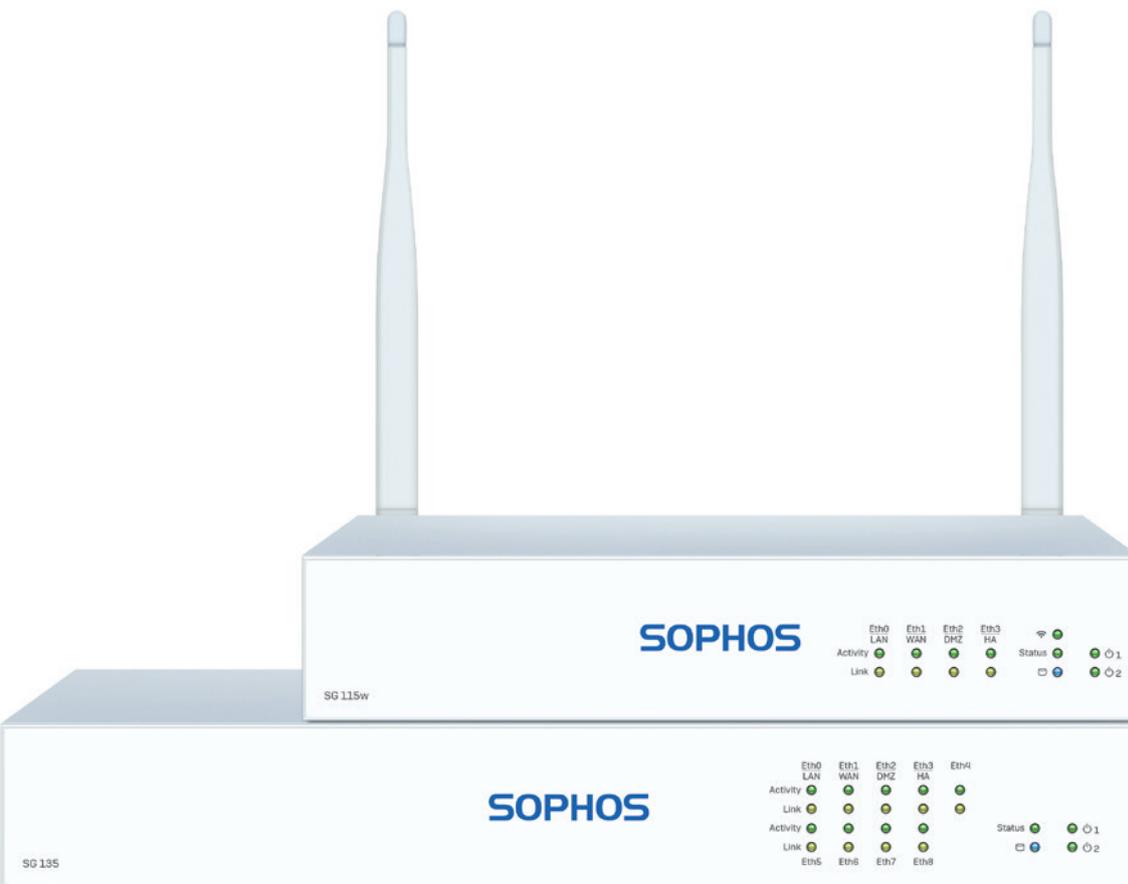


**SOPHOS**

Security made simple.

# Operating Instructions

SG 105(w)/115(w)/125(w)/135(w) Rev. 3



### Foreword

We are pleased to welcome you as a new customer of our Sophos SG 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
- **Operating Instructions:** Notes on the security and commissioning of the hardware appliance
- **Administration Guide:** 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](https://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 and the environment
- The appliance may be damaged
- The functions of the appliance will be no longer 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 SG 105(w)/115(w)/125(w)/135(w) models may be operated as a standalone appliance. The hardware appliance can be used in commercial, industrial and residential environments.

The SG 105(w)/115(w)/125(w)/135(w) models belong 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 at the following address:

**Sophos Technology GmbH**  
**Amalienbadstr. 41/Bau 52**  
**76227 Karlsruhe**  
**Germany**

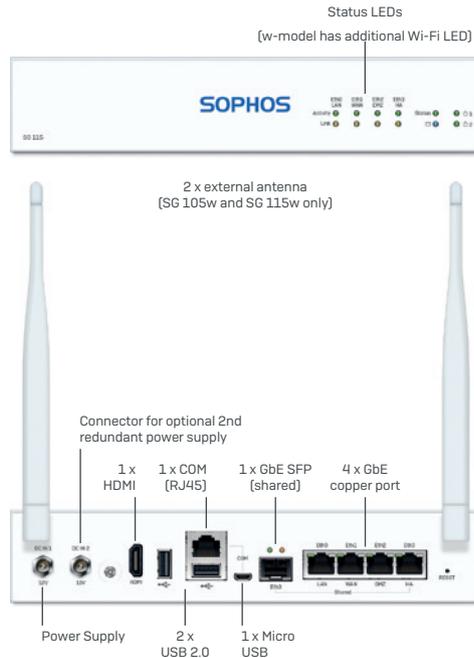
## CE Labeling, FCC and Approvals

The SG 105(w)/115(w)/125(w)/135(w) appliances comply with CB, CE, FCC Class B, ISSED, VCCI, RCM, UL, CCC, and BIS.

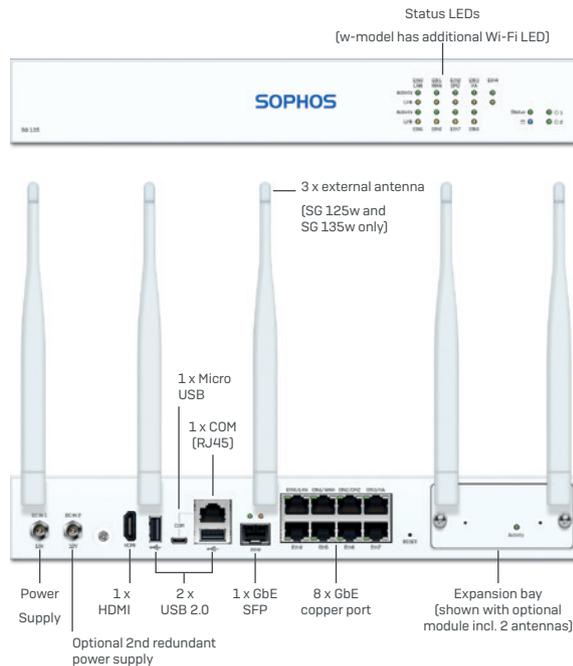


**Important Note:** For computer systems to remain CE and FCC compliant, only CE and FCC compliant parts may be used. Maintaining CE and FCC compliance also requires proper cable and cabling techniques.

## Operating Elements and Connections SG 105(w)/115(w)\* [Rev. 3]



## SG 125(w)/135(w)\* [Rev. 3]



\* The displayed front images are of the SG 115 and 135 device. The displayed back images are of the SG 115w device and the SG 135w. Devices may vary slightly.

## LED Status

LEDs on Front			
<b>Storage</b>	Blue	Flashing	SSD drive is being accessed
<b>Status</b>	Green	Constantly	Normal operation
		Flashing	Device is booting up or shutting down
	Red	Constantly	SSD or boot failure
		Flashing	General error (please contact support)
<b>Wifi</b>	Green	On	Wifi is active
		Off	Wifi is inactive
<b>Power 1</b>	Green	Constantly	Power adapter 1 in normal operation
	Red	Constantly	Power adapter 1 failed or disconnected
<b>Power 2</b>	Green	Constantly	Power adapter 2 in normal operation
	Red	Constantly	Power adapter 2 failed or disconnected

LEDs on each RJ45 Ethernet connector			
<b>ACT/LNK (Left LED)</b>	Green	Constantly	1. The Ethernet port is receiving power. 2. Good connection between the Ethernet port and hub.
		Flashing	The adapter is sending or receiving network data. The frequency of the flashes varies with the amount of traffic.
		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.
<b>Speed (Right LED)</b>	Amber	On	The Ethernet port is operating at 1,000 Mbps.
	Green	On	The Ethernet port is operating at 100 Mbps.
		Off	The Ethernet port is operating at 10 Mbps.

LEDs on SFP connector			
<b>ACT/LNK (Left LED)</b>	Green	Constantly	1. The SFP connector is receiving power. 2. Good connection between the SFP connector and hub.
		Flashing	The adapter is sending or receiving network data. The frequency of the flashes varies with the amount of traffic.
		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.
<b>Speed (Right LED)</b>	Amber	On	The Ethernet port is operating at 1,000 Mbps



## Putting into 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 SG 105(w)/115(w)/125(w)/135(w) appliances can be placed on a stable horizontal surface or 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 coupled 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 multi-unit 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 a hazardous condition does 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 WebAdmin Quick Start Guide or cancel it and perform a manual setup (see the Sophos SG Firewall Administrator Guide).

### SFP Port

The XG1xx rev.3 models provide a SFP port allowing you to either insert a SFP Mini-GBIC (transceiver) to connect to a 1 GbE fiber or copper cable or to insert a VDSL2 SFP modem to directly connect to a VDSL line (via a RJ11 cable).

These modules are not delivered with the appliance but available through your Sophos partner.

Please note that there are different Mini-GBIC module types. The required type is determined by the existing network. The following SFP GBIC module types may be used:

#### SFP:

##### 1000 Base-T

IEEE 802.3 - 1 Gbit/s via Ethernet cable. An Ethernet cable category 5 covers a maximum distance about 100 meters.

##### 1000 Base-SX

IEEE 802.3 - 1 Gbit/s via fiberglass. Multi-mode fiberglass cables (MMF) cover a distance of 200 m to 550 m.

##### 1000 Base-LX

IEEE 802.3 - 1 Gbit/s via fiberglass. Here, exclusively singlemode-fiber glass is used. This transmission option covers approximately 10 km.



**Caution:** The SFP GBIC fiber modules use lasers to transmit signals over fiber optic cable. The lasers are compliant with the requirements of a Class 1 Laser equipment and are inherently eye-safe in normal operation. However, you should never look directly at a transmit port when it is powered on. Always install appropriate and UL approved Laser Class I Transceivers, rated 3.3Vdc, max. 1W, in the fiber ports before using the fiber ports.

**Please note:** on SG 105/115 models the SFP port is shared with RJ45 Ethernet Port 4 and takes precedence over the RJ45 port in case you connect cables to both ports at the same time.

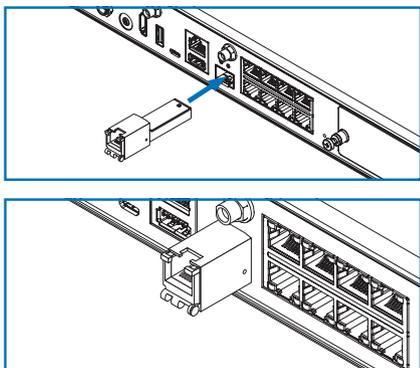
#### Installing a SFP module:

Please read the operation manual to the SFP module. Carefully insert the SFP module into the port until it engages. The interface is immediately ready for use.

Removing a SFP module:

1. Remove the fiberglass cable (if needed) from the module which you wish to remove.
2. Remove the module carefully from the port.

Depending on when you purchased your SFP module, it may have any of three different release mechanisms: a plastic tab on the bottom of the miniGBIC, a wire bail, or a plastic collar around the mini-GBIC. Please read the operation manual to the SFP module



## Expansion Modules

The SG 125(w)/135(w) support an additional expansion module allowing you to insert an optional 3G/4G or Wireless module (on SG 135w only). These modules are not delivered with the appliance but available through your Sophos partner. Please note that there are different 3G/4G modules available depending on the region you want to operate it in Americas/EMEA and APAC.

Please see table below for further details.

Target Region	Americas/EMEA	APAC
<b>4G LTE</b>		
Category	Cat-6	Cat-6
Frequency Bands	B1, B2, B3, B4, B5, B7, B12, B13, B20, B25, B26, B29, B30, B41	B1, B3, B5, B7, B8, B18, B19, B21, B28, B38, B39, B40, B41
<b>3G</b>		
1. Technology supported	WCDMA	WCDMA
Frequency Bands	B1, B2, B3, B4, B5, B8	B1, B5, B6, B8, B9, B19
2. Technology supported		TD-SCDMA
Frequency Bands		B39
<b>DATA SPEED</b>		
Peak Download Rate	300 Mbps	300 Mbps
Peak Upload Rate	50 Mbps	50 Mbps
<b>LOCATION SERVICES</b>		
Satellite Systems	GPS, Galileo, Glonass, Beidou	GPS, Galileo, Glonass, Beidou

For installing the module please read the mounting instructions which are shipped with each module.

## Serial Console

You can connect a serial console to either of the COM ports of the Sophos SG 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 ttyS1. The connections of the appliances and the respective functionality are listed in chapter "Operating Elements and Connections."

## Operating Instructions

United Kingdom and Worldwide Sales  
Tel: +44 (0)8447 671131  
Email: sales@sophos.com

North American Sales  
Toll Free: 1-866-866-2802  
Email: nasales@sophos.com

Australia and New Zealand Sales  
Tel: +61 2 9409 9100  
Email: sales@sophos.com.au

Asia Sales  
Tel: +65 62244168  
Email: salesasia@sophos.com