HUAWEI USG6330/6350/6360
Next-Generation Firewalls
---Securely and Reliably Connect Small- and Medium-Sized Businesses

Huawei USG6330/6350/6360 next-generation firewalls are security gateways designed for small- and medium-sized businesses and branch offices with 200 to 800 users. The firewalls provide VPN, intrusion prevention, and antivirus functions for comprehensive and integrated network protection, effectively reducing management costs. Refined bandwidth management improves bandwidth efficiency and ensures quality experiences for key services. These firewalls provide continuous next-generation network security in an easy and efficient way.

Highlights

Comprehensive and integrated protection
- Multiple security functions, including firewall, VPN, intrusion prevention, and online behavior management, for complete versatility
- Refined bandwidth management based on application and website category to prioritize bandwidth for mission-critical services
- Detection and prevention of unknown threats, such as zero-day attacks, using sandboxing and the reputation system*

Simple management and rapid deployment
- Zero-configuration deployment using USB disks to improve deployment efficiency
- Predefined common-scenario defense templates to facilitate security policy deployment
- Intelligent detection of redundant and invalid policies
- Supports cloud-based management and enables Huawei Agile Controller-Cloud Manager to manage and configure the firewalls

Flexible bandwidth management, improving Internet access experience
- Differentiated user bandwidth and quota management for fair and prioritized bandwidth usage

HUAWEI

- Application-based bandwidth management to prioritize bandwidth for mission-critical applications
- Modification of URL category priority

Deployment

Secure interconnections between enterprise branches

- Inspect services in six dimensions (application, user, content, threat, time, and location) and provide refined service access control at the Internet egress.
- Establish IPsec or L2TP over IPsec permanent tunnels for branches and partners with fixed VPN gateways (L2TP over IPsec tunnel is recommended if account authentication is required).
- Provide SSL VPN for remote access of people on the move and implement fine-grained control over the resources accessible to users.
- Authenticate VPN tunnel users to ensure they are legitimate and authorized.
- Enable intrusion prevention, antivirus, file blocking, and data filtering functions to prevent remote access users from introducing network threats or leaking information.
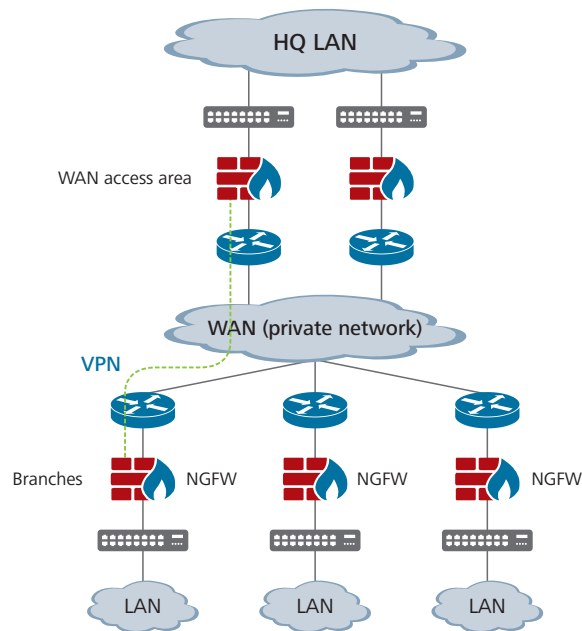
Hardware

USG6330/6350/6360
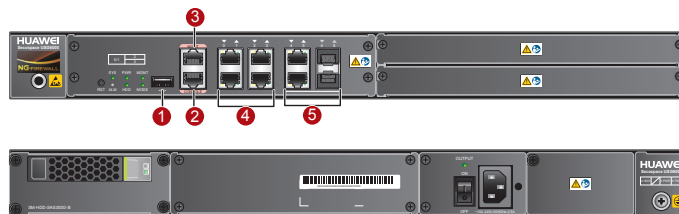
Interfaces
1. USB Port
2. Console Port
3. 1 x GE (RJ45) Management Port
4. 4 x GE (RJ45) Ports
5. 2 x GE (Combo) Ports

Table 1. Wide Service Interface Cards (WSICs) for USG6300 Series

Feature	2XG8GE	8GE
Technical Specification		
Integrated Ports	2 x 10 GE (SFP+), 8 x GE (RJ45)	8 x GE (RJ45)

Feature	8GEF	4GE-BYPASS
Technical Specification		
Integrated Ports	8 x GE (SFP)	4 x GE (RJ45) BYPASS

Software Features

Function	Description
Integrated Protection	Provides firewall, VPN, intrusion prevention, antivirus, data leak prevention, bandwidth management, Anti-DDoS, URL filtering, and anti-spam functions.
Application Identification and Control	Identifies common applications, supports application-specific access control, and combines application identification with intrusion prevention, antivirus, and data filtering to improve detection performance and accuracy.
Intrusion Prevention and Web Protection	Obtains the latest threat information in a timely manner for accurate detection and prevention of vulnerability exploits and web attacks, such as cross-site scripting and SQL injection attacks.
Antivirus	Rapidly detects over five million types of viruses through the daily-updated signature database.
Anti-APT*	Interworks with the sandbox to detect and block malicious files.
Data Leak Prevention	Inspects files to identify the file type, such as WORD, EXCEL, POWERPOINT, and PDF, based on file contents, and filters sensitive content.
Bandwidth Management	Manages per-user and per-IP bandwidth in addition to identifying service applications to prioritize mission-critical services and users through methods such as peak bandwidth and committed bandwidth, policy-based routing (PBR), and application forwarding priority adjustment.
URL Filtering	Can access a URL category database of over 120 million URLs to manage access by URL category, such as blocking malicious URLs and accelerating access to specified categories.
Behavior and Content Audit	Audits and traces the sources of URL access based on the user IP address and requested content.
Load Balancing	Supports server load balancing and link load balancing, fully utilizing existing network resources.
Intelligent Uplink Selection	Supports service-specific PBR and intelligent uplink selection based on multiple load balancing algorithms (for example, based on bandwidth ratio and link health status) in multi-homing scenarios.

Function	Description
VPN Encryption	Supports multiple highly reliable VPN features, such as IPsec VPN, SSL VPN, L2TP VPN, and GRE. Supports IPsec intelligent link selection and dynamic IPsec tunnel switchover to improve link availability.
SSL Encrypted Traffic Detection	Serves as a proxy to detect and defend against threats in SSL-encrypted traffic using application-layer protection methods such as intrusion prevention, antivirus, data filtering, and URL filtering.
Anti-DDoS	Defends against more than 10 types of common DDoS attacks, including SYN flood and UDP flood attacks.
User Authentication	Supports multiple user authentication methods, including local, RADIUS, HWTACACS, SecurID, AD, CA, LDAP, and Endpoint Security.
Security Virtualization	Allows users to create and manage virtual security services, including firewall, intrusion prevention, and antivirus services, on the same physical device.
Policy Management	Provides predefined common-scenario defense templates to facilitate security policy deployment. Automatically evaluates risks in security policies and provides tuning suggestions. Detects redundant and conflicting policies to remove unnecessary and incorrect policies.
	Provides the firewall policy management solution in partnership with FireMon to reduce O&M costs and potential faults.*
Diversified Reports	Provides visualized and multi-dimensional reports by user, application, content, time, traffic, threat, and URL.[1]
	Generates network security analysis reports on the Huawei security center platform to evaluate the current network security status and provide optimization suggestions.*
Routing	Supports IPv4 static routes, policy-based routing, routing policies, multicast, RIP, OSPF, BGP, and IS-IS. Supports IPv6 static routes, policy-based routing, routing policies, RIPng, OSPFv3, BGP4+, and IPv6 IS-IS.
Working Mode and High Availability	Supports multiple working modes (transparent, routing, and hybrid), high availability modes (active/active and active/standby), and link high-availability technologies (IP-Link, BFD, and Link-group).
Device Management Capability	Built-in Web UI: Provides abundant device management and maintenance functions, including log report, configuration, and troubleshooting.
	eSight network management: Manages the performance, alarms, resources, configurations, and topology of the entire network.
	Agile Controller: Implements application- and user-specific security policy control in the Huawei SDN Agile Network Solution.*
	LogCenter security event management system: Provides functions such as security posture awareness, report management, log audit, and centralized alarm management.
	API: Supports both NETCONF* and RESTCONF northbound APIs to enable users to centrally configure and maintain firewalls via an upper-level controller to simply the O&M.

1: If no hard disk is inserted, you can view and export system and service logs. By inserting a hard disk, you can also view, export, customize, and subscribe to reports.

Functions marked with * are supported only in USG V500R001 and later versions.

Specifications *

System Performance and Capacity

Model	USG6330	USG6350	USG6360
IPv4 Firewall Throughput[1] (1518/512/64-byte, UDP)	1/1/0.4 Gbit/s	2/2/0.4 Gbit/s	3/2.5/0.4 Gbit/s
IPv6 Firewall Throughput[1] (1518/512/84-byte, UDP)	1/1/0.5 Gbit/s	2/2/0.5 Gbit/s	3/3/0.5 Gbit/s
Firewall Throughput (Packets Per Second)	0.6 Mpps	0.6 Mpps	0.6 Mpps
Firewall Latency (64-byte, UDP)	40 μs	40 μs	40 μs
FW + SA* Throughput[2]	1 Gbit/s	1.2 Gbit/s	1.4 Gbit/s
FW + SA + IPS Throughput[2]	500 Mbit/s	950 Mbit/s	1.1 Gbit/s
FW + SA + Antivirus Throughput[2]	500 Mbit/s	950 Mbit/s	1.1 Gbit/s
FW + SA + IPS + Antivirus + URL Throughput[2]	300 Mbit/s	400 Mbit/s	500 Mbit/s
FW + SA + IPS + Antivirus Throughput (Realworld)[3]	300 Mbit/s	350 Mbit/s	400 Mbit/s
Concurrent Sessions (HTTP1.1)[1]	1,500,000	2,000,000	3,000,000
New Sessions/Second (HTTP1.1)[1]	30,000	30,000	30,000
IPsec VPN Throughput[1] (AES-128 + SHA1, 1420-byte)	700 Mbit/s	800 Mbit/s	900 Mbit/s
Maximum IPsec VPN Tunnels (GW to GW)	4,000	4,000	4,000
Maximum IPsec VPN Tunnels (Client to GW)	4,000	4,000	4,000
SSL Inspection Throughput[4]	40 Mbit/s	40 Mbit/s	40 Mbit/s
SSL VPN Throughput[5]	50 Mbit/s	50 Mbit/s	50 Mbit/s
Concurrent SSL VPN Users (Default/Maximum)	100/500	100/500	100/500
Security Policies (Maximum)	15,000	15,000	15,000
Virtual Firewalls (Default/Maximum)	10/50	10/50	10/50
URL Filtering: Categories	More than 130		
URL Filtering: URLs	Can access a database of over 120 million URLs in the cloud		
Automated Threat Feed and IPS Signature Updates	Yes, an industry-leading security center from Huawei (http://sec.huawei.com/sec/web/index.do)		
Third-Party and Open-Source Ecosystem[6]	Open APIs for integration with third-party products through RESTCONF and NETCONF interfaces Other third-party management software based on SNMP, SSH, and syslog Collaboration with third-party tools, such as FireMon Collaboration with Anti-APT solution		
Centralized Management	Centralized configuration, logging, monitoring, and reporting is performed by Huawei eSight and LogCenter		

Model	USG6330	USG6350	USG6360
VLANs (maximum)	4,094		
VLANIF Interfaces (Maximum)	1,024		
High Availability Configurations	Active/Active, Active/Standby		

1. Performance is tested under ideal conditions based on RFC 2544 and RFC 3511. The actual result may vary with deployment environments.
2. Antivirus, IPS, and SA performances are measured using 100 KB of HTTP files.
3. Throughput is measured with the Enterprise Traffic Model.
4. SSL inspection throughput is measured with IPS-enabled and HTTPS traffic using TLS v1.2 with AES256-SHA.
5. SSL VPN throughput is measured using TLS v1.2 with AES128-SHA.
6. USG6000 V100R001 supports only the RESTCONF interface and cannot interwork with sandbox or third-party tools.
* SA indicates Service Awareness.
* This content is applicable only to regions outside mainland China. Huawei reserves the right to interpret this content.

Hardware Specifications

Model	USG6330	USG6350	USG6360
Dimensions (H x W x D) mm	44.4 x 442 x 421		
Form Factor/Height	1U		
Fixed Interfaces	4 x GE (RJ45) + 2 x GE (Combo)		
USB2.0 Port	Supported		
Expansion Slot	2WSIC*		
Expansion I/O	WSIC: 2 x 10 GE (SFP+) + 8 x GE (RJ45), 8 x GE (RJ45), 8 x GE (SFP), 4 x GE (RJ45) BYPASS		
Maximum Number of Interfaces	22 x GE (RJ45) + 4 x 10GE (SFP+) or 18 x GE (SFP) + 4 x GE (RJ45)		
MTBF	11.58 years		
Weight (Full Configuration)	7.9 kg		
Local Storage	Optional. Supports a 300 GB hard disk (The hard disk is hot-swappable, but the hard disk card is not.)		
AC Power Supply	100V to 240V, 50/60Hz		
Power Consumption (Average/Maximum)	30.7W/107.83W		
Heat Dissipation	368 BTU/h		
Power Supplies	Single 150W AC power supply; optional 170W AC power supply		
Operating Environment (Temperature/Humidity)	Temperature: 0°C to 45°C (without optional HDD); 5°C to 40°C (with optional HDD) Humidity: 5% to 95% (without optional HDD), non-condensing; 5% to 90% (with optional HDD), non-condensing		
Non-operating Environment	Temperature: -40°C to +70°C Humidity: 5% to 95% (without optional HDD), non-condensing; 5% to 90% (with optional HDD), non-condensing		
Operating Altitude (maximum)	5,000 meters (without optional HDD); 3,000 meters (with optional HDD)		
Non-operating Altitude (maximum)	5,000 meters (without optional HDD); 3,000 meters (with optional HDD)		
Noise	54.1 dBA		

*WISC is not hot-swappable.

Certifications

Certifications	
Software	ICSA Labs: Firewall, IPS, IPsec, SSL VPN CC: EAL4+
Hardware	CB, CE-SDOC, ROHS, REACH&WEEE(EU), RCM, ETL, FCC&IC, VCCI, BSMI

Regulatory, Safety, and EMC Compliance

Certifications	
Regulatory Compliance	Products comply with CE markings per directives 2014/30/EU and 2014/35/EU.
Safety	• UL 60950-1 • CSA-C22.2 No. 60950-1 • EN 60950-1 • IEC 60950-1
EMC: Emissions	• AS/NZS CISPR 22 • CISPR 22 Class A • EN 55022 Class A • ETSI EN 300 386 • IEC 61000-6-4/EN 61000-6-4 • IEC 61000-3-2/EN 61000-3-2 • IEC 61000-3-3/EN 61000-3-3 • FCC CFR47 Part 15 Subpart B Class A • ICES-003 Class A • VCCI V-3 Class A • CNS 13438 Class A
EMC: Immunity	• EN 55024 • CISPR 24 • ETSI EN 300 386 • IEC 61000-6-2/EN 61000-6-2 • CNS 13438 Class A

Ordering Guide

Product	Model	Description
USG6330	USG6330-AC	USG6330 AC Host(4GE(RJ45)+2GE Combo, 4GB Memory, 1 AC Power)
USG6330	USG6330-BDL-AC	USG6330 AC Host(4GE(RJ45)+2GE Combo, 4GB Memory, 1 AC Power, with IPS-AV-URL Function Group Update Service Subscribe 12 Months)
USG6350	USG6350-AC	USG6350 AC Host(4GE(RJ45)+2GE Combo, 4GB Memory, 1 AC Power)
USG6350	USG6350-BDL-AC	USG6350 AC Host(4GE(RJ45)+2GE Combo, 4GB Memory, 1 AC Power, with IPS-AV-URL Function Group Update Service Subscribe 12 Months)
USG6360	USG6360-AC	USG6360 AC Host(4GE(RJ45)+2GE Combo, 4GB Memory, 1 AC Power)

Product	Model	Description
USG6360	USG6360-BDL-AC	USG6360 AC Host(4GE(RJ45)+2GE Combo, 4GB Memory, 1 AC Power, with IPS-AV-URL Function Group Update Service Subscribe 12 Months)

Business Module Group

Product	Model	Description
WSIC	WSIC-8GE	8GE Electric Ports Interface Card
WSIC	WSIC-4GEBYPASS	4GE Electric Ports Bypass Card
WSIC	WSIC-8GEF	8GE Optical Ports Interface Card
WSIC	WSIC-2XG8GE	2*10GE Optical Ports+8GE Electric Ports Interface Card

Hard Disk Group

Product	Model	Description
HDD	SM-HDD-SAS300G-B	300GB 10K RPM SAS Hard Disk for 1U rack Gateway

Function License

Product	Model	Description
Virtual Firewall	LIC-VSYS-10-USG6000	Quantity of Virtual Firewall (10 Vsys)
	LIC-VSYS-20-USG6000	Quantity of Virtual Firewall (20 Vsys)
	LIC-VSYS-50-USG6000	Quantity of Virtual Firewall (50 Vsys)
SSL VPN Concurrent Users	LIC-SSL-100-USG6000	Quantity of SSL VPN Concurrent Users(100 Users)
	LIC-SSL-200-USG6000	Quantity of SSL VPN Concurrent Users(200 Users)
	LIC-SSL-500-USG6000	Quantity of SSL VPN Concurrent Users(500 Users)

NGFW License

Product	Model	Description
IPS Update Service	LIC-IPS-12-USG6300-02	IPS Update Service Subscribe 12 Months(Applies to USG6330/50/60)
	LIC-IPS-36-USG6300-02	IPS Update Service Subscribe 36 Months(Applies to USG6330/50/60)
URL Filtering Update Service	LIC-URL-12-USG6300-02	URL Filtering Update Service Subscribe 12 Months(Applies to USG6330/50/60)
	LIC-URL-36-USG6300-02	URL Filtering Update Service Subscribe 36 Months(Applies to USG6330/50/60)
Anti-Virus Update Service	LIC-AV-12-USG6300-02	Anti-Virus Update Service Subscribe 12 Months(Applies to USG6330/50/60)
	LIC-AV-36-USG6300-02	Anti-Virus Update Service Subscribe 36 Months(Applies to USG6330/50/60)
IPS-AV-URL Function Group	LIC-IPSAVURL-12-USG6300-02	IPS-AV-URL Function Group Subscribe 12 Months(Applies to USG6330/50/60)
	LIC-IPSAVURL-36-USG6300-02	IPS-AV-URL Function Group Subscribe 36 Months(Applies to USG6330/50/60)

Basic License

Product	Model	Description
Content Filtering	LIC-CONTENT	Content Filtering Function

About This Publication

This publication is for reference only and does not constitute any commitments or guarantees. All trademarks, pictures, logos, and brands mentioned in this document are the property of Huawei Technologies Co., Ltd. or a third party.
For more information, visit http://e.huawei.com/en/products/enterprise-networking/security.