to after-sales O&M. Its extensive UNIX to Linux migration experience helps enterprises accelerate their transformation to open mission-critical computing.
- Better economic benefits for mission-critical computing: Compared with conventional UNIX servers, KunLun reduces TCO by over 30% and brings higher IT ROI.

12 TB/24 TB scale-up SAP HANA appliance, mass data real-time interaction and insights

Support for 18x single-node computing resources, 25x memory bandwidth, and ns-level

RH1288 V3

FusionServer RH1288 V3 is a 1U rack server with an architecture optimized for enterprise-intensive applications and cloud computing.

- 1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors
- 16 DDR4 DIMMs
- Eight 2.5-inch SAS/SATA HDDs or SSDs (support four NVMe SSDs), or four 3.5-inch SAS/SATA HDDs
- 3 PCIe slots
- 2 or 4 onboard GE ports or 2 onboard 10 GE ports

RH2288 V3

FusionServer RH2288 v3 is a 2U rack server that provides flexible storage expansion capabilities and agile computing performance.

- 1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors
- Eight or twenty-eight 2.5-inch SAS/SATA HDDs or SSDs,or ten or sixteen 3.5inch SAS/SATA HDDs (support four NVMe SSDs)
- 16 DDR4 DIMMs
- 6 PCIe slots
- 2 or 4 onboard GE ports or 2 onboard 10 GE ports

RH2288H V3

FusionServer RH2288H v3/v4 is a 2U rack server that provides flexible resource expansion capabilities as well as high computing performance.

- 1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors
- 9 PCIe slots
- 24 DDR4 DIMMs
- Eight or twenty-eight 2.5-inch SA S/SATA HDDs or SSDs,or ten or sixteen 3.5inch SA S/SATA HDDs(support four NVMe SSDs)
- 2 or 4 onboard GE ports or 2 onboard 10 GE ports

5288 V3

FusionServer 5288H v3/v4 is a new-generation 4U twosocket storage rack server. It provides optimal computing performance, ultra-large local storage capacity, and flexible expansion capabilities.

- 1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors
- Forty 3.5 inch SAS/SATA HDDs
- 16 DDR4 DIMMs
- 6 PCIe slots
- 2 or 4 onboard GE ports, or 2 onboard 10 GE, or 2 onboard GE and 2 onboard 10 GE





RH5885H V3

FusionServer RH5885H V3 is a 4U, 4-socket rack server that supports 53 RAS features to meet the requirements of databases and Business Intelligence (BI).

- 2 or 4 Intel® Xeon® E7-4800 v3/v4/E7-8800 v3/v4 series
 processors
- 96 DDR3/DDR4 DIMMs
- Eight or twenty-three 2.5-inch SAS/SATA HDDs or SSDs
- 2 or 4 onboard GE ports or 2 onboard 10 GE port
- 17 PCIe slots (including one slot for RAID)

RH5885 V3

FusionServer RH5885 V3 is a 4U, 4-socket rack server that supports 96 cores to meet the requirements of databases and Business Intelligence (BI).

- 2 or 4 Intel® Xeon® E7-4800 v3/v4 or E7-8800 v3/v4 series processors
- 48 DDR3/DDR4 DIMMs
- Eight or twenty-three 2.5-inch SAS/SATA HDDs or SSDs
- 8 PCIe slots (including one slot for RAID)
- 2 or 4 onboard GE ports or 2 onboard 10 GE port

RH8100 V3

FusionServer RH8100 V3 is a 8U, 8-socket rack server that supports 60 RAS features and 192 cores to meet the requirements of mission-critical applications.

- 4 or 8 Intel® Xeon® E7-8800 v3/v4 series processors
 192 DDR4 DIMMs
- Eight, twelve, or twenty-four 2.5-inch SA S/SATA HDDs or SSDs
- 18 PCIe slots (including two slots for RAID)
- 8 onboard GE ports or 4 onboard 10 GE ports

E9000 Blade Server Chassis

FusionServer E9000 is a 12U blade server that integrates computing, storage, switching, and management subsystems to form a powerful integrated infrastructure platform.

- 16 half-width server nodes or 8 full-width server nodes
- 4 switch modules support GE, 10 GE, 40 GE, FCoE, FC, InfiniBand FDR/QDR/EDR switching
- 6 hot-swappable AC or DC PSUs in N+N or N+M redundancy mode
- 2 management modules in 1+1 redundancy mode
- 14 hot-swappable fan modules in N+1 redundancy mode
- Complies with IPMI v2.0 and provides management functions such as remote startup, shutdown, reset, logging, hardware monitoring, SOL, KVM over IP, virtual media, fan module monitoring, and PSM monitoring









E9000 Series Blades

CH121 V3

- 1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors
- 24 DDR4 DIMMs
- Two 2.5-inch SAS/SATA HDDs or SSDs, supports two 2.5inch NVMe SSDs
- 2 PCIe mezzanine-card slots and 1 standard PCIe slot

CH140 V3

- Two 2S nodes; each node
- 1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors
- 8 DDR4 DIMMs
- One 2.5-inch SATA HDD or SSD
- Shares 2 PCIe mezzanine-card slots

CH220 V3

- 1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors
- 16 DDR4 DIMMs
- Two 2.5-inch SAS/SATA HDDs or SSDs
- 4 PCIe mezzanine-card slots and 6 standard PCIe slots

CH222 V3

- 1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors
- 24 DDR4 DIMMs
- Fifteen 2.5-inch SAS/SATA HDDs or SSDs
- 2 PCIe mezzanine-card slots and 1 standard PCIe slot

CH225 V3

- 1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors
- 24 DDR4 DIMMs
- Twelve 2.5-inch NVMe SSDs, and two 2.5-inch SAS/SATA HDDs or SSDs
- 4 PCIe mezzanine-card slots

CH226 V3

- 1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors
- 24 DDR4 DIMMs
- Six 3.5-inch SAS/SATA HDDs, and two 2.5-inch SAS/SATA HDDs or SSDs
- 2 PCIe mezzanine-card slots and 1 standard PCIe slot

CH242 V3

- 2 or 4 Intel® Xeon® E7 v2/E7 v3/v4 series processors
- 32 DDR3 DIMMs or 32 DDR4 DIMMs
- Eight 2.5-inch SAS/SATA HDDs or SSDs, four of them are compatible with NVMe SSDs
- 4 PCIe mezzanine-card slots, and 2 standard PCIe slots











X6800 Data Center Server

FusionServer X6800 is very suitable for cloud computing and Big Data scenarios; it offers a flexible configuration of a wide range of server nodes, meeting differentiated requirements for computing, storage, and I/O.

- 4U multiple-node server for centralized power supply (supports high-voltage DC) and heat dissipation
- 5 fan modules in N+1 redundancy mode
- 4 hot-swappable AC or DC PSUs in N+N/1+1 redundancy mode

X6800 Server Nodes

XH620 V3

1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors 16 DDR4 DIMMs

- Four or two 2.5-inch SAS/SATA HDDs or SSDs, or two 3.5-inch SAS/SATA HDDs
- 3 PCIe slots
- 2 or 4 onboard GE ports, or 2 onboard 10 GE ports, or 2 onboard GE and 2 onboard 10 GE ports, or 2 onboard 10G Base-T, or 2 x 56G IB

XH622 V3

1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors 16 DDR4 DIMMs

- Four 2.5-inch SAS/SATA HDDs or SSDs
- 5 PCIe slots
- 2 or 4 onboard GE ports, or 2 onboard 10 GE ports, or 2 onboard GE and 2 onboard 10 GE ports, or 2 onboard 10G Base-T, or 2 x 56G IB

XH628 V3

1 or 2 Intel® Xeon® E5-2600 v3/v4 series processors 16 DDR4 DIMMs

- Twelve 2.5-inch SAS/SATA HDDs or SSDs or twelve 3.5inch SAS/ SATA HDDs, and two 2.5-inch SAS/SATA HDDs or SSDs
- Up to 5 PCIe slots
- 2 or 4 onboard GE ports, or 2 onboard 10 GE ports, or 2 onboard GE and 2 onboard 10 GE ports, or 2 onboard 10G Base-T, or 2 x 56G IB











ES3000 SSD

ES3000 SSDs are enterprise-level SSDs with high performance and high reliability. ES3000s solve HDD IO bottlenecks, significantly improving business performance, helping customers reduce system TCO.

ES3500P V3 NVMe SSD Disk

- U.2 disk (2.5-inch), 1.2/2.0/3.2 TB capacities
- PCIe 3.0 x4 interface, NVMe compatible
- Read: Up to 3.4 GB/s BW, 815K IOPS, 76 µs latency
- Write: Up to 2.05 GB/s BW, 78K IOPS, 12 µs latency
- Supports hot-swappable, UEFI bootable, SR-IOV
- 1 DWPD for 5 years endurance

ES3600P V3 NVMe SSD Disk

- U.2 disk (2.5-inch), 1.2/1.6/3.2 TB capacities
- PCIe 3.0 x4 interface, NVMe compatible
- Read: Up to 3.4 GB/s BW, 815K IOPS, 76 µs latency
- Write: Up to 2.05 GB/s BW, 175K IOPS, 12 µs latency
- Support hot-swappable, UEFI bootable, SR-IOV
- 3 DWPD for 5 years endurance

ES3600C V3 NVMe SSD Card

- HH-HL card, 1.6/3.2 TB capacities
- PCle 3.0 x4 interface. NVMe compatible
- Read: Up to 3.4 GB/s BW, 815K IOPS, 76 µs latency
- Write: Up to 2.05 GB/s BW, 175K IOPS, 12 µs latency
- Support UEFI bootable, SR-IOV
- 3 DWPD for 5 years endurance
- DWPD: Full Disk Writes Per Day

FusionCube Hyper-Converged Infrastructure

FusionCube is a hyper-converged infrastructure, which consists of computing, storage, network, virtualization and management systems.

- High performance, low latency, fast deployment, and built-in distributed storage
- Supported Databases: Oracle, DB2, Sybase IQ, SQL Server and SAP HANA
- Supported Virtualization: VMware, KVM

FusionCube 9000

- Database or virtualization scenarios
- 96 CPUs (maximum/cabinet)
- 36 TB memory (maximum/cabinet)
- 460.8TB PCIE-SSD or 345.6TB SAS HDD (maximum/ cabinet)
- 56 Gbit/s InfiniBand
- 7.2 million IOPS (maximum/cabinet)
- 192 GB/s throughput (maximum/cabinet)
- 1T rebuild time < 15 minutes



FusionCube 6000

- For virtualization or VDI scenarios
- Standard virtualization appliance: 140 VMs
- Standard VDI appliance: 280 VDI users
- 4U with 3 nodes at minimum, all-in-one delivery, simplicity
- · Fast deployment within 11 minutes, automatic hardware discovery, installation wizard
- · Smooth online expansion, up to 256 nodes

Huawei solutions for SAP HANA®

Huawei joins hands with SAP to develop the Huawei solutions for SAP HANA based on Huawei high performance hardware platform. This innovative solution implementsreal-time data processing and analysis, and presents the analysis results to frontline engineers and business decision makers at the earliest opportunity, helping customers learn about the business operation status at any time.

Huawei SAP HANA Appliance Scale-up Configuration

Server Model	RH5885H V3 (E7-8880 v3/E7-8890 v3)								
HANA memory	128 GB	256 GB	384 GB	512 GB	768 GB	1 TB	1.5 TB	2 TB	3 TB
Processors	2	2	2	2	2	2/4	2/4	4	4
HANA log volume storage	2 x High-perf	2 x High-performance PCIe SSD cards							
HANA data volume storage	8 x 900 GB	8 x 900 GB	8 x 900 GB	8 x 900 GB	8 x 900 GB	8 x 900 GB	14 x 900 GB	14 x 900 GB	18 x 900 GB
OS	SLES11 SP4 8	& SLES12 For S	SAP / RHEL6.6	For SAP HAN	4				
Server Model	RH8100 V3	(E7-8880 v3/E	7-8890 v3)						
HANA memory	256 GB	512 GB	768 GB	1 TB	1.5 TB	2 TB	3 TB	4 TB	6 TB
Processors	4	4	4	4	4	4	4/8	8	8
HANA log volume storage	2 x High-performance PCIe SSD card								
HANA data volume storage	8x1.2TB/ 18x1.8TB	8x1.2TB/ 18x1.8TB	8x1.2TB/ 18x1.8TB	8x1.2TB/ 18x1.8TB	12x1.2TB/ 18x1.8TB	12x1.2TB/ 18x1.8TB	18x1.2TB/ 18x1.8TB	8x1.2TB/ 18x1.8TB	18x1.8TB
OS	SLES11 SP4 & SLES12 For SAP / RHEL6.6 For SAP HANA								

Huawei SAP HANA Appliance Scale-out Configuration

Computing													
Server model	R	H5885H V	3		F	RH8100 V	3			F	usionCub	e	
Single-node memory	1TB	1.5 TB	2 TB	1 TB	1.5TB	2TB	3 TB	4 TB	1TB	1.5TB	2TB	3TB	4TB
Processor model		ntel®Xeon 30 V3/E7-8				tel®Xeon 0 V3/E7-8					tel®Xeon 0 V3/E7-8	-	
Processors	4	4	4	4	4/8	4/8	8	8	4	4/8	4/8	8	8
Expandable nodes (incl. 1 standby node)	15+1	15+1	15+1	15+1	15+1	15+1	15+1	15+1	15+1	15+1	15+1	15+1	15+1
Available memory	15 TB	22.5 TB	30 TB	15 TB	22.5 TB	30 TB	45 TB	60 TB*	15 TB	22.5 TB	30 TB	45 TB	60 TB

		Storage				
Storage system	OceanStor converged storage	OceanStor converged storage	FusionStorage			
HANA log volume storage	High-performance SSD drive	High-performance SSD drive	High-performance distributed storage			
HANA data volume stor- age	High-p	erformance SAS hard drive	High-performance distributed storage			
Switch						
Service switch	High-performance 10 GE switch	High-performance 10 GE switch	High-performance 10 GE switch			
Storage switch	High-performance FC switch	High-performance FC switch	High-performance Infiniband switch			

Storage						
Storage system	OceanStor converged storage	OceanStor converged storage	FusionStorage			
HANA log volume storage	High-performance SSD drive High-performance SSD drive		High-performance distributed storage			
HANA data volume stor- age	High-p	erformance SAS hard drive	High-performance distributed storage			
Switch						
Service switch	High-performance 10 GE switch	High-performance 10 GE switch	High-performance 10 GE switch			
Storage switch	High-performance FC switch	High-performance FC switch	High-performance Infiniband switch			
OS	SLES 11 SP3 For SAP/ RHEL6.6 For SAP	SLES11 SP3 For SAP/RHEL6.6 For SAP HANA	SLES11 SP3 For SAP			









HPC Solution

HPC is based on its proprietary IT products such as servers, storage, networking, modular rooms, etc. With the integration of professional cluster management software and parallel environment tools, we offer you an advanced HPC platform system to meet your diversified requirements. Currently the integrated solution has three available options: All-in-Chassis, All-in-Rack, and All-in-Room.

All-in-Chassis: Small HPC system solution

8/16/32 nodes in a 12U space, 64 Xeon processors in each chassis, and up to 50 TFlops floating-point arithmetic capability

- 24 TB cost-efficient memory in each chassis, capable of
- virtual and Big Data analysis
- • Up to 15.6 Tbit/s backplane bandwidth, and highspeed cluster interconnection
- • Supports InfiniBand QDR/FDR/EDR
- • Supports GPGPU/MIC accelerators

All-in-Rack: Medium HPC system solution

- A rack can be 24U or 42U high, which can be flexibly assembled.
- · Deep integration of servers, routers, switches, monitoring units, PDUs, and heat-dissipation systems.
- IT racks, network racks, and battery racks are modular in design and can be flexibly combined.
- UPSs, batteries, and PDUs are designed for standard 19inch racks and can be deployed on demand.
- Liquid cooling builds green HPC.
- · Fans support variable speeds.

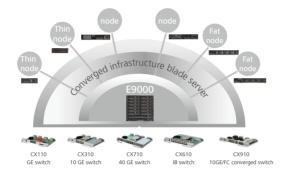
All-in-Room: Large HPC system solution

As low as 2.6 m room height requirement One-row or double-row chassis deployment With pre-configured and standard interfaces, the onsite solution installation can be completed within 1 week, improving the deployment efficiency by 50% compared to traditional installation mode.

Modular architecture, high efficiency, and energy conservation

Efficient and energy-saving Power Usage Effectiveness (PUE)

A PUE index less than 1.2 thanks to the combination of in-row air conditioners, modular UPSs, enclosed cold passages, and deeply integrated Power Distribution Frames (PDFs).







Liquid cooling solutions

Liquid cooling solutions are board-level liquid cooling solutions for high-density systems. They have competitive features of energy-saving, high reliability, high integration, and easy maintenance.

- Liquid cooling takes away > 80% of heat from the intraboard components, supports 45°C inlet of warm water. Cooling PUE is less than 1.1
- Maximum of 3 x E9000 chassis per rack with 96 x 2-socket nodes, support maximum cooling capability of 45 kW per rack
- 3D integrated forming designed cold plate without any connector inside board, support status monitor and alert for condensation prevention, leakage detection, and assurance of automatic water shutdown
- Modular designs for cold plate support independent maintenance for CPUs, DIMMs, support single node, and quick connector plug-and-play

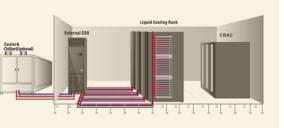
Data Center

Huawei proposes the Service-driven distributed cloud data center provides innovative virtual data center cloud services, supports separation of data center physical and virtual resources, implements data center as a service (DCaaS), and provides customers with new experience. The values of SD-DC² are as follows:

- Supports distributed IT architecture and comprehensive O&M management to reduce TCO, optimize cloud resource provisioning agility, enable rapid service rollout for business departments, and improve business department IT experience.
- Rapid cloud service access and orchestration enable services to be automatically deployed across data centers within minutes
- Implements active O&M and visible DR decision-making to improve IT O&M capabilities, reduces IT operation risks, and ensures the business continuity of key enterprise services.

Future-Oriented Cloud Data Center Architecture: SD-DC² laaS PaaS vac 100 ManageOne Storage pool Computing pool FusionSphere OpenStack DC 1 23 DC 2

ise husevel.com + Haseri Confidential + 12





Business Continuity and Disaster Recovery (BC&DR) Solution

This solution ensures business continuity, restorability, and high availability in Private, Hybrid and Public Cloud environments. The solution provides Disaster Recovery-asa-Service (DRaaS) and Backup-as-a-Service (BaaS) for easy customer DR application and management.
High Availability (HA): A single DC prevents service

- interruption due to a fault in a single part and ensures service HA
- Active-passive mode: The DR center provides services in both local and remote DR modes
- Active-active mode: In local DR mode, services are loaded in a balanced manner into the production and DR centers; both centers provide services
- · Geo-redundant mode: Active-active and activepassive DR modes in the same city, active-passive DR mode between cities, and replication DR mode ensure improved service continuity
- Backup Solution: Supports multi-DC backup, SMB backup, and massive VM backup.

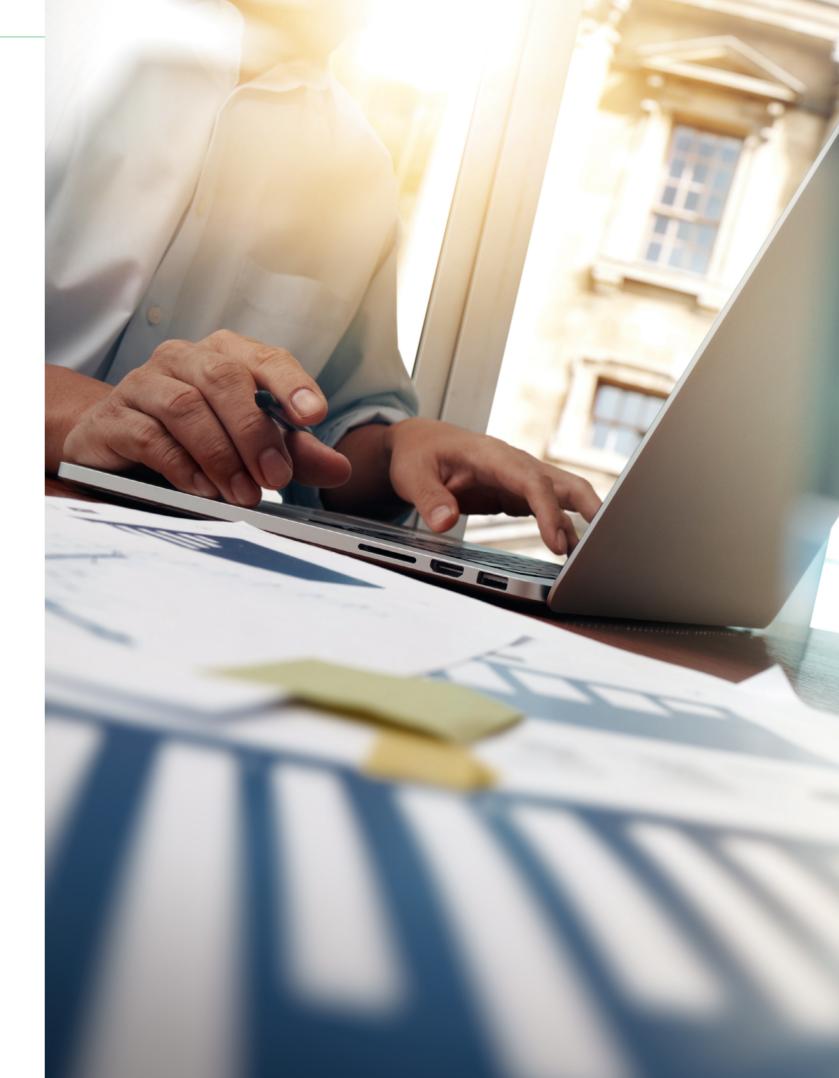
ManageOne

ManageOne is a data center management solution for simplified management and agile operation. Simplified management

- Unified management of multiple data centers
 Unified management of cloud and non-cloud resources
- Unified management of service lifecycles
 End-to-end service management

- Agile operation Rapid service launch Flexible sales models
- Open architecture
- Integrated capabilities





Enterprise Wireless

>>> Enterprise Wireless

eLTE

Core Network

The Core Network is a compact EPC which integrates the functions of MME, S-GW/P-GW, HSS, and professional Trunking into only a 3U box. This core network provides huge throughput and subscriber management ability to meet enterprise needs. The core network has optimized design for professional trunking and together with trunking-optimized eNodeBs so the customer can harvest professional trunking, video dispatching, and data services.

- Maximum Subscribers: 200,000
- Maximum eNodeBs: 1,500 • Maximum Throughput: 40 Gbit/s
- Maximum Groups: 20,000 (eCNS210 only)
- Geographic redundancy, billing, and roaming.
- QoS and traffic Management

eSCN210

The integrated core network is a professional LTE core network that is only 2U in height. It integrates the functions of MME, S-GW/P-GW, HSS, and professional Trunking.

- Maximum Subscribers: 4,000
- Maximum eNodeBs: 50
- Maximum Throughput: 2 Gbit/s
- Maximum Groups: 512
- Dimensions (H x W x D): 86 mm x 442 mm x 310 mm
- QoS and traffic Management

DBS3900

The DBS3900 is an eLTE distributed base station. It is composed of two basic modules - BBU and RRU which can be flexibly deployed to meet with the diversified deployment requirements of different scenarios.

- Frequency:
- TDD 400 MHz/1.4 GHz/1.8 GHz/2.3 GHz/2.6 GHz FDD 700 MHz/800 MHz
- Bandwidth: 3 MHz/5 MHz/10 MHz/20 MHz
- Dimensions (in mm): BBU 86 x 42 x 310, RRU 480 x 270 x 140
- Weight: BBU < 12 kg, RRU < 21 kg
- One BBU supports 12 RRUs (FDD)/18 RRUs (TDD)
- Installation method: Mounted on a tower/on a pole/ against a wall/on the rooftop









eLTE Rapid

The eLTE Rapid integrates base station and core network functions into a 2U-height box. Its coverage is up to 50 square kilometers, and it can be equipped inside vehicles and quickly deployed to set up emergency communications.

- Frequency: TDD 400 MHz/1.8 GHz
- Maximum Users: 100
- Maximum Simultaneous Voice Calls: 40
- Maximum Simultaneous Video Calls: 40
- Dimensions (in mm): Main box 559 x 567 x 286 Radio unit box 559 x 568 x 286 Antenna box 285 x 469 x 1.458

Emergency Command Vehicle (ECV)

The ECV is a mobile command center that can drive and provide broadband trunking solutions anywhere. The coverage radius is 3 km to 10 km.

The EP820 broadband-trunking handset meets today's

requirements with a 4.5-inch large touch-screen and uses

the Android operating system. Along with a rich array of

400 MHz/1.4 GHz/1.8 GHz/2.3 GHz/2.6 GHz/3.5 GHz;

Front camera: 5 megapixels

Android-based applications, the EP820 supports voice,

video, and data in one network and switches flexibly

• Dimensions (in mm): 161H x 80W x 28.2D (without

- Frequency: TDD 1.8 GHz
- Maximum Users: > 100

EP820

- Maximum Simultaneous Voice Calls: 40
- Maximum Simultaneous Video Calls: 40

between private and public networks.

• Weight: 450g (including the battery)

Camera: EP680 Rear camera: 13 megapixels

• Frequency: EP681 TDD

• Screen Size: 2.0 inches

FDD 800 MHz

antenna)







EP681

The EP681 is a portable high-end broadband trunking terminal that provides powerful functions, including private calls, group calls, SMS and MMS, broadband data access, video dispatching, and concurrent transmission of multiple services.

It can be widely used in public security, energy, and transport industries, providing professional trunking dispatching, multimedia dispatching, and broadband data transmission functions.

- Frequency: EP681 TDD 400 MHz/1.4 GHz/1.8 GHz/2.3 GHz/3.5 GHz
- FDD 700 MHz/800 MHz
- Dimensions (in mm):137.5H x 58W x 35D (without antenna)
- Weight: 400g (including the battery)
- Screen Size: 2.0 inches
- Camera: EP680 Rear camera: 13 megapixels Front camera: 5 megapixels
- Ingress Protection Rating: IP67
- Shock Proofing: MIL-STD-810F
- Working Temperature: -20°C to 55°C
- WLAN: Wi-Fi 802.11 b/g/n (only for EP680)
- DMO, Location based service with embedded GPS

EP630

EP630 is a portable low- and medium-end broadband trunking terminal that provides professional voice trunking services and plays a significant role in the professional communications field.

It can be widely used in public security, energy, and transport industries for daily life or in case of unexpected events. The EP630 provides quick access of calls, high-quality voice, and strong noise-proof

performance, and supports private calls, group calls, and emergency calls, etc.

- Frequency: EP681 TDD 400 MHz/1.4 GHz/1.8 GHz FDD 800 MHz
- Dimensions (in mm): 137.5H x 58W x 35D (without antenna)
- Weight: 400g (including the battery)
- Screen Size: 2.0 inches
- Ingress Protection Rating: IP67
- Shock Proofing: MIL-STD-810F
- Working Temperature: -20°C to 60°C
- WLAN: Wi-Fi 802.11 b/g/n (only for EP680)
- DMO, Location based service with embedded GPS

Shock Proofing: MIL-STD-810GWorking Temperature: -10°C to 55°C

• Ingress Protection Rating: IP67

- WLAN: Wi-Fi 802.11 b/q/n
- DMO, location-based service with embedded GPS





EV750

EV750 is an eLTE broadband vehicle-mounted terminal. It is designed to completely satisfy the demand of drivers for professional broadband trunking. Besides, it can simultaneously work as a Wi-Fi access point.

- Frequencies: TDD 400 MHz/1.4 GHz/1.8 GHz FDD 800 MHz
- Screen: 2.4 inches
- Shock Proofing: ETSI 300 019-1-5 class 5M4
- Protection Level: IP54
- WLAN: Wi-Fi 802.11 b/g/n
- Supports Attachable Camera
- DMO, Location based service with embedded GPS

EM710

EM710 is an eLTE USB Dongle. It can be plugged into a USB port on a host computer to provide broadband access, such as for Internet, data uploading and downloading, and mobile office.

- Frequencies: TDD 1.4 GHz, 1.8 GHz
- Dimensions (in mm): 85H x 43W x 10D
- Weight: 45g
- Working Temperature: -20°C to 60°C
- USB: USB2.0
- WINXP/WIN7/VISTA, automatic install

Network Management System(NMS)

NMS enables operators to remotely manage, monitor, and update large numbers of terminals, eNodeBs and core networks via batch processing, thus omitting manual intervention. This feature simplifies network operation and significantly improves management efficiency.

- Topology Management
- Performance Management
- Fault Management
- Configuration Management
- Fault Assistant Resolved Solution (FARS)

Dispatch Platform

The Dispatch Platform provides professional broadband trunking dispatch services, including voice, data, and video. It consists of Multimedia Dispatching and Processing Center, Dispatching Console, Multimedia Recording and Playback Server, Video/Audio Decoder and PLMN/PSTN/ TETRA Gateway.

- Maximum Registered Users: 200,000
- Maximum Registered Groups: 20,000
- Maximum Concurrent PTT Users: 2,000
- Maximum Base Stations: 1,500
- System Throughput: 40 Gbit/s (1eCNS210) 80 Gbit/s (2eCNS210 in PS pool mode)



OneAir@Smart X

eSE2603/eSE2601

eSE2603/2601 is the service engine of the core network of the OneAir solution access network. It can provide services for LTE @ licensed, LTE @ unlicensed, and eLTE-IoT solutions. eSE2603 supports board back while eSE2601 doesn't.

- Dimensions: 3U (eSE2603)/1U (eSE2601)
- Virtualization platform for flexible application expansion

DBS3900

The DBS3900 is an eLTE distributed base station. It composes of two basic modules, BBU and RRU, which can be flexibly deployed to meet diversified deployment requirements for different scenarios.

- Frequencies: TDD 1.8 GHz/2.3 GHz/2.6 GHz
 FDD 450 MHz/700 MHz/800 MHz/1.9 GHz/AWS
- Bandwidth: 3 MHz/5 MHz/10 MHz/20 MHz
- Dimensions (in mm): BBU 86H x 42W x 310D, RRU 480H x 270W x 140D
- Weight: BBU < 12 kg, RRU < 21 kg
- One BBU supports 12 RRUs (FDD)/18 RRUs (TDD)
- Installation Methods: Mounted on a tower/on a pole/ against a wall/on a rooftop

eAN3810/eAN3810A

eAN3810/eAN3810A is an Airnode, LTE access base station, at 2.4 Ghz/5.8 GHz unlicensed frequency. eAN3810 is indoor Airnode and eAN3810A is outdoor Airnode. They can be flexibly deployed to meet diversified deployment requirements for different scenarios.

- Frequencies: 2.4 GHz/5.8 GHz unlicensed
- Power: POE
- Dimensions (in mm): eAN3810: 200H x 200W x 50D eAN3810A: 290H x 210W x 60D
- Protection Lever: eAN3810: IP20 eAN3810A: IP65
- Supports 2-carrier for multi-link to ensure stable connections
- Supports DFS/LBT anti-interference technology







eSE2603/eSE2601



DBS3900



eAN3810



eAN3810A

eA260/eA280

eA260/eA280 indoor CPEs are Long-Term Evolution (LTE) Customer Premises Equipment (CPE) devices. As wireless gateways, they can be deployed indoors to provide services such as data collection and video surveillance.

eA260

- Frequency: TDD 3.5 GHz/3.7 GHz
- Cat 4
- Power: POE
- Dimensions (in mm): 190H x 35W x 176D
- Weight: About 390g (power adapter excluded)
- DL: 2 x 2 MIMO
- WLAN: 802.11b/g/n

eA280

- Frequency: TDD 2.3 GHz/2.5 GHz/3.5 GHz/3.7 GHz FDD 2.5GHz
- Cat 6
- DL: 4 x 4 MIMO
- Power: POE
- WLAN: 802.11b/g/n/ac 2.4 GHz\5 GHz Dual Wi-Fi

eA360/eA380

eA360/eA380 outdoor CPEs are the Long-Term Evolution (LTE) Customer Premises Equipment (CPE) devices. As wireless gateways, they can be deployed outdoors to provide services such as data collection and video surveillance.

eA360

- Frequency: TDD; 1.4 GHz/1.8 GHz/2.3 GHz/2.5 GHz/3.5 GHz/3.7 GHz
- Cat 4
- Power: POE
- Dimensions (in mm): 258H x 220W x 66D
- Weight: 1 kg (power adapter excluded)
- DL: 2 x 2 MIMO
- Protection level: IP65

eA380

- Frequency: TDD 2.3 GHz/2.5 GHz/3.5 GHz/3.7 GHz FDD 2.5 GHz
- Cat 6 • DL: 4 x 4 MIMO
- Power: POE
- WLAN: 802.11b/g/n/ac • Supports 2CC & eMBMS
- Protection level: IP65











eA660/eA880

eA660/eA880 industrial outdoor CPEs are Long-Term Evolution (LTE) Customer Premises Equipment (CPE) devices. As wireless gateways, they can be deployed outdoors to provide services such as data collection and video surveillance.

eA660

- Frequency: TDD 1.4 GHz/1.8 GHz/3.5 GHz/3.7 GHz FDD 700 MHz/800 MHz
- Cat 4
- Power: POE
- Dimensions (in mm): 258H x 220W x 66D
- Weight: 3 kg (power adapter excluded)
- DL: 2 x 2 MIMO
- Protection level: IP67
- IEC61373 (rail transit) & MIL-STD-810F

eA880

- Frequency: TDD 1.8 GHz FDD 1.8 GHz
- Cat 6
- DL: 4 x 4 MIMO
- Power: POE
- WLAN: 802.11b/g/n/ac 2.4 GHz\5 GHz dual Wi-Fi eMBMS
- Supports 2CC & eMBMS
- Protection level: IP67
- IEC61373 (rail transit) & MIL-STD-810F

eM100

eM100 series module is a Mini-PCIe data module. It is based on LTE technology. The eM100 can be connected to a terminal as an LTE modem via the Mini-PCIe Interface and support data transportation.

- Frequency: TDD 1.8 GHz/2.3 GHz/2.6 GHz/3.5 GHz
- Dimensions (in mm): 50.95H x 30W x 4.75D
- Weight: < 20g
- Working Temperature: -20°C to 70 °C





eLTE-loT

eSE2603/eSE2601

eSE2603/2601 are service engines of the OneAir solution access network core network. They can provide services for the LTE @ licensed, LTE @ unlicensed, and eLTE-IoT solutions. eSE2603 supports board back while eSE2601 doesn't.

- Dimensions: 3U (eSE2603)/1U (eSE2601)
- Virtualization platform for flexible application expansion



eAN3710/eAN3710A are the enterprise wireless IoT (eW-IoT) Airnodes. eAN3710 is indoor Airnode and eAN3710A is outdoor Airnode. They can be flexibly deployed to meet diversified deployment requirements for different scenario.

- Frequencies: 902 MHz to 928 MHz, 863 MHz to 870 MHz, 470 MHz to 510 MHz;
- Power: POE
- Dimensions (in mm): eAN3710: 200H x 200W x 50D eAN3710A: 290H x 210W x 60D
- Protection levels: eAN3710: IP20 eAN3710A: IP65

eA300

eA300 outdoor CPE is an enterprise wireless IoT (eW-IoT) Customer Premises Equipment (CPE) device. As a wireless gateway, it can be deployed outdoors to improve production efficiency in key areas, such as smart metering, intelligent assembly in manufacturing, and for moreaccurate logistics.

- Frequencies: 863 MHz to 870 MHz, 902 MHz to 928 MHz
- Dimensions (in mm): 280H x 250W x 90D
- Power: POE
- Protection level: IP65

eM300

eM300 is an eLTE-IoT module. It uses sleep technology to reduce power consumption and prolong service life up to 10 years.

- Frequencies: 863 MHz to 870 MHz, 902 MHz to 928 MHz
- Dimensions (in mm): 22.4H x 33.2W x 3.2D
- Power: 2.5V to 3.5V





R662 Huawei GSM-R GPH Handheld

ITEM		R662
Frequency Bands	GSM900: Uplink: 876 MHz to 915 MHz Downlink: 921 MHz to 960 MHz GSM1800: Uplink: 1,710 MHz to 1,785 MHz Downlink: 1,805 MHz to 1,88 MHz DATA: GRRS/EDGE CLASS 12	
Form Factor		Bar type
Platform		Huawei Kirin 620
SIM		Supports 2FF SIM Card
Antenna		Built-in
Battery	2,000 mAh Lithium- polymer battery	Standby time: More than 400 hours (network dependent) Ta time: More than 10 hours (network dependent)
	Resolution	240 x 320 pixels
Display	LCD size	2.4 inches
	Charger port	Micro-USB port
	USB port	Micro-USB port
Ports	SD port	Micro SD port, can expand to max. 32 GB
	Headset jack	Standard 3.5 mm jack
Side Keys		PTT button, emergency button volume (+/-) button
GPS		Supported
Wi-Fi		Supported
Bluetooth		Bluetooth 4.0
Sensor	G-Sensor	
Camera		13 megapixels
Working Temperature		
Storage Temperature		
Physical Characteristics		
Dimensions (in mm)	130.8H x 60W x	21D

R952 Huawei GSM-R OPH Handheld

ITEM		R952
Frequency Bands		GSM900: Uplink: 876 MHz to 915 MHz Downlink: 921 MHz to 960 MHz GSM1800: Uplink: 1,710 MHz to 1,785 MHz Downlink: 1,805 MHz to 1,880 MHz DATA: GPRS/EDGE CLASS 12
Form Fac	tor	Bar type
Platform		Huawei Kirin 620
SIM		Supports 2FF SIM Card
Antenna		Built-in
Battery	3,000 mAh Lithium-polymer battery	Standby time: More than 600 hours (network dependent) Talk time: More than 15 hours (network dependent)
Display	Resolution	240 x 320 pixels
Dispidy	LCD size	2.4 inches
	Charger port	Micro-USB port
Port	USB port	Micro-USB port
POIL	SD port	Micro-SD port, can expand to max. 32 GB
	Headset jack	Standard 3.5mm jack
Side Keys	,	PTT button, emergency button, volume(+/-) button
GPS		Supported
Wi-Fi		Supported
Bluetooth	ı	Bluetooth 4.0
Sensor		G-Sensor
Camera		13 megapixels
IP Class		IP65
Working temperature		-25°C to +55°C
Storage temperature		-40°C to +70°C
Physical (Characteristics	
Dimensio	ons (in mm)	141.4H x 62.8W x 25.9D











BTS3900 / BTS3900A

BTS3900 is an indoor macro-BTS and BTS3900A is for outdoors. These base stations feature

greater transmit power, higher reliability, and LTE evolution.

- Frequency Bands:
- E-GSM: 880-915 (35 MHz) ER-GSM: 873-880 (7 MHz)
- Transmitting Diversity, 4-way Receiving Diversity
- Maximum Power: ER frequency band: 60W E frequency band: 80w
- Static receiving sensitivity: -112.5 dBm
- Outdoor BTS3900A has stronger acclimatization: -40°C to +50°C, IP55 protection level





BTS3900

BTS3900A

DBS3900

The DBS3900 GSM features a distributed architecture and consists of two basic functional modules: BBU and RRU. These basic modules can be flexibly configured to meet requirements for different capacities and different application scenarios for GSM networks. RRU

- Frequencies: 900 MHz EGSM/900 MHz RGSM
- Sensitivity: -113 dBm/1-Way Receiver & -116 dBm/
- 2-Way Receiver
- Weight: 23 kg (with the housing)
- TOC: 30W per TRX
- Protection Level: IP65
- Temperature: -40°C to +50°C (without solar radiation) BBU
- Weight: 7 kg to 12 kg
- Capacity: 36 TRXs
- Power consumption: 50W
- Protection level: IP20
- Temperature: -20°C to +50°C

BSC6000

BSC6000 is responsible for radio resource management, base station management, and power control.

- Max. Equivalent BHCA: 5,900k
- Traffic Volume: 24,000
- Number of TRXs: 2,048
- Number of Configured PDCHs: 30,720
- Gb Interface Throughput: 1,536 Mbit/s
- Power Consumption: \leq 3,200W



BSC6000

eCNS300

The eCNS300 deploys all the CN NEs of GSM-R in a single cabinet, including MSC Server, UMG, and HLR based on the unified ATCA platform. Furthermore eCNS300 features LTE evolution.

The typical configuration is MSC Server, eHLR, and eUMG sharing one subrack

- Maximum Subscribers: 50,000
- System Reliability: \geq 99.999%
- Weight: ≤ 200 kg
- Power Consumption: ≤ 2,200W(housing MSC server +eHLR + eUMG)

USN9810

USN9810 is a unified service node that can be deployed in Evolved Packet Core (EPC) systems.

- ATCA platform
- Maximum Subscribers: 12,000,000
- Maximum Carriers: 24,000,000
- Number of eNodeBs: 50,000
- Number of S-GWs and P-GWs: 4,096
- Weight: < 400 kg (in full configuration)

UGW9811

The Huawei-proprietary UGW9811 (UGW9811) is a unified packet gateway that can be deployed in Evolved Packet Core (EPC) systems. It provides the functionalities of Serving Gateway (S-GW) and PDN Gateway (P-GW).

- Maximum Carriers: 5,000,000 (SPUs in active/standby mode)
- Maximum Data Throughput: 120 Gbit/s (SPUs in active/ standby mode)
- Maximum APNs: 3,000
- Maximum GRE Tunnels: 4,000
- Maximum eNodeBs: 100,000
- Weight: < 380 kg (in full configuration)
- Dimensions (in mm): 2,200H x 600W x 800D

iManager U2000

The iManager U2000 centrally manages Huawei mobile Network Elements (NEs), including BSS and NSS. The U2000 provides basic functions, such as management of configuration, performance, faults, security, logs, topology, software, and systems. It also provides various optional functions.





eCNS300



USN9810



UGW9811



ATAE



PC Server



>>> Enterprise Network Energy

Data Center Facilities

Prefabricated Data Center

Product Positioning and Application Scenarios

Prefabricated data center is a prefabricated and fully enclosed outdoor structure to house data center infrastructure. Huawei FusionModule1000 includes Huawei brand in-row air conditioners, high efficiency UPS and Huawei NetEco management system to provide necessary environment for IT and CT equipment.

Application Scenarios:

- New outdoor IDC; outdoor data center upgrade and integration; switch site, transmission site and core network site; marine cable landing station
- · Private cloud data center; active-active disaster tolerance data center; Smart City, Safe City data center; oil piping valve station; power grid digital transmission station





FusionModule1000A20 20 ft stand-alone with 4 racks Total IT Power: ≤ 24 kW Power Density: $\leq 6 \text{ kW/Rack}$

FusionModule1000A40 40 ft stand-alone with 8 racks Total IT Power: ≤ 48 kW Power Density: $\leq 6 \text{ kW/Rack}$

Features and Value

- Huawei brand components; standard product 6 to 8 weeks from leaving factory; prefabricated delivery, deployment time saved by 60%; ISO shipping containers, 50% transportation cost savings compared with non-standard products; non- standard container option is supported
- 15 kW/Rack power density; PUE 1.5 @ London, and free cooling supported; TCO saved by 30% compared with traditional building data center; IT, CT, and IT-CT multiple application scenarios are supported
- No less than 25-year service life; IP55 dustproof and waterproof; NEBS GR63 Zone3 anti-seismic; UL 120 min. fire rated; follows Uptime Tier & TIA942 topology



FusionModule1000B cluster deployment flexible scale-up IT, CT, and IT-CT application Power Density: 3 kW to 15 kW/Rack



FusionModule1000C cluster deployment flexible scale-up IT application only Power Density: 3 kW to 15 kW/Rack

Smart Modular Data Center

FusionModule2000

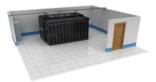
Product Positioning and Application Scenarios

FusionModule2000 is a new-generation modular data center solution that includes integrated UPS, highly efficient DC inverter air conditioner, intelligent management, etc. It adopts leading-edge technology such as wireless transmission and mobile O&M

Product Positioning: For the application of small to medium-sized data centers with air-cooled cooling system.

Single-Row Smart MDC

- · Carrier: eGovernment, PSTN retrofit, core office, transmission site etc.
- Finance: High-density zones in headquarters data centers, branch data centers
- Enterprise: Headquarters or branch data centers





UPS inside scenario w/o independent power room





 2 to 24 racks • ≤ 128 kW

Dual-Row Smart MDC

- ISP/Co-location: High-density zones in data centers
- · Public Affairs: Informatization of medical and education data
- Government: Informatization of government, public security, and intelligent city



UPS inside scenario w/o power room/ distributed power supply



UPS outside scenario c/w power room/ centralized power supply



• 6 to 48 racks • • ≤ 128 kW

Features and Value

Reliable

- Dehumidifying at low load rate down to 10%, ensuring the safe operation of IT equipment
- Excellent environment adaptability, stable operations under extreme conditions Pre-alarm of circuit breaker terminal with temperature monitoring, batteries auto-shutdown for fire protection, and
- power-off rate reduced by 50% Efficient
- Closely coupled cooling, efficient power system, and PUE down to 1.45 (real test in Shenzhen)
- Aisle containment and separated hot and cold air, eliminating hotspots
- Integrated, high-efficiency UPS power system
- Simple
- Standardized devices, modular architecture, and on-demand deployment
- Integrated power supply and distribution, saving space of 1 to 2 IT racks
- Remote and local intelligent management, mobile O&M, simple and convenient

Smart Small Data Center

FusionModule800 Small Data Center

Product Positioning and Application Scenarios

Introduction

FusionModule800 small data center is a new-generation data center infrastructure solution. It integrates the PDU, UPS, air conditioner, and the monitoring system in a single cabinet and allows flexible expansion of IT cabinets. A single module supports a maximum of eight cabinets, including zero to six IT cabinets. The IT load must be 15 kW or less, and the maximum power density is 7 kW/R. Cold or hot aisle can be chosen where the depth is only 250 mm. **Application Scenarios**

- Tier I or Tier II construction
- Recommend 10m2 DC room or bigger when cold aisle
- Recommend 30m2 DC room or smaller when hot aisle
- Bank branches, schools, hospitals, government and more

Features and Value

Reliable

- Dehumidifying at low load rate down to 10%, ensuring the safe operation of IT equipment
- Battery overheating intelligent shutdown to prevent fires
- Key component redundancy design, improving system reliability

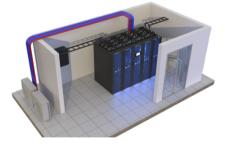
Efficient

- · In-rack air conditioner, saving at least one cabinet of installation space
- Frequency conversion refrigeration, aisle containment, and superior PUE at 1.37

Simple

- PDU, UPS, monitoring, and air conditioner are integrated in a cabinet, preassembled; choose cabinet combination. Only 4 hours to deploy.
- Mobile phone App, SMS alarm, remote web platform control, centralized network monitoring, all provide for unattended operation







Smart Data Center Facility Management system

NetEco6000

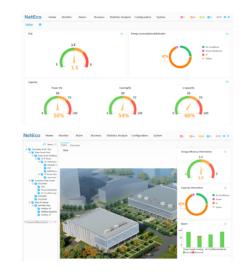
NetEco is a new-generation data center management system launched by Huawei. It manages the real-time data and status of data center infrastructures, including power, environment, power consumption, and status, and generates alarms if any fault occurs.

NetEco supports remote management and local mobile O&M by PAD, for convenience and easy control.

Features and Value

High availability, warnings, and troubleshooting

- Advance warning of faults and risks improves IDC availability
- Quickly locate faults, virtual inspection
- Smart interaction, energy saving
- Dynamic PUE management
- Optimizes important power and cooling services Rapid deployment, one-button launch
- · Parameters of AC and UPS loads, saves testing time



Modular UPS

UPS5000

Product Positioning and Application Scenarios

UPS ensures uninterrupted power supply for business continuity. Huawei's 25 kVA to 800 kVA modular UPS is reliable, efficient, convenient, and intelligent to meet the different requirements of customers across multiple industries.

- ISP: New builds, reconstruction, and expansion of data centers (200 kVA to 600 kVA)
- Telecom: Core office reconstruction (30 kVA to 200 kVA); New builds, reconstruction, and expansion of data centers (200 kVA to 600 kVA)
- Medium and Large-scale enterprise: New builds and reconstruction of data centers (30 kVA to 500 kVA)









50 kVA to 300 kVA

50 kVA to 500 kVA

50 kVA to 600 kVA

Features and Value

- High Efficiency: Up to 97.5% (8-year energy saving equal to cost of one UPS with 1% efficiency improvement)
- High Power Density: 50% footprint saving (compared with other vendors, One hundred Huawei 600 kVA UPS units can save 100 IT cabinet spaces and increase income by USD 1.2 million)
- Modular and Hot-swappable Design: Just 5 minutes for replacement by non-professional labor (traditional UPS needs professional service from the manufacturer resulting in high OPEX)

Site Power

Embedded Telecom Power System

ETP4830 & ETP4890 & ETP48150

Compact embedded power (ETP4830 & ETP4890 & ETP48150) can be embedded in standard 19-inch rack or cabinet, providing 30A to 150A power to communication network equipment.

- Compact Power: 30A output @1U, 90A output @ 2U, 150A output @ 3U
- Compatible with Different Rectifiers: 15A/30A, 94% /96% efficiency
- Abundant system management functions, LCD display
- Supporting multiple interfaces, convenient remote centralized management

ETP48200 & ETP48400

Expandable embedded power (ETP48200 & ETP48400) can be embedded in standard 19-inch rack or cabinet, supplying up to 200A & 400A power to communication network equipment.

- Leading Rectifier Efficiency: > 98%
- · Support solar access, further saving energy
- Support Mix-plug for Different Functional Modules: compatible with rectifiers of different efficiencies and with Solar Supply Unit (SSU)
- Large Capacity: 200A output @ 5U, 400A output @ 9U
- omplete site and power management functions

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Distributed Power System (DPS)

DPU30D & DPU30A & DBU20B

Distributed Power System (DPS) is a new generation power solution.

specialized for compact sites. It consists of DC module, AC module & battery module. It supports pole- mounted and wall-mounted. DPS can be widely used for macro sites, small cells and remote RRUs.

DPU30D: Converts AC/HVDC to DC

DPU30A:Supplies constant AC output and a branch of DC DPU30A: supply constant AC output and a branch of DC output for battery unit or DC load

DBU20B: Provides reliable power backup

- Fast Installation, 10 mins by1 person, flexible deployment
- Multiple Input Mode: AC/HVDC
- · Mobile App (based on Bluetooth) for intelligent management, NetEco
- Fan-free design, 3 to 5 years routine maintenance free
- Iron lithium battery, IP65, working temperature -40°C to

• +55°

Outdoor Power System

MTS 9000A

MTS9000A smart outdoor site solution ensures that carriers can deploy networks easily.

provides site level savings, efficient O&M, and smooth evolution plus easy, intelligent, and highly efficient performance. Huawei's MTS system highly integrates power, cooling, site monitoring, and housing systems to provide a safe and reliable environment for telecom equipment.

- Leading site-level energy efficiency, reducing energy consumption and costs
- NetEco OSS and mobile App improve O&M efficiency, ensuring site efficiency is visible and manageable
- · Integrated design, one-site-one-cabinet, small footprint, and fast deployment
- Modular design, facilitating smooth evolution and component maintenance
- Energy MIMO, simplifying energy access and site acquisition

Note: MIMO; Multiple energy Input & Multiple Mode Output



DPU30D & DPU30A & DBU20B

TP48120A & TP48200A & TP48400A

Outdoor power systems (TP48120A & TP48200A & TP48400A) have been widely used for telecom sites, whose rated output power is 120A/200A/400A. They have helped many customers achieve rapid site deployment, high site energy efficiency and convenient maintenance.

- High Protection Level: IP55
- Various temperature control methods apply to all kinds of environments and scenarios
- Leading Rectifier Efficiency: > 98%
- Wide Operational Temperature Range: -40°C to 55°C (with heater)
- Cabinet Space: 9U (TP48200A)
- Maximum 2 groups of 190 Ah batteries inside cabinet

Indoor Power System

TP48200B & TP48400B

Indoor integrated power (TP48200B & TP48400B) are highend types of AC/DC indoor power systems whose rated output current is 200A and 400A. They are compatible with rectifiers/solar supply units, and provide battery and equipment accommodation space in one cabinet

- Leading Rectifier Efficiency: > 98%
- Large Accommodation Space: 2 to 4 groups of batteries and OU to 16U use space, saving site footprint
- Support solar access, further saving energy
- Support mix-plug for different functional modules: Compatible with rectifiers of different efficiencies and with Solar Supply Units (SSUs)
- Intelligent battery management, prolonging battery lifespan
- Remote management, reducing operation expenditure

TP48300B & TP48600B

Indoor standalone power (TP48300B & TP48600B) are basic types of AC/DC power systems whose rated output current is 300A and 600A. They have high power efficiency and provide reliable power supply.

- Leading Rectifier Efficiency: > 98%
- Large Power Capacity: Up to 600A
- Wide Input Voltage Range: 85 Vac to 300 Vac

Networking Diagram of MTS9000A

MTS9000A

MTS9000A

Ð

NetEco

Mohile APP



TP48120A

TP48200A



TP48400A





TP48200B

TP48400B



TP48300B



TP48600B

Mini TP48300B

Indoor mini power (mini TP48300B) is a mini type of AC/ DC power system whose rated output current is 300A. It features easy deployment and supports flexible installation modes including battery rack stacking and standard open rack.

- Flexible Installation: Battery rack stacking, 19/21/23 inches open rack, ground, DFMU cabinet or wallmounted (optional)
- Compact Power: Only 11U in height
- Supports: NetEco network management system and in-band/out-band networking, reduces operation expenditure



Mini TP48300B

Central Office Power System

TP481200B & TP482000B

Standalone-type CO power (TP481200B & TP482000B) convert 208/380 Vac into -48 Vdc, with a rated output current of 1,200A 2,000A respectively. AC distribution, rectifier, monitoring unit, and DC distribution are integrated in single cabinet.

- All-in-one design of AC, rectifier, and DC unit, expandable to 12,000A by parallel connection
- System MTBF: > 500.000 hours
- Leading Rectifier Efficiency: 98%
- Intelligent Battery Management System (IBMS), improving power backup reliability
- Precise load management (IPDU), alarms, and power detection of each branch

TP483000D

Distributed-type CO power (TP483000D) is the first alldigital large-capacity power system in industry, providing large power capacity and abundant power distribution. The system consists of 1U 100A high-efficiency rectifiers. The output of the rectifier cabinet can reach 3,000A, expandable up to 24,000A.

- High Capacity: 3,000A output in one cabinet, expandable to 24,000A maximum output, smoothing future evolution for central offices
- High Power Density: Power density of the rectifier module is up to 25.4W/inch³
- System MTBF > 500,000 hours; Rectifier MTBF: > 540,000 hours
- All-CAN communication
- Intelligent Battery Management System (IBMS), improving power backup reliability
- Precise load management (IPDU), alarms, and power detection of each branch



TP481200B



TP483000D

Hybrid Power

PowerCube1000-D: Diesel Hybrid

PowerCube1000-D is an outdoor telecom-class power supply system for unstable grid and off-grid areas. It provides 48 Vdc output power and is scalable to load up 3,000W. The system adopts diesel as main energy source.

- Saving 40% to 60% of fuel consumption and 90% of D.G. maintenance cost
- Small footprint, saving deployment time and manpower
- Smooth evolution, opening to mains and solar resources
- Anti-theft design prevents stealing of fuel
- Operating Temperature Range: -5°C to +50°C

PowerCube1000-S: Solar Hybrid

PowerCube1000-S is an outdoor telecom-class power supply system for unstable grid and off-grid areas. It adopts solar as the main energy input and outputs 48Vdc power. PowerCube1000-S is scalable up to a load of 3.000W.

- High conversion efficiency, 98.5 %
- Reduces PV panel by 30%
- Reduces carbon emissions, even to "zero"
- · Easy and quick deployment
- Anti-theft design protects investments
- Operating Temperature Range: -20°C to 50°C

PowerCube1000-G: Grid Hybrid

PowerCube1000-G is an outdoor telecom-class power supply system for poor grid or unstable grid areas. The system makes most use of the grid and reduces carbon emissions. It provides 48Vdc output power.

- Maximal usage of grid, "zero" D.G. running
- "Zero" fuel and D.G. maintenance
- ROI < 2 Years @ 1,500W load, "zero" hours/day grid failure
- Excellent energy storage system enables faster charging and shortens the charging time by more than half
- Easy and quick deployment
- Small footprint



PowerCube1000-D



PowerCube1000-S



PowerCube1000-G

PowerCube 500: Power Solution for Video Surveillance

PowerCube 500 power solution provides sustainable power supply for video surveillance and transmission equipment, which is widely used in Safe City

and Smart City. It is mainly used for scenarios like streets, squares, checkpoints, parks, highways, forests, oil pipe lines.

- Multi-energy Input: Grid and solar
- Multi-mode Output: 12 Vdc / 24 Vac / 48 Vdc / 220 Vac
- Special designed battery with long lifespan
- Wide Temperature Adaptability: -30°C to +50°C
- High Protection Level: Up to IP55
- High Level Wind-resistant: 40 m/s
- Remote energy management by NetEco



Smart Site Management System

iManager NetEco (Site) OSS

iManager NetEco focuses on providing a simple, efficient and intelligent management platform for telecom energy equipment with its environment of temperature and humidity control components. It accurately manages power, fuel, energy efficiency, assets, and routine maintenance. It supports three types of server platforms, or virtual machine deployment, flexible integration with third-party NMS via alarm and performance northbound interfaces.

- Visible and Efficient O&M: Accurate maintenance; site visits reduced by 40%.
- Proactive O&M: Automatic management of State Of Health (SOH) of the battery and DG, with maintenance and refueling reminders.
- Reliable Power Supply: Power availability improved by 20%.
- Operation and Optimization: Full management of energy efficiency for 'component-site-entire network'. Expert advice for troubleshooting and expert experience knowledge base.



Full management of energy efficiency



Proactive SOH management



Big Data analysis



Services

>>> Services Preface

Rapid changes in the Information and Communications Technology (ICT) industry bring new opportunities for businesses and governments everywhere. Huawei is leading the development of new ICT, and also offers a leading Service portfolio to help you take advantage of these new developments. A comprehensive ICT Service solution helps you execute your business strategies, enabling you to build your ICT infrastructure efficiently, shorten your time-to-value, as well as reduce your Total Cost of Ownership (TCO).

Huawei ICT Services are available for all Huawei products and solutions, such as Cloud Computing, Smart City, Railway Communication, Agile Campus Network, and Data Center Networking. Also available are Services that address specific requirements such as disaster recovery, security penetration testing and support during critical business events. For all of these solutions, we offer full network lifecycle Services that include planning, design, implementation, operation, and optimization.

Incorporating Huawei's 25+ years of experience in delivering world-class services to customers across the globe, these ICT Services will make your business more successful. Together with our global ecosystem of Certified Service Partners, we provide flexible and reliable services that customers can depend on.

ICT Planning & Consulting

Cyber Security Consulting

Cyber Security Consulting helps governments and companies develop clear, robust cyber and information security strategies and plans. The Service can also help plan and implement the strategies on both management and technology levels.

Defeat Hackers and Keep Your Data Safe

- Thorough information security gap analysis
- Information security risk assessment
- Information security system implementation
- Technical support system design
- Advanced Persistent Threat (APT) modeling and attack resistance process design



ICT Infrastructure Consulting

ICT Infrastructure Consulting harnesses the expertise of Huawei products and new technology to design ICT architecture, recommend technology solutions, and offer best practices to keep you running smoothly and efficiently

Cutting-Edge Architecture Now, and in the Future

Integrated consulting

- · Cloud data center planning
- Global IT infrastructure planning
- Integration and optimization of IT infrastructure design
- Cloud platform planning
- Cloud computing
- Cloud storage
- Disaster Recovery and more
- Network planning
- Data center networks
- Global networks
- Access networks

IT operational planning

- Operations management
- Technical standards

Smart City Architecture Consulting

Smart City Consulting works with local and national governments to develop Smart City master plans tailored to the specific needs of cities and the individual government departments within them.

Based on an overall perspective, regional characteristics, location, functional requirements, and development strategy, the service develops a full ICT architecture:

- Business architecture
- Data architecture
- Application architecture
- Technical architecture
- Integration architecture
- Cyber security architecture

It also:

- Develops master planning and implementation approaches and planning
- Arranges major tasks and key projects to help customers achieve their goals through more effective project management
- Offers national ICT planning and basic information infrastructure architecture planning

Let Huawei Help Make Your Smart City Smarter

- Set clear purpose and positioning to take advantage of development opportunities based on unique customer characteristics
- Achieve sustainable development based on overall perspective and focus
- Develop more valuable knowledge resources
- Improve public service quality by increasing collaboration between government departments and their systems



Professional Services

Professional services team of highly skilled engineers and project managers specialize in planning, designing, and integrating Huawei products and solutions. Drawing on our global experience, knowledge of industry best practices, and specialized tools we help get your deployment up and running smoothly and efficiently. Huawei and its partners seamlessly move your business into the fully digitized world.

Enterprise Network

Planning, design, implementation, and migration of IP, security, WLAN, and firewall products & networks

Enterprise IT

Turnkey deployment of Storage, FusionSphere, FusionCloud, and FusionStorage products

Enterprise Wireless

Specialized services for eLTE and GSM-R deployments in combination with third-party products

Enterprise Communication

Planning, design, and implementation of Enterprise-wide IP telephony and telepresence projects





Technical Support

Product Support provides faster resolution of network incidents, keeping your business free from disruptions. From 24/7 access to experts in our Technical Assistance Centers to software updates and hardware replacement, we help you maintain a more efficient, stable network and improve productivity.

We work hand-in-hand with our Certified Service Partners to deliver world-class services for a price that cost you less than a few hours of downtime. Best of all, we provide our services based on the Service Level Agreements (SLAs) you choose depending on the critical nature of your business.

- Product Support Services
- Critical Business Event Support
- Dedicated Resident Engineer Service
- Equipment Health Check Service
- Storage Device Retention
- Software Subscription and Support (SnS)



Product Support

Fast support at your fingertips

Your business continuity relies on the availability of the network and, when a problem occurs, you want it fixed immediately. Based on the following features you can depend on Huawei Support to reduce the impact a network incident has on your business:

Technical Assistance Center (TAC) support

Anytime access to Huawei TACs by phone, email, web, or mobile App. To service you better, we give priority to business-critical incidents and immediate responses to severe situations. Our help desk is available in 12 different languages, so chances are you can use your own language to talk to our people.

Online self-help support

Our online self-help provides answers to most questions, and through our online support communities you can ask for help from your peers in the industry or from Huawei experts without having to open a ticket. It is available 24/7, via our support website or by mobile App.

Tools to help you maintain your network

Through the support website a large number of tools are available for you, each designed to make specific tasks easier and more efficient. Based on the experience of many projects and interactions, these tools easily upgrade your capabilities with a minimal amount of effort.

Operating system software updates

Keep your application and system software up-to-date with easy access to web downloads for all Huawei products. Prevent downtime through a timely software upgrade.

Advance hardware replacement

Depending on the service level you choose, receive replacement parts within 4 hours 24/7 or 9 to 5 the next business day.

On-site support

Depending on your needs you can decide to include an on-site engineer to install the replacement part for you and verify the problem is resolved.

Hi-Care and Co-Care

You can choose to receive the Huawei support directly from Huawei (Hi-Care) or integrated into the service of your

preferred Huawei partner (Co-Care). Partners are entitled to receive the support from Huawei once they meet certain requirements, ensuring they are able to deliver the same high-quality service as Huawei. Only those Certified Service Partners (CSPs) are entitled to access the Huawei Support capabilities and utilize Huawei Support to enhance their own support capabilities.

Critical Business Event Support

The whole world is watching when you launch a new product, conduct marketing or media events, finish yearend closing, or have any other type of critical business event. While your full attention is on making the event a success, you may need temporary, remote or on-site support for your network. Huawei's Critical Business Event Support Service is the perfect solution.

The service helps prevent network disruptions that may affect your event. Before the event, Huawei engineers perform a network health check that collects information remotely and on-site for analysis. The information collection does not affect your network, so there is no business disruption. Based on the outcome, Huawei experts will suggest modifications to enhance your network's stability and performance. We can even help

The Critical Business Event Support Service provides:

- Preparation to make sure your network is ready and optimized
- Faster problem resolution in case something happens

Huawei's Critical Business Event Support Service gives you the confidence to sit back, relax, and concentrate on your event, whatever the scenario.

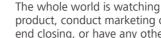
Stay online

Avoid disruptions that affect your critical business events.

Maximize event success

Optimize network performance during the event and in the future.

Let Huawei attend to any network issue for you — quickly and more efficiently.



you implement them.

Remote and/or on-site support during critical business events

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Fix problems fast

Dedicated Resident Engineer Service

Training staff and keeping them up-to-date on the latest technologies and equipment is an ongoing responsibility. When your company receives new equipment or systems your staff needs new skills to efficiently operate, maintain, and manage them. Trying to develop those skills without help can be an expensive, time-consuming task. Huawei's Dedicated Resident Engineer Service provides experienced Huawei engineers to conduct On-the-Job Training (OJT) and supplement your staff until they are fully trained.

The service is also ideal when you have a short- or longterm shortage of gualified operating staff. Dedicated Huawei engineers can quickly fill your staffing gaps while training and rebuilding your new team.

The Dedicated Resident Engineer Service provides:

- Resident Huawei engineers dedicated specifically to your company
- · Direct access to extensive Huawei engineering skills and expertise
- · OJT to transfer knowledge from Huawei engineers directly to your employees
- Shorter time-to-resolution for network problems so your network stays up and running
- Proactive network monitoring by Huawei engineers to avoid network disruptions during the training period

Dedicated Resident Engineer Service is the flexible, fast, and cost-effective way to jumpstart your O&M team.

Improved network availability

Huawei engineers help manage your network as your staff is being trained.

Knowledge transfer

Huawei-led OJT builds technical knowledge within your organization without the loss of productivity.

Resource limitations

Huawei engineers can guickly fill in resource limitations and train replacements. For more information refer to our Support website.

Equipment Health Check Service

Things change. Perhaps your network's traffic has grown or changed patterns. Maybe your equipment can no longer handle the load. Software may not have the latest updates or features. There are dozens of wavs network performance deteriorates over time and it may be smart to check your equipment and determine how to optimize it for current and future conditions.

Huawei's Equipment Health Check Service analyzes many variables in network equipment and generates a comprehensive report with recommendations that can immediately enhance the performance and stability of your network.

Expert hardware analysis

Experienced Huawei specialists remotely compile hardware configurations and key statistics and compare them to industry benchmarks to determine how your network stands up against your peers and competitors. You'll get recommendations for changing parameters or using different configurations that adapt equipment to current needs. If necessary, we will recommend equipment modifications such as additional memory or ports.

Expert software analysis

We can prepare an optimization plan that enhances the network by recommending overdue software updates or recommending newer software versions that sometimes include features that were not originally available.

Expert configuration analysis

You can fine-tune many configuration commands or enable new features. Huawei can analyze equipment configurations and recommend how to optimize them to best meet current and future requirements.

On-the-fly analysis

No need to take the network offline. Huawei's data collection is unobtrusive, done remotely, and analyzed offline so you stay up and running.

The Equipment Health Check Service helps you get the most from your network.

Faster Increase network stability and performance.

Better

Avoid unexpected disruptions in the future by making controlled improvements today.

Cheaper Extend equipment's lifecycle through smart, tailored optimization.

Storage Device Retention

Do you need to replace a defective hard drive or Solid-State Drive (SSD) to keep your business up and running? Do you have company data security policies that preclude handing over the drive, and its critical data, to a third party? Huawei's Storage Device Retention Service will put vour mind at ease.

The service lets you keep your defective drive and data so you can dispose of it in compliance with your own data security policies. It is an add-on to Huawei's Hi-Care Product Support Service, so only parts covered by a Hi-Care contract are eligible. Huawei simply requires you to record the serial number of both the defective and replacement devices on the Return Material Agreement (RMA) field service report and sign it. It is that easy.

With the Storage Device Retention Service you can dispose of your own data by your own rules.

Keep your data in your hands Meet regulatory and company data security compliance rules and keep customer data safe.

Dispose of the drive yourself Maintain or destroy the old device in any way you choose.

Software Subscription and Support (SnS)

Keeps your business operating smoothly and enriches the value of your ICT investment.

TAC Support

You get anytime access to our Technical Assistance Centers (TACs) by phone, email, web, or mobile App.

Online Support

Access the Huawei Support website for general information, discussion forums, software, tools, eLearning, and more.

Software Subscription

You can always download new software releases that include software updates and upgrades through the Huawei Support website 24/7. And keep your software products operating on new functionality and technology.

Reliable Strengthen availability, functionality, and reliability of application software.

Functional Increase application functionality with major upgrade releases.

Efficient Improve operating efficiency and performance.

Improvement **Service**

Improvement service offers evaluation and optimization of your network. Huawei uses tools to perform a thorough analysis off network availability, capacity, security, and performance, helping you proactively locate network issues. Huawei also provides solutions to improve resource utilization and architectures, and optimize performance to maximize service quality.

Network

- IP Network Evaluation and Optimization Service
- Opical Network Evaluation and Optimization Service
- SmartNOS Service
- Agile Cloud-Network Management Service

Wireless

- GSM-R Evaluation and Optimization Service
- eLTE Evaluation and Optimization Service

IT

- Storage Evaluation and Optimization Service
- · · Security Evaluation and Optimization Service

Service Highlights

- · Comprehensive and gualitative assessment systems and methods
- Efficient process management systems
- Teams of experienced optimization experts



Customer Benefits.

• Improves equipment utilization

Balances data distribution between devices

• Explores potential capacity issues

• Distributes resources based on service requirements

Improves customers' ROI

· Proactively locates and resolves performance issues

Training and Certification Services

Huawei has developed the HCIE certification solution by leveraging its years of experience in developing ICT talent and its deep insight into industry trends. This solution fully encompasses Huawei's Cloud-Pipe-Device convergence technology and covers IP, IT, and CT convergence technologies. It is the only certification program of its kind in the industry that covers all ICT technical fields.

As a global-leading ICT solutions provider, Huawei has accumulated years of experience in technical training and innovations in the ICT industry. This advantage enables Huawei to provide students with tailored technical training and certification services that help them to improve their careers.

Huawei technical knowledge enablement

- Systematic knowledge and best practices
- ICT certification, facilitating employee career development

Enhanced competence for employees

- Gap analysis and learning map by ICT competence consulting
- Well-structured competence development

Individual career planning and development

- Industry-leading ICT certification
- Clear career development paths







Partners



Enterprise Customers



Individuals

Certification



Certifications Associate > HCNA-R&S Routing & Switching WLAN HCNA-WLAN HCNA-LTE Wireless HCNA-Transmission Transmission HCNA-Security Security HCNA-UC UC&C HCNA-CC HCNA-VC VC Cloud HCNA-Cloud HCNA-Storage Storage

Specialist Certification

HCS-Sales-IP Network HCS-Sales-IT HCS-Sales-UC&C HCS-Sales-Carrier Network HCS-Pre-Sales-IP Network HCS-Pre-Sales-IP Network (Security) HCS-Pre-Sales-Transmission Network HCS-Pre-Sales-Access Network HCS-Pre-Sales-Storage HCS-Pre-Sales-Cloud HCS-Pre-Sales-Server HCS-Pre-sales-TP&VC

ICT Career Certification

Professional >	Expert
HCNP-R&S	HCNP-R&S
HCNP-WLAN	HCNP-WLAN
HCNP-LTE	HCNP-LTE
HCNP-Transmission	HCNP-Transmission
HCNP-Security	HCNP-Security
HCNP-UC	HCNP-UC
HCNP-CC	HCNP-CC
HCNP-VC	HCNP-VC
HCNP-Cloud	HCNP-Cloud
HCNP-Storage	HCNP-Storage

HCS-Field-R&S HCS-Field-WLAN HCS-Field-Server HCS-Field-IVS