USG6000E-S13

Overview

Table 2-8 Basic information about the USG6000E-S13

Description	Part Number	Model	First supported version
USG6000E-S13-AC Host(2*GE RJ45 + 8*GE COMBO + 2*10GE SFP+,1 AC power,Include SSL VPN 100 Users)	02355YXM	USG6000E-S13-AC	V600R007C20SPC605

Appearance

Figure 2-7 Appearance of the USG6000E-S13 (front view)

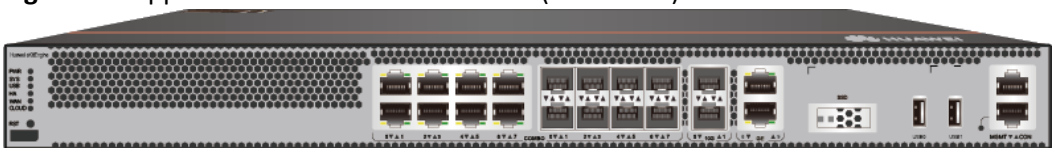
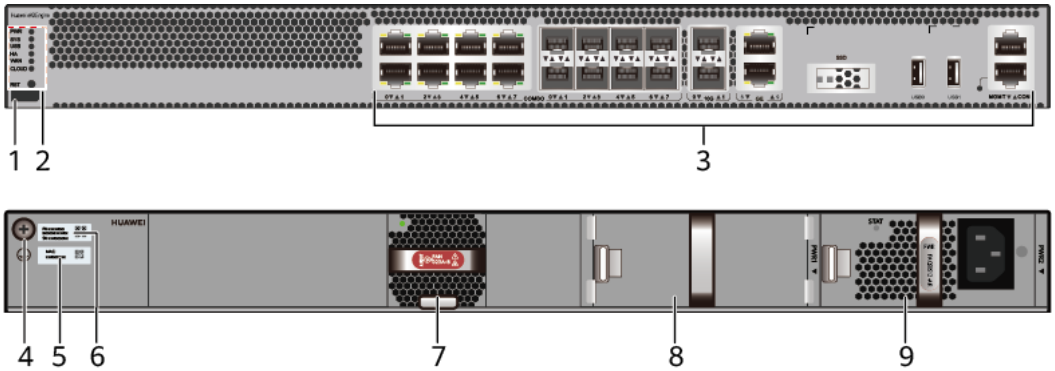


Figure 2-8 Appearance of the USG6000E-S13 (rear view)

Components

Figure 2-9 Components of the USG6000E-S13



1. Product series ID	2. Indicator and button area	3. Fixed interface area	4. Protective ground terminal	5. MAC label

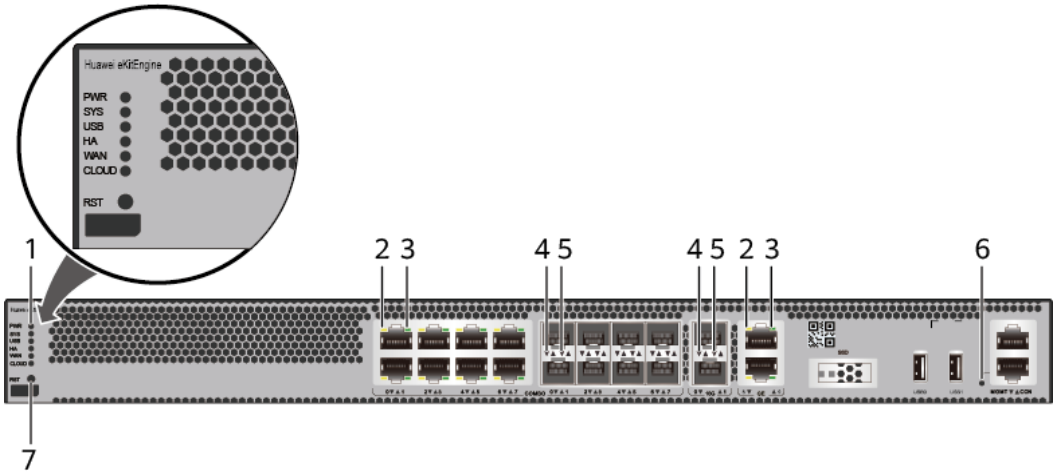
6. SN label	7. Fan module	8. Optional power module slot	9. Power module	-

Table 2-9 Component functions

Name	Description
Product series ID	Indicates the product series of the device. For details about the product model, see the nameplate in the lower part of the device.
Indicator and button area	Provides multiple indicators to display the running status of the device in real time and provides the RST button for emergency maintenance.
Fixed interface area	Provides service ports, USB ports, console ports, and out-of-band management ports for device configuration and maintenance.
Protective ground terminal	Connects the M4 OT terminal of a PGND cable to the cabinet or the ground bar in the equipment room.
MAC label	Uniquely identifies the MAC address of the device, which is required during network forwarding configuration.
SN label	Uniquely identifies the device, which needs to be provided for the local technical support personnel to apply for a license.
Fan module	Dissipates heat for the device and is swappable. The fan module can be removed for no more than 1 minute. The slot number of the fan module is 4.
Power module	Provides power input and distribution for the device. One power module is included in the standard configuration. Two power modules can be configured to achieve 1+1 power redundancy. When one power module is running properly, the other one is hot swappable. The silkscreens of the power module slots are PWR1 and PWR2, and the corresponding slot numbers are 2 and 3 respectively.

Indicators and Buttons

Figure 2-10 Indicators and buttons on the USG6000E-S13



1. PWR, SYS, USB, HA, WAN and CLOUD indicators	2. GE electrical port ACT indicator	3. GE electrical port LINK indicator	4. Optical port ACT indicator	5. Optical port LINK indicator
6. MGMT port indicator	7. RST button	-	-	-

NOTE

Arrowheads of optical ports show the positions of the ports. A down arrowhead indicates a port in the upper part, and an up arrowhead indicates a port in the lower part.

Table 2-10 Indicators on the USG6000E-S13

Silkscreen	Name	Color	Status	Description
PWR	Power indicator	Green	Steady on	The power module is working properly.
		-	Off	The power module is faulty or the device is not powered on.
SYS	SYS indicator	Green	Steady on	The system is being powered on or restarted.

Silkscreen	Name	Color	Status	Description
		Green	Blinks once every 2 seconds (0.5 Hz).	The system is running normally.
		Green	Blinking four times every second (4 Hz)	The system is starting.
		Red	Steady on	• The system is faulty. • The power supply is abnormal. • The fan module is abnormal. **NOTE:** If the system starts with two power modules and one power module is not powered on, the SYS indicator is steady red, but the system is running properly.
		-	Off	The system is not running.
USB	USB indicator	Green	Steady on	USB-based deployment has been completed.

Silkscreen	Name	Color	Status	Description
		Green	Blinking four times every second (4 Hz)	The system is reading data from the USB flash drive.
		Red	Steady on	USB-based deployment fails.
		-	Off	USB-based deployment is disabled (default state).
HA	HA indicator	Green	Steady on	Hot backup, managing the master device
		Green	Blinks once every 2 seconds (0.5 Hz).	Hot backup, managing the slave device
		Red	Steady on	Dual-system hot backup is faulty.
		-	Off	The dual-system hot backup function is disabled.
WAN	WAN indicator	-	Off	Reserved function. This function is not enabled.
CLOUD	CLOUD indicator	Green	Steady on	Connected to the cloud management platform.

Silkscreen	Name	Color	Status	Description
		Green	Blinking four times every second (4 Hz)	Connecting to the cloud management platform, transmitting or receiving data.
		-	Off	The device is not connected to the cloud management platform.
-	ACT indicator of the GE electrical port	Yellow	Blinking (12 Hz)	The port is sending or receiving data.
		-	Off	The port is not sending or receiving data.
-	LINK indicator of the GE electrical ports	Green	Steady on	The port link is connected.
		-	Off	No link is established on the port.
-	ACT indicator of the optical port	Yellow	Blinking (12 Hz)	The port is sending or receiving data.
		-	Off	The port is not sending or receiving data.
-	LINK indicator of	Green	Steady on	The port link is connected.

Silkscreen	Name	Color	Status	Description
	an optical port	-	Off	No link is established on the port.
-	MGMT port indicator	Green	Steady on	The port link is connected.
		Green	Blinking (12 Hz)	The port is sending or receiving data.
		-	Off	No link is established on the port.

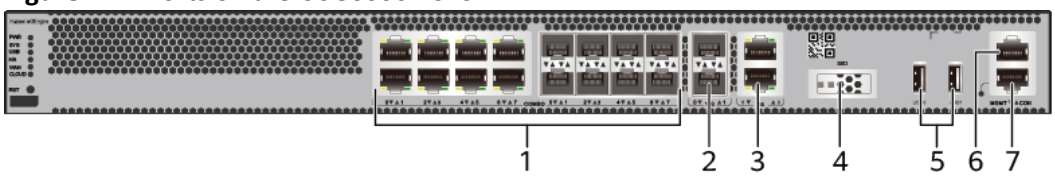
Table 2-11 Buttons on the USG6000E-S13

Silkscreen	Name	Description
RST	RST button	When the device is running properly, you can press the RST button to restart the device. You are advised to save the current configuration before pressing the RST button. This button can also be used to restore the default settings with one click. If you press and hold the RST button for 5 seconds and then release the RST button, the device restores its default settings and restarts. **NOTE:** If needed, you can run the factory-configuration prohibit command in the system view to disable the function of restoring

Silkscreen	Name	Description
		the factory settings by holding down the RST button. To enable this function again, run the undo factory-configuration prohibit command.

Ports

Figure 2-11 Ports on the USG6000E-S13



1. Combo port	2. 10GE optical port	3. GE electrical port	4. SSD card slot	5. USB port
6. Console port	7. MGMT port	-	-	-

Table 2-12 Ports on the USG6000E-S13

Port	Connector Type	Description	Available Components
Combo ports (0 to 7)	RJ45 + SFP	Combo ports. Combo ports are logic ports. One combo port can work as a GE electrical interface or a GE optical port. Each combo port has only one internal forwarding port. When the electrical port is enabled, the optical port is disabled. When the optical port is enabled, the	• Ethernet Cable • 100Mbps SFP Optical Modules • 1Gbps eSFP Optical Modules

Port	Connector Type	Description	Available Components
		electrical port is disabled. The electrical and optical ports of a combo port use the same interface view, numbered from GigabitEthernet 0/0/0 to GigabitEthernet 0/0/7. By default, the combo port is used as an electrical port. You can use the combo enable { copper | fiber } command to set the working mode of combo ports according to network requirements. **NOTE:** Arrowheads show the positions of ports. A down arrowhead indicates a port at the bottom, and an up arrowhead indicates a port at the top.	
10GE optical ports (0 to 1)	SFP+	2 10GE optical ports, numbered from XGigabitEthernet 0/0/0 to XGigabitEthernet 0/0/1.	• 1Gbps SFP Copper Modules • 1Gbps eSFP

Port	Connector Type	Description	Available Components
		NOTE: By default, the rate of 10GE optical ports are 10GE. You can run the set device port-config-mode [10ge | ge] command to set the rate of 10GE optical ports are to 10GE or GE as required.	Optical Modules • 10Gbps SFP+ Optical Modules
GE electrical ports (8 to 9)	RJ45	2 10/100/1000M autosensing Ethernet electrical ports, numbered from GigabitEthernet 0/0/8 to GigabitEthernet 0/0/9. The device is connected to the WAN or cloud management center using a network cable.	Ethernet Cable
SSD card slot	-	The M.2 module is inserted to record logs and reports in real time. The M.2 module is optional. You can purchase the M.2 module as required.	• Hard Disk Unit M.2-SATA64G-A • Hard Disk Unit M.2-SATA64G-B • Hard Disk Unit M.2-

Port	Connector Type	Description	Available Components
			SATA240G-A • Hard Disk Unit M.2-SATA960G-A
USB0	USB Type A	USB port allows you to insert an USB flash drive for system software upgrades. For details on upgrades through USB flash drives, refer to the Upgrade Guide delivered with the device.	USB flash drive
USB1	USB Type A	USB ports allow you to insert USB devices for system software upgrades. For details on upgrades through USB devices, refer to the Upgrade Guide delivered with the device.	USB flash drive
Console port	RJ45	Console ports allow you to locally connect a PC to the device. You can use a console cable to connect the console port (RJ45) on the	Console Cable

Port	Connector Type	Description	Available Components
		device to the COM port on your PC and use a serial port terminal program on your PC to access, configure, and manage the device.	
MGMT port	RJ45	Out-of-band 10/100/1000M RJ45 autosensing Ethernet management port. The interface number is METH 0/0/0 and the default IP address of the interface is 192.168.0.1. You can connect this port to the network port or any reachable port on a PC through a network cable. Then, you can use Telnet to access the CLI or use a web browser to access the web UI to configure, manage, and maintain the device. **NOTE:**	Ethernet Cable

Port	Connector Type	Description	Available Components
		The MGMT port cannot be used as a service port.	

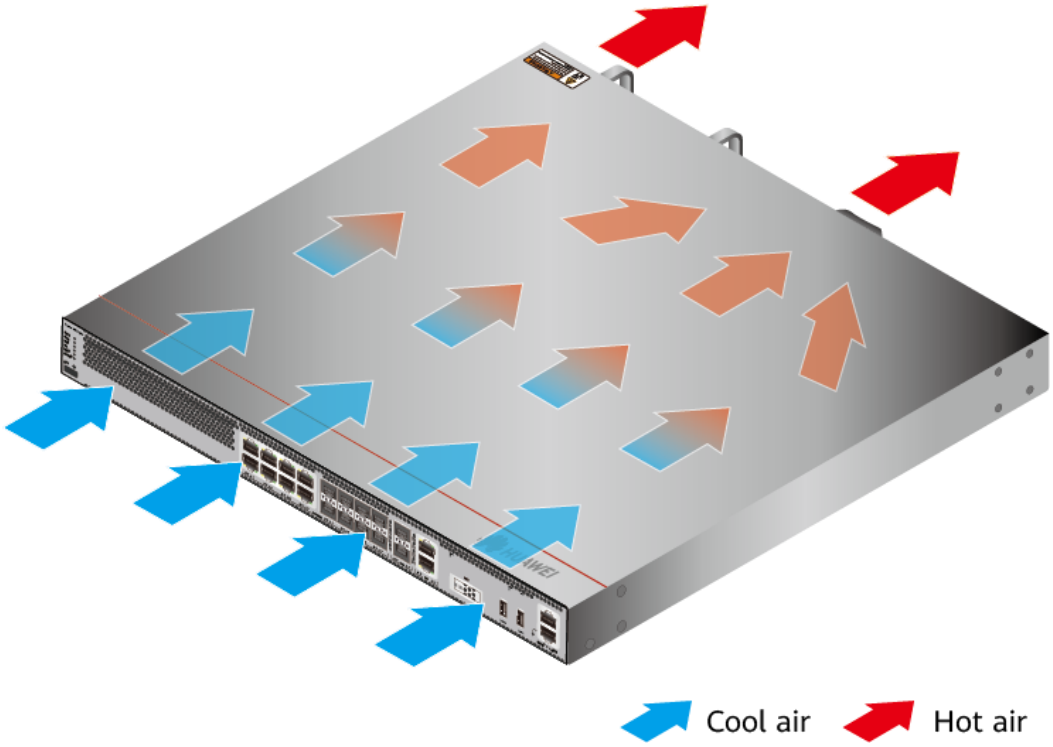
Power Supply System

The power supply system has one PAC60S12-AR AC power module, but two power modules can be configured for 1+1 power redundancy.

Heat Dissipation System

The heat dissipation system uses one FAN-023A-B module to dissipate heat for the system. From the front panel, the device provides a front-to-rear air flow. The fan module locates at the air exhaust of the system.

Figure 2-12 System air flow of the USG6000E-S13



Technical Specifications

Table 2-13 Technical specifications of the USG6000E-S13-AC

Item	Specification
Installation Type	• Rack • Work bench

Item	Specification
Cabinet installation standard	Cabinet with a depth of 600 mm or above
Dimensions without packaging (H x W x D) [mm(in.)]	• Typical dimensions (excluding the parts protruding from the body): 43.6 mm x 442 mm x 420 mm (1.72 in. x 17.4 in. x 16.54 in.) • Maximum dimensions (the depth is the distance from ports on the front panel to the handle on the rear panel): 43.6 mm x 442 mm x 453 mm (1.72 in. x 17.4 in. x 17.83 in.)
Dimensions with packaging (H x W x D) [mm(in.)]	220 mm x 550 mm x 530 mm (8.66 in. x 21.65 in. x 20.87 in.)
Chassis height [U]	1 U
Weight with packaging [kg(lb)]	7.93 kg (17.48 lb)
Weight without packaging [kg(lb)]	5.95 kg (13.12 lb)
CPU	1 CPU, 4 cores/CPU, up to 1.4 GHz
Memory	4 GB DDR4 ECC memory
NOR Flash	64 MB
NAND Flash	2 GB
Hard disk	Optional, M.2 SSD, hot-swappable. For details, see the description of M.2 in Storage Devices > Hard Disk.
Console port	RJ45
Eth Management port	RJ45

Item	Specification
Typical power consumption [W]	25 W
Typical heat dissipation [BTU/hour]	85.4 BTU/hour
Maximum power consumption [W]	45.3 W
Maximum heat dissipation [BTU/hour]	154.4 BTU/hour
MTBF [years]	68.98 years
MTTR [hours]	2 hours
Availability	0.999997
Power supply mode	AC pluggable
Number of power modules	1
Redundant power supply	Dual power modules can be purchased to form 1+1 redundancy backup.
Rated input voltage [V]	100 V to 240 V, 50 Hz/60 Hz
Input voltage range [V]	90 V to 290 V, 47 Hz to 63 Hz
Maximum input current [A]	2 A/power module
Rated output power [W]	60 W/12 V
Maximum output power [W]	60 W/power module
Types of fans	Pluggable
Number of fan modules	1
Automatic fan speed adjustment	Supported

Item	Specification
Heat dissipation mode	Absorbing cold air into the device
Airflow direction	Front-to-back airflow
Noise at normal temperature (acoustic power) [db(A)]	≤55dB(A)
Long-term operating temperature [°C(°F)]	0°C to 45°C (32°F to 113°F)
Storage temperature [°C(°F)]	–40°C to +70°C (–40°F to +158°F)
Storage environment	ETSI EN 300 019-1-1 Class 1.2 **NOTE:** • The product has a valid storage period of one year. • The valid storage period refers to the period during which the product maintains the required quality when stored with packing materials in an environment that meets the preceding requirements.
Long-term operating relative humidity [RH]	5% RH to 95% RH, non-condensing
Storage relative humidity [RH]	5% RH to 95% RH, non-condensing
Long-term operating altitude [m(ft.)]	0 m to 5000 m (0 ft to 16404 ft)
Storage altitude [m(ft.)]	0 m to 5000 m (0 ft to 16404 ft)

NOTE

- The width does not include the size of mounting ears.
- The height is 1U (1U = 1.75 inches, or about 44.45 mm), which is a height unit defined in International Electrotechnical Commission (IEC) 60297 standards.

- Temperature and humidity are measured 1.5 m above the floor and 0.4 m in front of the rack when no protection plate exists before or after the rack.