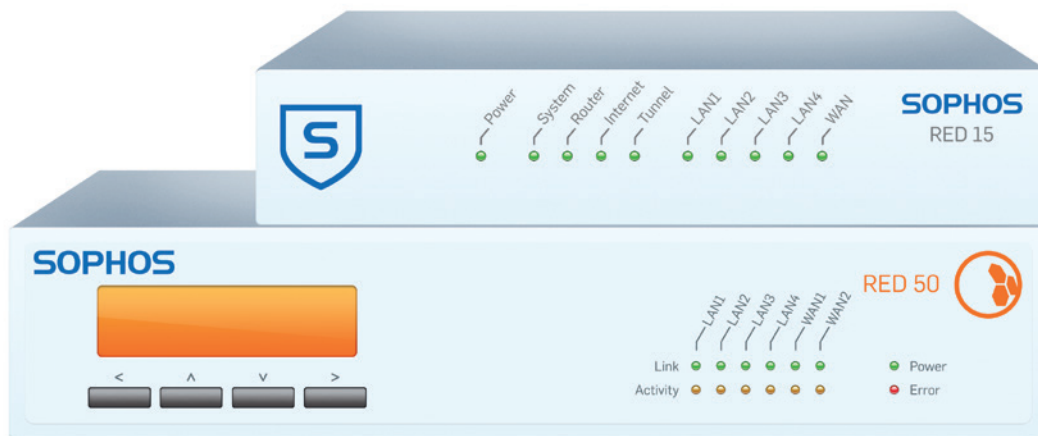


# SOPHOS

Security made simple.

# Operating Instructions

## Sophos RED 15 and RED 50 Appliances



## Introduction

These operating instructions will help you install and configure the Sophos RED appliances and provide technical specifications of all RED devices. In addition, please also see the following documents that contain useful information on safety regulations, regulatory compliance, and configuration options:

- Sophos RED Appliances Safety Instructions & Regulatory Information (part of the scope of supply)
- Sophos RED 15/50 Quick Start Guide (part of the scope of supply depending on RED model)
- Sophos UTM Administration Guide

The instructions must be read carefully prior to using the device and should be kept in a safe place. You may download all user manuals and additional documentation from the Sophos Knowledgebase at <http://www.sophos.com/en-us/support/knowledgebase.aspx>.

## RED 15









### Scope of supply

 Sophos RED 15 Appliance	 Quick Start Guide and Safety Instructions	 Power supply	 RJ45 Ethernet cable
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## Installation

### Preliminary steps

Make sure that the RED appliance has been shipped to the branch office. Ask the person who is going to put the RED appliance into operation at the branch office to provide the unique RED-ID, which is printed at the bottom of the device. Note that the RED appliance requires a working Internet connection at your branch office.

<b>SOPHOS</b> Product/产品名称: 网络服务器 Model/型号: RED 15 Rev.1 RED ID# A3000014EE22E39  Manufactured: December 2012 WAN MAC Address: 00:1A:8C:01:00:01 LAN MAC Address: 00:1A:8C:01:00:00 Input Rating/输入: 12V 1.5A MAX (18W MAX) 制造商 Sophos Ltd 台湾制造	     	 <p>This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.</p>
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### Configuring the RED appliance

Configure the RED appliance in the central UTM appliance as described in the Sophos UTM Administration Guide.

### Connecting branch office PCs to the RED appliance




At the branch office, use standard Ethernet cables to connect the PCs to the LAN ports (LAN1-LAN4) of the RED appliance, either directly or via a network switch.

Use the orange Ethernet cable (from the scope of supply) to connect the WAN port of the RED appliance to the interface of your router or cable modem that connects to the Internet.

### Connecting the RED appliance to the power supply

Connect the RED appliance to the power supply from the scope of supply. Plug the power supply into the electrical outlet. The Power LED will light.

After the system has booted, it will connect to the Internet. The status LEDs System, Router, and Internet will light:

-  System booted
-  Router reachable
-  Internet connectivity up

If all four status LEDs are flashing (from left to right and vice versa), the device is installing a new firmware version.



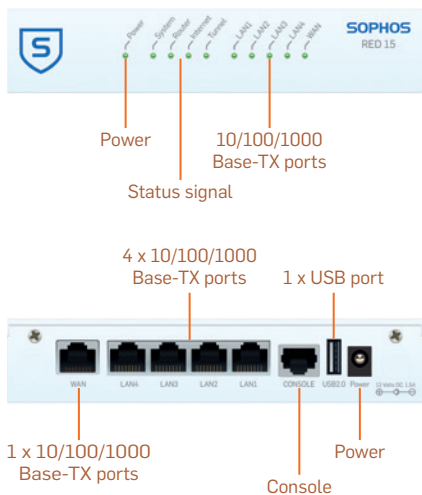
**Important note:** Do not unplug the power while the firmware is updating. Otherwise the RED appliance will be rendered inoperable and must be returned to the reseller.

### Establishing a tunnel between the branch office and the central UTM Gateway

The RED appliance will now automatically retrieve its configuration file from the Internet and establish an encrypted tunnel to the central office. The Tunnel LED will now light:

-  Tunnel up

If any of the four status LEDs is not lit or if the System LED is red and blinking, please refer to "Controls and LED codes" section below to identify the error.



## Controls and LED Codes

### Controls

Power	
Off	Power off
On continuously	Power on
LAN connection	
On continuously	Network connection, no activity
Blinking	Network activity

### LED codes

LED booting codes				
System	Router	Internet	Tunnel	Description
				The RED device is booting
				The RED device has finished booting
				The RED device is connecting to the default gateway/ router
				The default gateway/router is reachable
				The RED device is connecting to the Internet
				The connection to the Internet has been established
				The RED device is connecting to the UTM appliance
				The connection to the UTM appliance has been established
				The RED device is installing a new firmware

LED GSM/UMTS failover codes				
System	Router	Internet	Tunnel	Description
				GSM/UMTS failover is active
				The default gateway/router is reachable
				The connection to the Internet has been established
				The connection to the UTM appliance has been established

LED error codes				
System	Router	Internet	Tunnel	Description
				DHCP or static address settings failed, default gateway not reachable
				Internet not reachable
				No connection to UTM appliance
				No configuration or firmware update failed

**Technical specifications**

Sophos RED 15		
Chassis	Metal housing (painted white)	
Power supply	Input: 100-240 V AC, 50/60 Hz, 0.4 A	Output: 12 V === 1.5 A
Power consumption	7 W (max.)	
Dimensions W x H x D	165 x 134.8 x 34mm	
Weight	600g	
Temperature range	Operating: 0°C to 40°C	Storage: -20°C to 80°C
Humidity (non-condensing)	Operating: 10% to 85%	Storage: 5% to 95%
Mounting	Desktop	
Regulatory compliance	<b>Safety</b>	
	CB	IEC 60950-1:2005 (Second Edition) + A1:2009+A2:2013
	CE	EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
	UL	UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07
	RCM	AS/NZS 60950.1:2011+A1:2012
	CCC	GB 4943.1-2011
	<b>EMC</b>	
	CE	EN 55022:2010+AC:2011, Class B EN 61000-3-2:2014, Class A EN 61000-3-3:2013 EN 55024:2010
	FCC	47 CFR FCC Part 15, Subpart B, Class B ANSI C63.4:2009
	IC	ICES-003:2012 Issue 5, Class B
	RCM	AS/NZS CISPR22:2008, Class B
	VCCI	V-3/2015.04, Class B V-4/2012.04
	CCC	GB 9254-2008 YD/T993-1998

**RED 50**

**Scope of supply**

			
Sophos RED 50 Appliance	Quick Start Guide and Safety Instructions	Power supply	RJ45 Ethernet cable

**Installation**

**Preliminary steps**

Make sure that the RED appliance has been shipped to the branch office. Ask the person who is going to put the RED appliance into operation at the branch office to provide the unique RED-ID, which is printed at the bottom of the device. Note that the RED appliance requires a working Internet connection at your branch office.



### Configuring the RED appliance

Configure the RED appliance in the central UTM appliance as described in the Sophos UTM Administration Guide.

### Connecting branch office PCs to the RED appliance

At the branch office, use standard Ethernet cables to connect the PCs to the LAN ports (LAN1-LAN4) of the RED appliance, either directly or via a network switch.

Use the orange shielded Ethernet cable of the scope of supply to connect the WAN1 interface of the RED 50 appliance to the interface of your router or cable modem that connects to the Internet.

(Optional) If your office is equipped with a standby Internet connection, also connect the WAN2 interface of the RED 50 appliance to the interface of your router or cable modem that connects to the second Internet line.

Starting RED  
> A0000014EE22E39

### Connecting the RED appliance to the power supply

Connect the RED appliance to the power supply from the scope of supply. Plug the power supply into the electrical outlet. The Power LED will light and the system will boot. The LCD will show the message "Starting RED" and the RED-ID.

Tunnel is up (wan1)  
> UTM 10.8.16.32

### Establishing a tunnel between the branch office and the central UTM Gateway

The RED 50 will now automatically retrieve its configuration from the Internet and establish a tunnel to your central office. After successfully establishing the tunnel, the LCD will show the message "Tunnel is up (wan1)" and either the IP address or the hostname of the UTM appliance to which the RED 50 is connected.

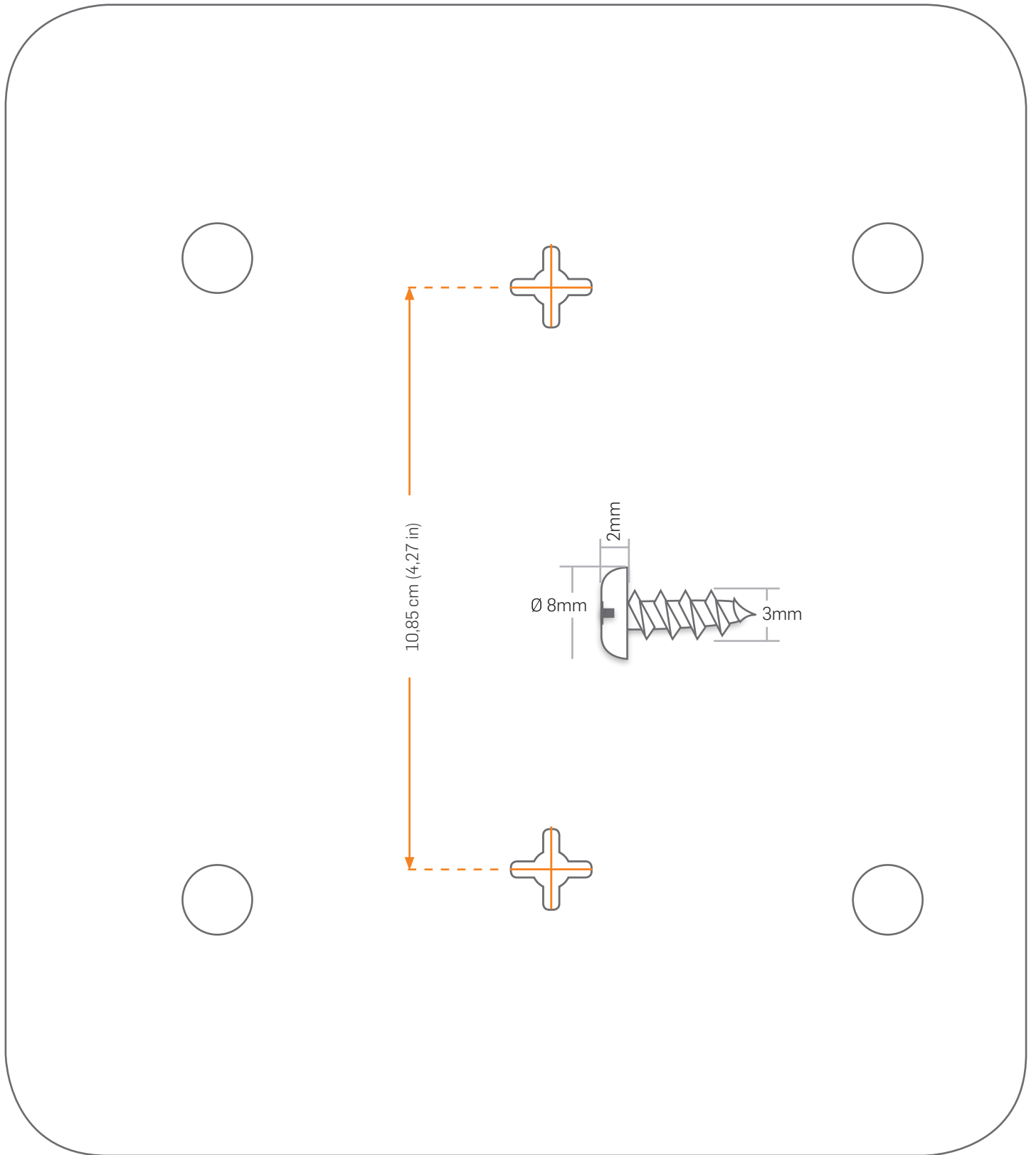
### Wall mounting instructions

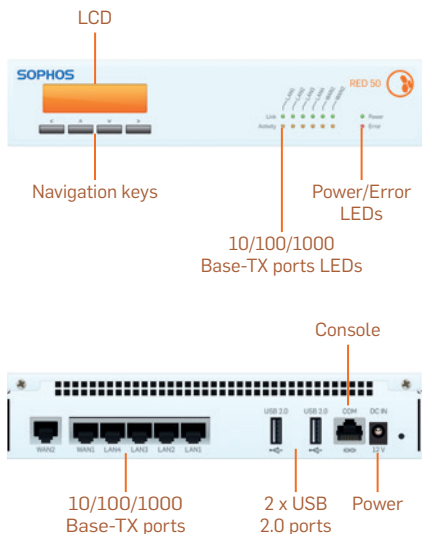
The Sophos RED 50 can be mounted on the wall. Screws are not included in the scope of supply. Only use screws whose dimensions correspond with the mounting holes on the back.

Secure the screws to the wall, and mount by inserting the screws into the mounting holes on the back. Do not connect the power cable until mounting to the wall is complete.

RED 50 Mounting template

Do not shrink to fit when printing





## Controls, LED Codes and LCD messages

### Controls

Power (LED)	
Off	Power off
On	Power on
Error	
Off	No error
On	Error
LAN/WAN connection	
Link (on continuously)	Link established
Activity (flashing)	Network activity
LCD and keys	
LCD	Display of 2 rows x 20 characters
Navigation keys	4 x keys to cycle through the LCD menu
Interfaces	
WAN1-WAN2, LAN1-LAN4	6 x 10/100/1000 Base-TX interface
USB 2.0	2 x USB 2.0 interface
COM	Serial console interface
DC IN 12 V	Power
Navigation keys	
◀	Open menu, switch from value to a menu or sub-menu entry
▲▼	Navigate between the menu entries
▶	Enter sub-menus and value

### The following menu entries are available

Live-Log		
WAN_Status ▶	IP addresses ▶	Local WAN1 IP:
		Local WAN2 IP:
	Throughput ▶	Local PPP0 IP:
		UTM Hostname:
		2nd UTM Hostname:
		WAN1 in/out:
Tunnel ▶	WAN2 in/out:	
	WAN1->UTM WAN1:	
	WAN1->UTM WAN2:	
	WAN2->UTM WAN1:	
RED-Status ▶	WAN2->UTM WAN2:	
	Device ▶	ID:
	Firmware ▶	Version:
3G/UMTS-Status ▶	Uptime:	
	Signal Strength:	



### LCD messages

<b>Booting up</b>	The RED device is booting
<b>Shutting down</b>	The RED device is shutting down
<b>Starting RED ID \$RED_ID</b>	The RED device is starting (the displays shows the RED ID as printed on the product label)
<b>Starting RED Network Setup</b>	The RED device is configuring DHCP or a static setup
<b>Starting RED Try \$uplink</b>	The RED device is connecting to the displayed uplink (wan1, wan2, or umts)
<b>Starting RED UTM \$hostname</b>	The RED device is connecting to the UTM appliance
<b>Got new config</b>	The RED device has received a new configuration
<b>Tunnel is up (\$uplink) UTM \$hostname</b>	The RED tunnel has been established; \$uplink can be wan1, wan2, or umts; \$hostname can be hostname or IP address of UTM appliance
<b>ERROR Invalid device ID</b>	The RED device has not been provisioned correctly

### Technical specifications

<b>Sophos RED 50</b>		
<b>Chassis</b>	Heavy-duty steel (painted white)	
<b>Power supply</b>	Input: 100-240 V, 50-60Hz, 1.3 A <span style="float: right;">Output: 12 V === 3.33 A</span>	
<b>Power consumption</b>	38.2 W (max.)	
<b>Dimensions W x H x D</b>	216 x 44 x 189 mm	
<b>Weight</b>	1.1 kg	
<b>Temperature range</b>	Operating: 0°C to 40°C <span style="float: right;">Storage: -20°C to 70°C</span>	
<b>Humidity (non-condensing)</b>	Operating: 5% to 90% <span style="float: right;">Storage: 5% to 95%</span>	
<b>Mounting</b>	Desktop/wall/rack (optional)	
<b>Regulatory compliance</b>	<b>Safety</b>	
	CB	IEC 60950-1 (ed.2), IEC 60950-1 (ed.2); am1
	CE	EN 60950-1:2006+A11:2009+ A1:2010+A12:2011
	UL	UL 60950-1, CSA C22.2 No. 60950-1-07
	<b>EMC</b>	
	CE	EN 55022:2010 Class A EN 61000-3-2:2006+A1:2009+A2:2009 EN 61000-3-3:2008 EN 55024:2010
	FCC	CFR 47, Part 15 Subpart B, Class A
	C-Tick	AS/NZS CISPR 22:2009 Class A
	VCCI	V-3/2012.04, Class A ITE

## Rack-Mount instructions

To mount the appliance to a rack (1U), you need the special RED 50 rack-mount ears, which is a separate item to be ordered. Make sure you only use the screws supplied with the rack-mount ears. Using the wrong screws could damage the hardware appliance and would invalidate your warranty.

1. Attach the rack-mount ears to the appliance

Place the appliance on a hard, flat surface with the front panel facing you. Attach the rack-mount ears to the left and right side of the appliance with the supplied screws. Make sure the ears are properly attached to the appliance.

2. Choose the rack location

For general warnings on rack-mount installations, see below.

3. Attach the brackets to the rack with appropriate screws (not included).

## General Warnings for Rack-Mount Installations

1. Elevated Operating Ambient – If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T<sub>ma</sub>) specified by the manufacturer.
2. Reduced Air Flow – Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
3. Mechanical Loading – Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
4. Circuit Overloading – Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
5. Reliable Earthing – Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit, (e.g. use of power strips).

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