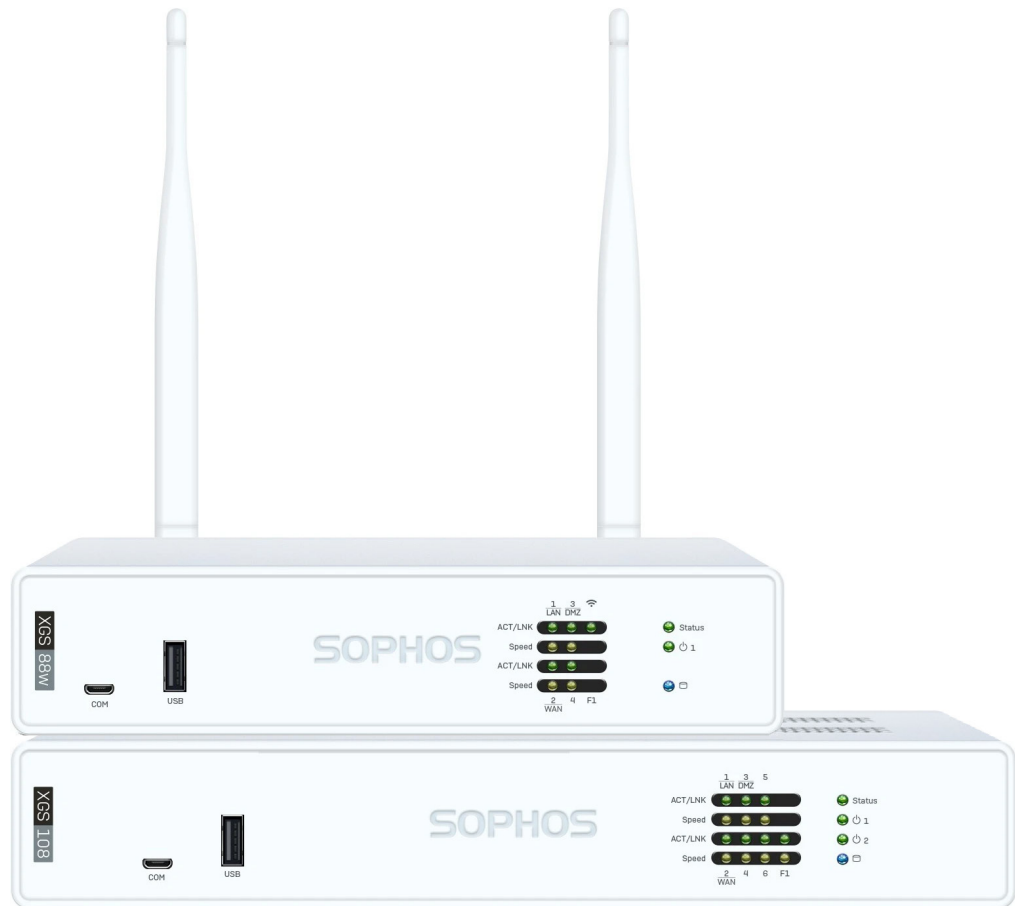


SOPHOS

Operating Instructions

XGS 88(w)/108(w)



Foreword

We are pleased to welcome you as a new customer of our Sophos XGS Series appliances.

To install and configure the hardware appliance you can use the following documents:

Hardware Quick Start Guide: Connection to the system peripherals in a few steps

Sophos Firewall How-To Library: Installing and configuring the software appliance

The Hardware Quick Start Guide and the Safety Instructions are also delivered in printed form together with the hardware appliance. The instructions must be read carefully prior to using the hardware and should be kept in a safe place.

You may download all user manuals and additional documentation from the support webpage at: sophos.com/support



Security Symbols

The following symbol and its meaning appears in the Hardware Quick Start Guide, Safety Instructions and in these Operating Instructions.

Caution and Important Note. If these notes are not correctly observed:

- This is dangerous to life or the environment
- The appliance may be damaged
- The functions of the appliance will no longer be guaranteed
- Sophos shall not be liable for damages arising from a failure to comply with the Safety Instructions

Designed Use

The hardware appliances are developed for use in networks. The 88(w)/108(w) models may be operated as standalone appliances. The hardware appliance can be used in commercial, industrial, and residential environments.

The 88(w)/108(w) models belongs to the appliance group B.

The hardware appliance must be installed pursuant to the current installation notes. Otherwise, failure-free and safe operation cannot be guaranteed. The EU declaration of conformity is available from the following address:

Sophos Technology GmbH
Gustav-Stresemann-Ring 1
65189 Wiesbaden
Germany

CE Labeling, FCC and Approvals

The XGS 88(w)/108(w) appliances comply with CB, CE, UL, FCC Class B, ISED, VCCI, CCC, KC, BSMI, RCM, NOM, Anatel, UKCA.

Environmental Approvals

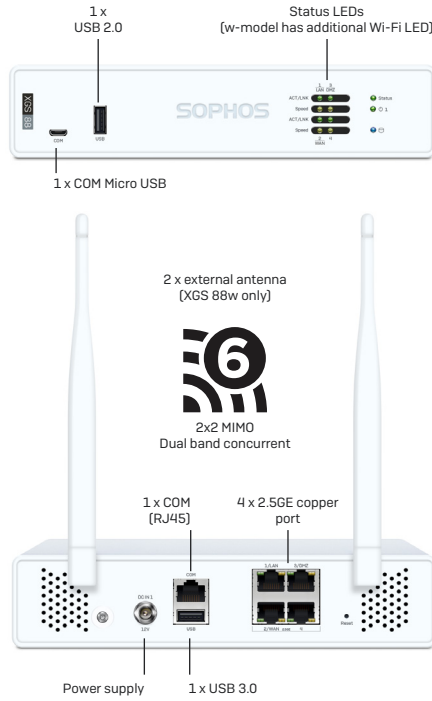
The XGS 88(w)/108(w) appliances comply with WEEE, RoHS 3, China RoHS, BSMI RoHS, REACH 2016+ and CMRT5.



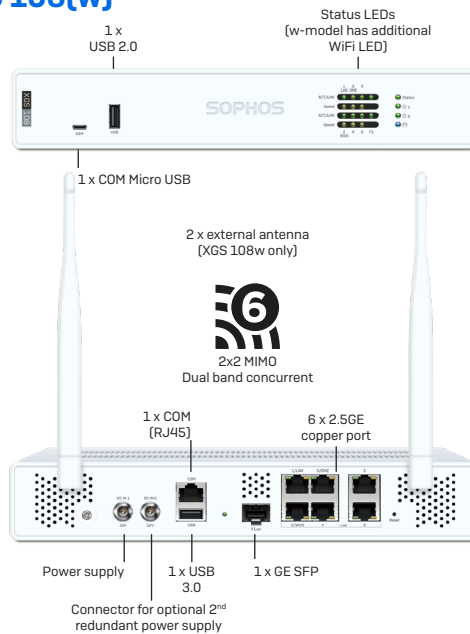
Important Note: For computer systems to remain CE and FCC compliant, only CE and FCC compliant parts may be used. Maintaining CE and FCC compliance also requires proper cable and cabling techniques.

Operating Elements and Connections

XGS 88(w)



XGS 108(w)



Technical Specifications

	XGS 88(w)	XGS 108(w)
Physical Specification		
#Fixed Ethernet Ports	4 x 2.5GE	6 x 2.5GE 1 x SFP
#Cores/Threads main CPU	2/2	2/2
Main Memory	4 GB LPDDR5	6 GB LPDDR5
Storage	16 GB eMMC	64 GB UFS 2.1
Power Supply	External auto-ranging AC-DC 100-240VAC, 1.7A@50-60 Hz 12VDC, 3.33A, 40W	External auto-ranging AC-DC 100-240VAC, 2A@50-60 Hz 12VDC, 5A, 60W
Power Consumption (idle - typical)	12.5 W / 42.65 BTU/hr [88] 14.5 W / 49.48 BTU/hr [88w]	21.5 W / 73.36 BTU/hr [108] 25.5 W / 87.01 BTU/hr [108w]
Power Consumption (full load - typical)	18 W / 61.42 BTU/hr [88] 22 W / 75.07 BTU/hr [88w]	27 W / 92.13 BTU/hr [108] 30 W / 102.36 BTU/hr [108w]
Mounting	Wall, Rack, DIN-Rail	Wall, Rack, DIN-Rail
Dimensions Width x Depth x Height	200 x 180 x 44 mm	260 x 180 x 44 mm
Weight (kg) unpacked/packed	1.4 kg / 3.08 lbs (unpacked) 2 kg /4.41 lbs (packed)	1.8 kg / 3.97 lbs (unpacked) 2.4 kg / 5.29 lbs (packed)
Environmental		
Noise level (avg.) (typical/max)	0 dBA - Fanless	0 dBA - Fanless
Operating Temperature	0°C-40°C	0°C-40°C
Storage Temperature	-20°C-70°C	-20°C-70°C
Operational/Storage Humidity	10% - 90% non-condensing	10% - 90% non-condensing
Altitude	2000m	2000m
MTBF (hours) [Telcordia SR-332 Issue 3]	936,308 [XGS 88] 936,308 [XGS 88w]	1,282,629 [XGS 108] 1,282,629 [XGS 108w]
Certifications [Safety, EMC]	CB, CE, UL, FCC, ISED, VCCI, CCC, KC, BSMI, RCM, NOM, Anatel, TEC, UKCA	CB, CE, UL, FCC, ISED, VCCI, CCC, KC, BSMI, RCM, NOM, Anatel, TEC, UKCA
Wireless Specification [applicable for 'w' models only]		
Radios	1x 2.4 GHz single band, 1x 5 GHz single band	
Antennas	2x external dual band antennas	
Antennas Gain	3.11 dBi (2.4 GHz band); 4.10 dBi (5 GHz)	
MIMO capabilities	2x2:2	
Support WLAN standards	IEEE 802.11 a/b/g/n/ac/ax	
SSIDs	16 (8 per radio)	
Max. Throughput	575 Mbps (2.4 GHz), 1200 Mbps (5 MHz)	

Interfaces

LAN Ports	Type	Speed	Comment
1-4	RJ45	10/100/1000 /2500 Mbps	
5-6 [XGS 108(w) only]	RJ45	10/100/1000 /2500 Mbps	
F1 [XGS 108(w) only]	SFP	1 Gbps	SFP transceivers are sold separately.

Other Ports	Type	Comment
COM	Micro USB [front] RJ45 [back]	You can connect a serial console to the Micro USB or RJ45 COM port to access the CLI. Only one port can be used at any time. If both ports are connected, then the Micro USB port will take precedence. The required connection settings are: <ul style="list-style-type: none"> Bits per second: 38,400 Data bits: 8 Parity: N [none] Stop bits: 1
USB	USB 2.0 [Type A] [front] USB 3.0 [Type A] [back]	You can connect a USB 2.0 and/or 3.0 compatible device to these ports (e.g. USB thumb drive, UPS, 3G/4G dongles).
Reset	Button [back]	Step1: Press for >3 seconds and release Step2: Press for 21 seconds and release Step3: Press and hold for 21 seconds till the Status LED blinks three times in red and then release it. This will reset the unit to factory default settings All configuration, reports, and patterns will be flushed.

LED Status

LEDs on each RJ45 Ethernet Connector			
ACT/LNK [Left LED on RJ45 port]	Green	Solid	Physical connection established
		Flashing	Data Transmit
		Off	No connection

Speed [Right LED on RJ45 port]	Amber	Flashing	If Ethernet port is operating at 2500 Mbps.
	Amber	On	If Ethernet port is operating at 1000 Mbps.
	Green	On	If Ethernet port is operating at 100 Mbps.
		Off	If Ethernet port is operating at 10 Mbps.

LEDs on each SFP Connector			
ACT/LNK	Green	Solid	1. The SFP connector is receiving power. 2. Good connection between the SFP port and link partner.
		Flashing	The adapter is sending or receiving network data.
		Off	1. The adapter and switch are not receiving power. 2. No connection between both ends of network. 3. Network drivers have not been loaded or do not function correctly.

LEDs (Front)			
Storage	Blue	Flashing	Storage drive is being accessed.
Status	Green	Solid	Normal operation.
	Red	Solid	Storage or boot failure.
	Red-Green	Toggling	System is in Fail-Safe mode.
Wi-Fi	Green	On	WiFi is active.
		Off	WiFi is inactive.
Power 1	Green	Solid	Power adapter 1 in normal operation.
	Red	Solid	Power adapter 1 failed or disconnected.
Power 2 [XGS 108(w) only]	Green	Solid	Power adapter 2 in normal operation.
	Red	Solid	Power adapter 2 failed or disconnected.



Starting Operation

Caution: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Scope of Supply

The supplied parts are indicated in the Hardware Quick Start Guide.

Mounting Instructions

The XGS 88/108 appliance can be placed on a stable horizontal surface, can be mounted to a rack, or you can hang it on the wall by using the optionally available rackmount kit.



Warnings and Precautions

The appliance can be operated safely if you observe the following notes and the notes on the appliance itself.

Rack Precautions

- Ensure that the leveling jacks on the bottom of the rack are fully extended to the floor with the full weight of the rack resting on them.
- In single rack installation, stabilizers should be attached to the rack.
- In multiple rack installations, the racks should be attached together.
- Always make sure the rack is stable before extending a component from the rack.
- You should extend only one component at a time—extending two or more simultaneously may cause the rack to become unstable.

General Server Precautions

- Review the electrical and general safety precautions that came with the components you are adding to your appliance.
- Determine the placement of each component in the rack before you install the rails.
- Install the heaviest server components on the bottom of the rack first, and then work up.
- Allow the hot-plug hard drives and power supply modules to cool before touching them.
- Always keep the rack's front door, all panels, and server components closed when not servicing to maintain proper cooling.

Rack Mounting Considerations

- ▶ **Ambient operating temperature:** If installed in a closed or multiunit rack assembly, the ambient operating temperature of the rack environment may be greater than the ambient temperature of the room. Therefore, you should install the equipment in an environment compatible with the manufacturer's maximum-rated ambient temperature.
- ▶ **Reduced airflow:** Equipment should be mounted into a rack with sufficient airflow to allow cooling.
- ▶ **Mechanical loading:** Equipment should be mounted into a rack so that hazardous conditions do not arise due to uneven mechanical loading.
- ▶ **Circuit overloading:** Consideration should be given to the connection of the equipment to the power supply circuitry and the effect that any possible overloading of circuits might have on overcurrent protection and power supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- ▶ **Reliable ground:** Reliable grounding must be maintained at all times. To ensure this, the rack itself should be grounded. Particular attention should be given to power supply connections other than the direct connections to the branch circuit (i.e., the use of power strips, etc.).

Connection and Configuration

How to connect the appliance is described in the Hardware Quick Start Guide. For configuration you can follow the initial setup wizard described in the Web Admin Quick Start Guide or cancel it and perform a manual setup (see the [Sophos Firewall How-To Library](#)).

Serial Console

You can connect a serial console to either of the COM ports of the Sophos XGS hardware appliances. You can use, for instance, the Hyperterminal terminal program which is included with most versions of Microsoft Windows to log on to the appliance console. Use an RJ45 to DB9 adapter cable or the provided USB cable to connect the console to your hardware appliance.

The required connection settings are:

- ▶ **Bits per second:** 38,400
- ▶ **Data bits:** 8
- ▶ **Parity:** N (none)
- ▶ **Stop bits:** 1

Access via the serial console is activated by default on ttyS0. The connections of the appliances and the respective functionality are listed in the chapter 'Operating Elements and Connections'.

Please Note: If you are connecting to the Micro USB port and it doesn't show up as a COM port but as unknown hardware in your system, please download a Micro USB Driver from <https://ftdichip.com/drivers/d2xx-drivers/>.

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