

# User's Guide SCR 50AXE

Secure Cloud-managed Router with AXE5400 Tri-Band WiFi 6E

### Local GUI

### **Default Login Details**

LAN IP Address	https://192.168.168.1
User Name	admin
Password	See the Zyxel Device label

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#### **IMPORTANT!**

#### **READ CAREFULLY BEFORE USE.**

#### KEEP THIS GUIDE FOR FUTURE REFERENCE.

Screenshots and graphics in this book may differ slightly from your product due to differences in your product firmware or your app version. Every effort has been made to ensure that the information in this manual is accurate.

Note: The version number on the cover page refers to the Zyxel Device's latest firmware version to which this User's Guide applies.

Related Documentation

Note: This guide is for troubleshooting when your Zyxel Device cannot connect to NCC.

• Quick Start Guide

The Quick Start Guide contains information on setting up your Zyxel Device using the Zyxel Nebula Mobile app.

More Information

Go to *https://community.zyxel.com/en* for product discussions. Go to *support.zyxel.com* to find other information on the Zyxel Device.



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# PART I Local GUI User's Guide

## CHAPTER 1 Get to Know Your Zyxel Device

## 1.1 Overview

Your Zyxel Device is a Secure Cloud-managed Router that is controlled using the Zyxel NCC (Nebula Control Center). NCC is a cloud-based network management system that allows you to remotely manage and monitor your Zyxel Device. You need to create a myZyxel account to log into the NCC for management first. You can access the NCC through the NCC web portal using a web browser on your computer or the Nebula Mobile app on your smartphone.

When your Zyxel Device cannot connect to NCC, see <u>Section on page 17</u> on using the Local GUI Web Configurator to configure the Zyxel Device's WAN settings.

### 1.1.1 Nebula Management

The Zyxel Device is managed and provisioned by the NCC (Nebula Control Center) when:

- It is connected to NCC.
- It has been registered on NCC.

Table 1 Management Methods

MANAGEMENT METHOD	WHEN TO USE IT
Nebula Mobile App	Registration, Monitoring and Basic Management
NCC Web Portal	Registration, Monitoring and Management

To set up a Zyxel Device, you need to:

- 1 Connect the Zyxel Device to a broadband modem or router that is connected to the Internet.
- 2 Install the Zyxel Nebula Mobile app and turn on WiFi on your smartphone to pair with your Zyxel Device. Make sure your smartphone also has Internet access.
- **3** Use the Zyxel Nebula Mobile app to set up the Zyxel Device and manage your Zyxel Device.



To install the app:

- Scan the QR code on the box
- Click the downlink on the QSG.

## 1.2 Features

The Zyxel Device is a router that supports (but is not limited to) the following features:

Table 2 Features	
FEATURE	SCR 50AXE
Maximum Bandwidth	5400 (WiFi 6E Tri-Band)
WPS Button	YES
Pairing Method	WiFi
APP Management	YES
GUI Management (for troubleshooting only)	YES
Number of LAN Ports	4
Number of internal antennas	
6G	2
2.4G + 5G	2
Threat Management that protects against ransomware, blocking ads/intrusion/exploits/dark web/VPN proxy, and stopping mail fraud, phishing.	YES
Guest VLAN	YES
Firewall	YES
Country Restriction	YES
IPSec VPN	YES
Content Filtering and Application Control	YES

A WiFi 6E Tri-Band WiFi System emits one 2.4 GHz, one 5 GHz and one 6 GHz WiFi signals. A WiFi 6 Tri-Band WiFi System emits one 2.4G WiFi signal and two 5G WiFi signals. Dual-Band WiFi Systems emit one 2.4G signal and one 5G signal.

"Maximum Bandwidth" refers to the sum of the bandwidths of all WiFi signals (2.4G, 5G, and 6G) emitted by the Zyxel Device.

See the Quick Start Guide for how to do the hardware installation, mounting, and Internet setup.

### 1.2.1 Tri-Band WiFi

The Zyxel Device is equipped with three WiFi radios. The Zyxel Device uses the WiFi radios to transmit WiFi signals. This means you can configure three different WiFi networks to operate simultaneously.

The tri-band Zyxel Devices support both 2.4 GHz and 5 GHz, and an additional 5 GHz or 6 GHz WiFi radio at the same time.

IEEE 802.11a/b/g/n/ac/ax compliant clients can wirelessly connect to the Zyxel Device to access network resources. You could use the 2.4 GHz band for regular Internet surfing and downloading while using the 5 GHz or 6 GHz band for time sensitive traffic like high-definition video, music, and gaming.

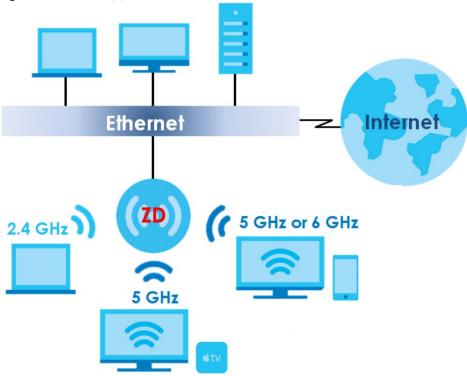


Figure 1 Tri-Band Application

#### 1.2.2 WiFi 6 / WiFi 6E Introduction

The Zyxel Device supports WiFi 6 and WiFi 6E standards and brings the following features for WiFi 6/WiFi 6E compatible client devices.

#### WiFi 6 (IEEE 802.11ax)

WiFi 6 is a WiFi standard that supports both 2.4 GHz and 5 GHz frequency bands and brings the following major improvements:

#### Higher Data Transmission Speed

WiFi 6 provides faster transmission data rate than the previous WiFi standards with the following features:

- 1024-QAM (Quadrature Amplitude Modulation) enhances the data capacity of each transmission unit.
- 160 MHz Channel Bandwidth extends the supported channel bandwidth to 160 MHz, providing higher data throughput.

#### Enhanced Air Time Utilization

WiFi 6 increases transmission performance in high-density environments that have multiple client devices with the following features:

- OFDMA (Orthogonal Frequency-Division Multiple Access) divides channels into sub-channels that enables multiple transmissions in a single channel.
- BSS Coloring tags traffic by BSS (Basic Service Set) and identifies traffic from overlapping BSSs. The AP can ignore traffic of unrelated BSSs and transmit data when a channel is occupied.
- MU-MIMO (Multiple User-Multiple Input Multiple Output) enables multiple users to connect to the AP and download/upload traffic simultaneously.

#### Extended Signal Range

Beamforming – forms the radiating signals into one direction. This enhances the signal strength and extends the signal transmission range.

#### Extended Battery Life

TWT (Target Wake Time) – The AP negotiates with client devices so client devices only wakes up and communicates with the AP in specific periods. This conserves client devices battery life.

#### WiFi 6E (IEEE 802.11ax – Extended Standard)

WiFi 6E is an extended standard of WiFi 6 (IEEE 802.11ax). WiFi 6E inherits all the WiFi 6 features and brings with an additional 6 GHz band. The 6 GHz band allows you to avoid possible congested traffic in the lower 2.4 GHz and 5 GHz bands. WiFi clients must support WiFi 6E to connect to an AP using the 6 GHz band.

Note: Check your client device's product specification to see if your client device supports the 6 GHz band (WiFi 6E). If not, you should still use the 2.4/5 GHz bands for connection.

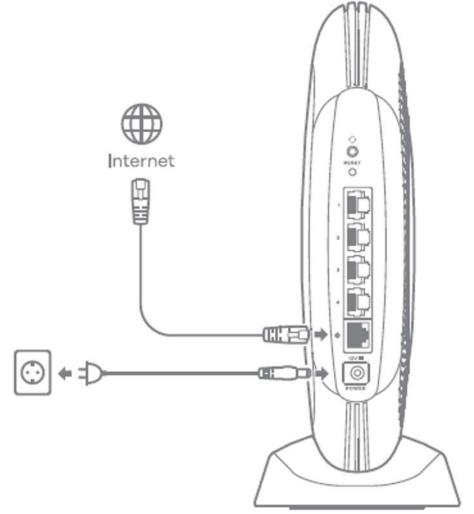
Note: Not all countries support the 6 GHz band (WiFi 6E).

## CHAPTER 2 Hardware

## 2.1 Hardware Connections

- 1 Use the included power cable to connect the Zyxel Device's power port to a power outlet.
- 2 Connect the Internet port of the Zyxel Device to a broadband modem or router that is connected to the Internet.

Figure 2 SCR 50AXE Ports Panel



## 2.2 Mounting Options

This section describes how the Zyxel Device can be mounted.

Table 3	Zyxel Device Mounting Options
	Zynei Device Moorning ophons

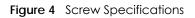
WALL MOUNTING	DESK PLACEMENT
YES	YES

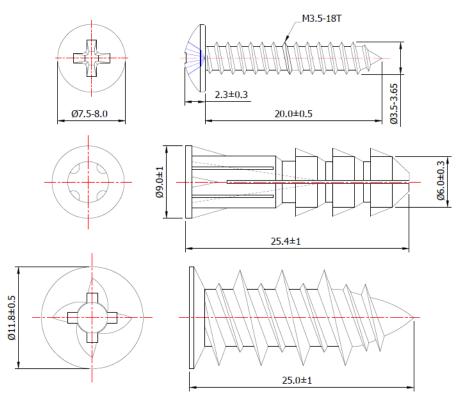
#### 2.2.1 Wall Mounting

Use the wall mounting method to install your Zyxel Device. See Table 3 on page 11 for more information.

Mark a hole on the wall at least 2 meter-high from the ground level. Drill the hole and insert the included anchor and wall mount screw into the wall. Align the mounting hole on the Zyxel Device to the wall mount screw on the wall. Adjust the angle of the Zyxel Device to make sure it is secure in place.



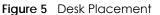




### 2.2.2 Desk Placement

You may place your Zyxel Device on a desk, table, shelf, and so on. See Table 3 on page 11 for more information.

Attach the bottom of the Zyxel Device to the magnetic stand. Then, place the Zyxel Device on a desk, table, shelf, and so on.





## 2.3 WPS Button

Use the WPS button to quickly set up a secure WiFi connection between the Zyxel Device and a WPScompatible client device or WiFi extender by adding one device at a time.

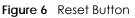
To activate WPS:

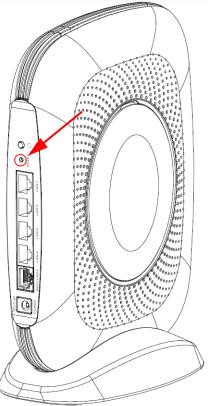
- 1 Press the WPS button until the UED blinks green and release it. See Section 2.5 on page 14 for the Zyxel Device LED table.
- 2 Press the WPS button on another WPS-enabled client device within range of the Zyxel Device within 120 seconds. The LED blinks green while the Zyxel Device sets up a WPS connection with the other WiFi client device.
- 3 Once the connection is successfully made, the LED turns off.

Note: When the Zyxel Device fails to set up a WPS connection, the WPS  $\bigcirc$  LED blinks green for 120 seconds and then turns off.

## 2.4 Reset Button

If you need to return the Zyxel Device to its default settings, use the **RESET** button on the rear panel.





## 2.4.1 Reset the Zyxel Device Back to Factory Default Settings

For a factory reset, press the **RESET** button for at least 3 seconds or until the system ( 🕁 ) LED starts to blink green.

## 2.5 LED Light

Look at the LED behavior to determine the status of the Zyxel Devices. See Table 4 on page 15 for more information.

Figure 7 SCR 50AXE LEDs



The following are the LED descriptions for your Zyxel Device.

ICON	COLOR	STATUS	DESCRIPTION	
415	Green	On	The Zyxel Device is receiving power.	
(1)	Red	On	Hardware failure.	
$\bigcirc$		Off	The Zyxel Device is not receiving power.	
	Green	On	The Zyxel Device is ready for use.	
(-H-7		Blinking	The Zyxel Device is booting up, or the Zyxel Device is upgrading firmware.	
$\bigcirc$	Green	On	The Zyxel Device is registered and connected to NCC (Nebula Control Center).	
		Blinking	The Zyxel Device can connect to NCC but is not registered in NCC.	
		On	The registered Zyxel Device cannot connect to NCC.	
		Blinking	The unregistered Zyxel Device cannot connect to NCC.	
		Off	The Zyxel Device in failed to connect to the Internet.	

Table 4 SCR 50AXE LED Descriptions

ICON	COLOR	STATUS	DESCRIPTION
	Green	On	The Zyxel Device's WiFi is on and with connected WiFi clients.
	Blue	On	The Zyxel Device's WiFi is on but without WiFi clients.
		Off	The Zyxel Device's WiFi is off.
(	Green	Blinking	The Zyxel Device is setting up a WPS connection with another device.
$\langle \rangle$		Off	The Zyxel Device:
			<ul> <li>has connected successfully through WPS, or</li> </ul>
			<ul> <li>failed to set up a WPS connection, or a 120 second timeout has occurred.</li> </ul>

Table 4 SCR 50AXE LED Descriptions (continued)

## CHAPTER 3 Web Configurator

## 3.1 Overview

This chapter describes how to access the Zyxel Device Local GUI Web Configurator and provides an overview of its screens.

The Local GUI Web Configurator is an HTML-based management interface that allows you to manage and set up basic settings for your Zyxel Device.

Use a browser that supports HTML5, such Microsoft Edge, Mozilla Firefox, or Google Chrome. The recommended screen resolution is 1024 by 768 pixels.

In order to use the Local GUI Web Configurator you need to allow web browser pop-up windows from your device.

Note: Use the Local GUI Web Configurator for troubleshooting when your Zyxel Device cannot connect to Nebula.

## 3.2 Accessing the Local GUI Web Configurator

- 1 Make sure your Zyxel Device hardware is properly connected (refer to the Quick Start Guide).
- 2 Make sure your computer has an IP address in the same subnet as the Zyxel Device.
- 3 Launch your web browser.
- 4 Enter "https://192.168.168.1" in the browser's address bar. The following screen appears. Select the language you prefer (upper right). Click Login to log in to the Local GUI Web Configurator.

ZYXEL   SCR 50	AXE				English
		L	ogin		
		User Name			
		Password		0	
			ogin		
	Note: This devic	e is managed by Nebula, Plea	ise use Nebula assigne	d password in the	
	Site-wide	> General settings > Device co	onfiguration.		

- 5 On the displayed login screen, enter the default user name **admin** and password.
  - If you are in Cloud management mode, use the Local credentials Password to log in to the cloud mode – local GUI. The Local credentials Password can be found in Site-wide > General settings > Device configuration: Local credentials: Password in the NCC portal.
  - If you are in standalone management mode, use the default password on the Zyxel Device label.
- 6 Then click Login.
- 7 The Zyxel Device **Overview** screen displays allowing you to monitor your Zyxel Device. It shows if the Zyxel Device is online and connected to NCC, and basic system information.

Figure 9 C				_
ZYXE	SCR 50AXE			Ξ
	Connectivity	System Info		
		Model Name Firmware Version	SCR 50AXE V1.00(ACGN.0)	
		System Uptime	0 days 2 hours 40 minutes 20 seconds D4:1A:D1:0F:EC:D8	
		Ethernet WAN		

## 3.3 Web Configurator Layout

As illustrated below, the main screen is divided into these parts:

- A Settings Icon (Side Bar)
- **B** Main Window

Figuro	10	Screen	
rigule	10	SCIEELI	LUYOUI

ZYXE	SCR 50AXE		A
	Connectivity	System Info	
		Model Name     SCR 50AXE       Pirmware Version     V1.00(ACGN.0)       System Uptime     0 days 2 hours 40 minutes 20 second       LAN MAC Address     D4:1A:D1:0F:EC:D8       Ethernet WAN     1000M/Full	s 🔪

### 3.3.1 Settings Icon

Click this icon (  $\equiv$  ) to see the side bar and navigation panel.

#### 3.3.1.1 Side Bar

The side bar provides some icons on the right hand side.



The icons provide the following functions.

Table 5 web Con	Tigurator icons in the side bar
ICON	DESCRIPTION
Diagnostic	Click this icon to open the <b>Diagnostic</b> screen. Use this screen to identify problems with the Zyxel Device. You can use Ping, TraceRoute, or Nslookup to help you identify problems.
Theme	Click this icon to select a color that you prefer and apply it to the Web Configurator.
Restart	Click this icon to reboot the Zyxel Device without turning the power off.
Language	Click this icon to select the language you prefer.
Logout	Click this icon to log out of the Web Configurator.

Table 5 Web Configurator Icons in the Side Bar

## CHAPTER 4 WAN Interface

## 4.1 Connectivity

After you log into the Web Configurator, the **Connectivity** screen appears. It shows the network and NCC connection status of the Zyxel Device. Use the **Connectivity** screen to configure settings for the WAN interface.





Click the Arrow icon (  $\geq$  ) to edit the WAN interface the Zyxel Device.

### 4.1.1 WAN Setting

The Edit WAN Interface screen allows you to configure basic settings for your WAN port.

Note: Use this screen to fix your Zyxel Device's connection problem with NCC.

Igue 13 Lui WANTINETICE (DICI	Figure 13	Edit WAN Interface	(DHCP
-------------------------------	-----------	--------------------	-------

`	Edit WAN Interface
/LAN	IP Address
VLAN	IP Address 192.168.11.41
VLAN ID 1	
VAN Type	
• DHCP	
○ Static IP	
O PPPoE	
O PPPoE with Static IP	

The following table describes the labels shown on the Edit WAN Interface screen.

LABEL	DESCRIPTION
VLAN	
VLAN	Select the check box to assign a VLAN ID to the WAN interface.
VLAN ID	Enter a number as the WAN interface VLAN ID (1 to 4094).
	A WAN interface VLAN ID is a tag that adds to incoming untagged frames received on a port so that the frames are forwarded to the VLAN group that the tag defines.
WAN Type	Select <b>DHCP</b> if the WAN interface gets its IP address from a DHCP server.
	Select Static IP if you want to assign a static IP address to the WAN interface.
	Select <b>PPPoE</b> if your WAN interface is getting Internet connection from a PPPoE server.
	Select <b>PPPoE with Static IP</b> if you want to assign a static IP address to the WAN interface and your WAN interface is getting Internet connection from a PPPoE server.
IP Address (This field appea	ars when you select DHCP as the WAN Type.)
IP Address	This field shows the IP address assigned by a DHCP server to the WAN interface.
PPP Information (These field	ds appear when you select <b>PPPoE</b> or <b>PPPoE with Static IP</b> as the <b>WAN Type</b> .)
User Name	Enter the user name given to you by your ISP. You can use alphanumeric and@\$./ characters. It can be up to 31 characters long.
Password	Enter the password associated with the user name above. Use up to 64 ASCII characters except the [] and ?. This field can be blank.
PPP Connection Trigger	Select when to have the Zyxel Device establish the PPP connection.
	Auto Connect – select this to not let the connection time out.
	<b>On Demand</b> – select this to automatically bring up the connection when the Zyxel Device receives packets destined for the Internet.
	Enter the <b>Idle Timeout</b> (up to 300 minutes) that elapses before the Zyxel Device automatically disconnects from the PPPoE server.

Table 6 Edit WAN Interface

LABEL	DESCRIPTION			
PPPoE Passthrough	In addition to the Zyxel Device's built-in PPPoE client, you can enable PPPoE pass through to allow up to ten hosts on the LAN to use PPPoE client software on their computers to connect to the ISP through the Zyxel Device. Each host can have a separate account and a public WAN IP address.			
	PPPoE pass through is an alternative to NAT for applications where NAT is not appropriate.			
	Disable PPPoE pass through if you do not need to allow hosts on the LAN to use PPPoE client software on their computers to connect to the ISP.			
IP Address (These fields appear when you select Static IP or PPPoE with Static IP as the WAN Type.)				
IP Address	Enter the static public IP address for your Zyxel Device.			
DNS Server				
Primary/Secondary DNS Server	The Domain Name System (DNS) maps a domain name to an IP address and vice versa. Enter a DNS server's IP address. The DNS server is extremely important because without it, you must know the IP address of a computer before you can access it. The Zyxel Device uses these (in the order you specify here) to resolve domain names for VPN, DDNS and the time server. Leave the field as 0.0.0.0 if you do not want to configure DNS servers.			
(These fields appear when you select Static IP as the WAN Type.)				
Subnet Mask	Enter the subnet mask for this WAN connection's IP address.			
Gateway IP Address	Enter the IP address of the router through which this WAN connection will send traffic.			
Cancel	Click <b>Cancel</b> to exit this screen without saving.			
Apply	Click <b>Apply</b> to save your changes back to the Zyxel Device.			

Table 6 Edit WAN Interface (continued)

## 4.2 System Information

Use this screen to view the basic system information of the Zyxel Device.

System Info	
Model Name	SCR 50AXE
Firmware Version	V1.00(ACGN.0)
System Uptime	0 days 2 hours 40 minutes 20 seconds
LAN MAC Address	D4-1A-D1-0E-EC-D9
Ethernet WAN	1000M/Full

<		System	nfo						
Host Name S	CR_50AXE								
Model Name S	CR 50AXE				Interfo	ice Statu	S		
Serial Number 🤉	2200V # #038022	1 A 4		1.00	1.00		246	((1 50	
Firmware Version \	/1.00(ACGN.0)	LANI	LAN2	LAN3	LAN4	WAN	2.4G WLAN	5G WLAN	eg WLAN
System Uptime C	) days 0 hours 5 minutes 26 seconds	-	1000M	-	-	1000M		s 1.2010 Gb/s	-
Interface Up Time (	) days 0 hours 3 minutes 19 seconds								
NAN Information	n (Ethernet WAN)	WLAN		2.4GHz		5GHz		6GHz	
Name	ETHWAN	Informatio	n	2.10112		00112		00112	
Encapsulation	IPoE	MAC Add	dress	N4·1A·N1·N	F.EC.C9	D.4.1 A.D.1.	NE-EC-CA	D4-1A-D1-0	E-EC-CA
IP Address	10.10.8.25	Status		On		On		Off	
	Release	SSID		Zyxel0FEC	C8	Zyxel0FE	CC8	Zyxel0FEC	C8
IP Subnet Mask	255.255.255.0								
MAC Address	D4-1A-D1-06-EC-CC	Channel		Auto(Curr	ent 6)	Auto(Cu	rent 40)	Auto(Curr	ent 0)
Primary DNS server	10.10.8.1	Security		WPA2/WP	A3-	WPA2/W		WPA3-Per	sonal
Secondary DNS ser	ver N/A			Personal		Personal			
AN Information		802.11 M	ode	802.11b/g Mixed	/n/ax	802.11a/ Mixed	n/ac/ax	802.11ax	
IP Address	192.168.168.1	WPS		On		On		Off	
Subnet Mask	255.255.255.0	VVFS		01				01	
DHCP	Server								
MAC Address	P4-14-P1-05-50-09								

#### Figure 15 System Info: Detailed Information

The following table describes the labels shown on the System Info screen.

Table 7	System	Info:	Detailed	Information
---------	--------	-------	----------	-------------

LABEL	DESCRIPTION
Host Name	This is the Zyxel Device system name. It is used for identification.
Model Name	This is the model number of your Zyxel Device.
Serial Number	This is the serial number of the Zyxel Device.
Firmware Version	This is the current version of the firmware inside the Zyxel Device.
System Uptime	This displays how long the Zyxel Device has been running since it last started up. The Zyxel Device starts up when you plug it in, when you restart it, or when you reset it.
Interface Uptime	This displays how long the WAN interface is up since it last started up.
WAN Information	
Name	This is the Ethernet WAN interface name.
Encapsulation	This is the current encapsulation method.
IP Address	This is the current IP address of the Zyxel Device in the WAN.
IP Subnet Mask	This is the current subnet mask in the WAN.
Primary DNS Server	This is the first DNS server address assigned by the ISP.
Secondary DNS Server	This is the second DNS server address assigned by the ISP.
LAN Information	
IP Address	This is the current IP address of the Zyxel Device in the LAN.

LABEL	DESCRIPTION	
Subnet Mask	This is the current subnet mask in the LAN.	
DHCP	This displays what DHCP services the Zyxel Device is providing to the LAN. The possible values are:	
	Server – The Zyxel Device is a DHCP server in the LAN. It assigns IP addresses to other computers in the LAN.	
	<b>Relay</b> – The Zyxel Device acts as a surrogate DHCP server and relays DHCP requests and responses between the remote server and the clients.	
	Disable – The Zyxel Device is not providing any DHCP services to the LAN.	
MAC Address	This is the WAN Ethernet adapter MAC (Media Access Control) address of your Zyxel Device.	
WLAN Information	· · ·	
MAC Address	This is the WiFi adapter MAC (Media Access Control) address of the WiFi interface.	
Status	This displays whether WiFi is activated.	
SSID	This is the descriptive name used to identify the Zyxel Device in a WiFi network.	
Channel	This is the channel number currently used by the WiFi interface.	
Security	This displays the type of security mode the WiFi interface is using in the WiFi network.	
802.11 Mode	This displays the type of 802.11 mode the WiFi interface is using in the WiFi network.	
WPS	This displays whether WPS is activated on the WiFi interface.	

 Table 7
 System Info: Detailed Information (continued)

## CHAPTER 5 Diagnostic

## 5.1 Diagnostic Overview

The Diagnostic screen displays information to help you identify network problems when they occur.

## 5.2 Diagnostic

Use this screen to ping, traceroute, or nslookup for troubleshooting. Ping and traceroute are used to test whether a particular host is reachable. After entering an IP address and clicking one of the buttons to start a test, the results will be shown in the Ping/Traceroute Test area. Use nslookup to find the IP address for a host name and vice versa.

Fiaure	16	Diagnostic
iguic		Diagnostic

	Diagnostic
The Diagnostic screens display infor	mation to help you identify problems with the Zyxel Device.
	or nslookup for troubleshooting. Ping and traceroute are used to test whether a particular hast is reachable icking on one of the buttons to start a test, the results will be shown in the Ping/Traceroute Test area. Use a host name and vice versa.
Diagnostic Test	

The following table describes the labels shown in this screen.

#### Table 8 Diagnostic

LABEL	DESCRIPTION	
Diagnostic Test	The result of tests is shown here in the information area.	
TCP/IP		

LABEL	DESCRIPTION
Address	Enter the IP address or FQDN (Fully-Qualified Domain Name) that you want to perform ping, traceroute, or nslookup in order to test a connection.
Ping	Click this button to perform a ping test on the IPv4 address or host name in order to test a connection. The ping statistics will show in the information area.
Trace Route	Click this button to perform the IPv4 trace route function. This determines the path a packet takes to the specified host.
Nslookup	Click this button to perform a DNS lookup on the FQDN IP address.

Table 8 Diagnostic (continued)

# PART II Troubleshooting and Appendices

## CHAPTER 6 Troubleshooting

## 6.1 Overview

This chapter offers some suggestions to solve problems you might encounter. The potential problems are divided into the following categories.

- NCC Access
- Power, Hardware Connections, and LEDs
- Zyxel Device Access and Login
- Internet Access
- Resetting the Zyxel Device to Its Factory Defaults
- WiFi Connections

## 6.2 NCC Access

#### I cannot access the NCC portal.

- Check that you are using the correct URL:
  - Zyxel Device: https://nebula.zyxel.com/
- Make sure your computer's Ethernet card is installed and functioning properly.
- Check that you have Internet access. In your computer, click **Start**, **(AII) Programs**, **Accessories** and then **Command Prompt**. In the **Command Prompt** window, enter 'ping' followed by a website such as 'zyxel.com'. If you get a reply, try to ping 'nebula.zyxel.com'.
- Make sure you are using the correct web browser that supports HTML5. View the browser in full screen mode to display the NCC portal properly. Browsers supported are:
  - Google Chrome
  - Microsoft Edge
  - Mozilla Firefox
  - Safari

I cannot log into the NCC portal.

Open your web browser and go to *https://nebula.zyxel.com*. Sign in with the correct email and password. Click **Sign Up** if you do not have a myZyxel account and create an account.

#### I cannot access the Zyxel Device that I have registered in NCC.

- Check if the TCP/UDP port is blocked by your network's firewall rule or ISP. Click Help > Support tools >
  Firewall information in NCC to view information required for firewall rules to allow management traffic
  between NCC and Zyxel Devices on your sites.
- Check the Zyxel Device's hardware connections, and make sure the LEDs are behaving as expected. See the Quick Start Guide.
- Make sure the Zyxel Device is connected to the Internet.
- Check if the WAN IP address is configured on the Zyxel Device.
- Check if the Zyxel Device can access the NCC server's domain through SSH and enter 'nslookup d.nebula.zyxel.com'. If the Zyxel Device shows 'unknown host', check your DNS server setting or use '8.8.8.8' as the DNS server on the Zyxel Device.
- The Zyxel Device will apply the site-wide password after getting online on NCC. Check the login credential by going to Site-wide > General settings > Device configuration: Local credentials in NCC.

I cannot see my Zyxel Device in the NCC Dashboard or the corresponding Zyxel Device monitor page.

- Make sure that your Zyxel Device can connect to NCC by checking your network's firewall/security settings. The following ports must be allowed:
  - TCP: 22, 443, 4335 and 6667
  - UDP: 123

Note: Go to Help > Support tools > Firewall information in NCC to find the latest port information.

- Make sure that you have registered your Zyxel Device with NCC.
- Make sure that you have created an organization and site and add the Zyxel Device to the site.

## 6.3 Power, Hardware Connections, and LEDs

The Zyxel Device does not turn on. None of the LEDs turn on.

- Make sure you are using the power adapter or cord included with the Zyxel Device.
- Make sure the power adapter or cord is connected to the Zyxel Device and plugged in to an appropriate power source. Make sure the power source is turned on.
- Disconnect and re-connect the power adapter or cord to the Zyxel Device.

• If the problem continues, contact the vendor.

#### One of the LEDs does not behave as expected.

- Make sure you understand the normal behavior of the LED.
- Check the hardware connections. See the Quick Start Guide.
- Inspect your cables for damage. Contact the vendor to replace any damaged cables.
- Disconnect and re-connect the power adapter or cord to the Zyxel Device.
- If the problem continues, contact the vendor.

## 6.4 Zyxel Device Access and Login

#### I do not know the IP address of my Zyxel Device.

- The default IP address of the Zyxel Device is http://192.168.168.1.
- If you changed the IP address and have forgotten it, you might get the IP address of the Zyxel Device by looking up the IP address of the default gateway for your computer. To do this in most Windows computers, click Start > Run, enter cmd, and then enter ipconfig. The IP address of the Default Gateway might be the IP address of the Zyxel Device (it depends on the network), so enter this IP address in your Internet browser.
- If your Zyxel Device is a DHCP client, you can find your IP address from the DHCP server. This
  information is only available from the DHCP server which allocates IP addresses on your network. Find
  this information directly from the DHCP server or contact your system administrator for more
  information.
- Reset your Zyxel Device to change all settings back to their default. This means your current settings are lost. See Section 6.6 on page 33 in the **Troubleshooting** for information on resetting your Zyxel Device.

#### I cannot see or access the Login screen of the Local GUI Web Configurator.

- Make sure you are using the correct IP address.
- The default IP address of the Zyxel Device is http://192.168.168.1.
- If you changed the IP address and have forgotten it, see the troubleshooting suggestions for I do not know the IP address of my Zyxel Device.
- Check the hardware connections, and make sure the LEDs are behaving as expected. See the Quick Start Guide.
- Make sure your computer is in the same subnet as the Zyxel Device. (If you know that there are routers between your computer and the Zyxel Device, skip this step.)
- Reset the device to its factory defaults, and try to access the Zyxel Device with the default IP address. See Section 2.4 on page 13.

• If the problem continues, contact the network administrator or vendor, or try one of the advanced suggestions.

#### **Advanced Suggestions**

- Try to access the Zyxel Device using another service, such as Telnet. If you can access the Zyxel Device, check the remote management settings and firewall rules to find out why the Zyxel Device does not respond to HTTP.
- If your computer is connected to the **WAN** port or is connected wirelessly, use a computer that is connected to a **LAN/ETHERNET** port.

I can see the Login screen, but I cannot log in to the Zyxel Device.

- This can happen when you fail to log out properly from your last session. Try logging in again after 5 minutes.
- Disconnect and re-connect the power adapter or cord to the Zyxel Device.
- If this does not work, you have to reset the device to its factory defaults. See Section 6.6 on page 33.

## 6.5 Internet Access

#### I cannot access the Internet.

- Check the hardware connections, and make sure the LEDs are behaving as expected. See the Quick Start Guide.
- Make sure the WAN port is connected to a broadband modem or router with Internet access. Your computer and the Zyxel Device should be in the same subnet.
- Make sure you entered your ISP account information correctly in the WAN screen. These fields are case-sensitive, so make sure [Caps Lock] is not on.
- If you are trying to access the Internet wirelessly, make sure the WiFi settings in the WiFi client are the same as the settings in the AP.
- Disconnect all the cables from your Zyxel Device, and follow the directions in the Quick Start Guide again.
- If the problem continues, contact your ISP.

I cannot access the Internet anymore. I had access to the Internet (with the Zyxel Device), but my Internet connection is not available anymore.

- Check the hardware connections, and make sure the LEDs are behaving as expected. See the Quick Start Guide.
- Reboot the Zyxel Device by disconnecting and re-connecting the power adapter or cord.
- If the problem continues, contact your ISP.

The Internet connection is slow or intermittent.

- There might be a lot of traffic on the network. Look at the LEDs. If the Zyxel Device is sending or receiving a lot of information, try closing some programs that use the Internet, especially peer-to-peer applications.
- Check the signal strength. If the signal strength is low, try moving the Zyxel Device closer to the AP if possible, and look around to see if there are any devices that might be interfering with the WiFi network (for example, microwaves, other WiFi networks, and so on).
- Reboot the Zyxel Device by disconnecting and re-connecting the power adapter or cord.
- If the problem continues, contact the network administrator or vendor.

## 6.6 Resetting the Zyxel Device to Its Factory Defaults

If you reset the Zyxel Device, you lose all of the changes you have made. The Zyxel Device reloads its default settings (for example, default login IP address, WiFi SSID and password). You have to make all of your changes again.

You will lose all of your changes when you push the **RESET** button.

To reset the Zyxel Device:

- Make sure the power LED is on.
- Press the **RESET** button for longer than 3 seconds to set the Zyxel Device back to its factory-default configurations.

If the Zyxel Device restarts automatically, wait for the Zyxel Device to finish restarting, and log in to the Local GUI Web Configurator.

If the Zyxel Device does not restart automatically, disconnect and reconnect the Zyxel Device's power. Then, follow the directions above again.

## 6.7 WiFi Connections

I cannot access the Zyxel Device or ping any computer from the WiFi network.

- Make sure WiFi is enabled on the Zyxel Device.
- Make sure the WiFi adapter on your computer is working properly.
- Make sure the WiFi adapter on your computer is IEEE 802.11 compatible and supports the same WiFi standard as the Zyxel Device.

- Make sure your computer (with a WiFi adapter installed) is within the transmission range of the Zyxel Device.
- Check that both the Zyxel Device and the WiFi adapter on your computer are using the same WiFi and WiFi security settings.
- Make sure traffic between WiFi and the LAN is not blocked by the firewall on the Zyxel Device.
- Make sure you allow the Zyxel Device to be remotely accessed through the WLAN interface. Check your remote management settings.

#### The WiFi connection is slow or intermittent.

The following factors may cause interference:

- Obstacles: walls, ceilings, furniture, and so on.
- Building Materials: metal doors, aluminum studs.
- Electrical devices: microwaves, monitors, electric motors, cordless phones, and other WiFi devices.

To optimize the speed and quality of your WiFi connection, you can:

- Move your WiFi client closer to the Zyxel Device if the signal strength is low.
- Reduce WiFi interference that may be caused by other WiFi networks or surrounding wireless electronics such as cordless phones.
- Place the Zyxel Device where there are minimum obstacles (such as walls and ceilings) between the Zyxel Device and the WiFi client. Avoid placing the Zyxel Device inside any type of box that might block WiFi signals.
- Reduce the number of WiFi clients connecting to the same Zyxel Device simultaneously, or add additional Zyxel Devices if necessary.
- Try closing some programs that use the Internet, especially peer-to-peer applications. If the WiFi client is sending or receiving a lot of information, it may have too many programs open that use the Internet.
- Position the antennas for best reception. If the Zyxel Device is placed on a table or floor, point the antennas upwards. If the Zyxel Device is placed at a high position, point the antennas downwards. Try pointing the antennas in different directions and check which provides the strongest signal to the WiFi clients.

## APPENDIX A Customer Support

In the event of problems that cannot be solved by using this manual, you should contact your vendor. If you cannot contact your vendor, then contact a Zyxel office for the region in which you bought the device.

For Zyxel Communication offices, see *https://service-provider.zyxel.com/global/en/contact-us* for the latest information.

For Zyxel Network offices, see *https://www.zyxel.com/index.shtml* for the latest information.

Please have the following information ready when you contact an office.

#### **Required Information**

- Product model and serial number.
- Warranty Information.
- Date that you received your device.
- Brief description of the problem and the steps you took to solve it.

#### Corporate Headquarters (Worldwide)

#### Taiwan

- Zyxel Communications (Taiwan) Co., Ltd.
- https://www.zyxel.com

#### Asia

#### China

- Zyxel Communications Corporation–China Office
- https://www.zyxel.com/cn/sc

#### India

- Zyxel Communications Corporation–India Office
- https://www.zyxel.com/in/en-in

#### Kazakhstan

- Zyxel Kazakhstan
- https://www.zyxel.com/ru/ru

#### Korea

- Zyxel Korea Co., Ltd.
- http://www.zyxel.kr/

#### Malaysia

- Zyxel Communications Corp.
- https://www.zyxel.com/global/en

#### Philippines

- Zyxel Communications Corp.
- https://www.zyxel.com/global/en

#### Singapore

- Zyxel Communications Corp.
- https://www.zyxel.com/global/en

#### Taiwan

- Zyxel Communications (Taiwan) Co., Ltd.
- https://www.zyxel.com/tw/zh

#### Thailand

- Zyxel Thailand Co., Ltd.
- https://www.zyxel.com/th/th

#### Vietnam

- Zyxel Communications Corporation–Vietnam Office
- https://www.zyxel.com/vn/vi

#### Europe

#### Belarus

- Zyxel Communications Corp.
- https://www.zyxel.com/ru/ru

#### **Belgium (Netherlands)**

- Zyxel Benelux
- https://www.zyxel.com/nl/nl
- https://www.zyxel.com/fr/fr

#### Bulgaria

• Zyxel Bulgaria

https://www.zyxel.com/bg/bg

## **Czech Republic**

- Zyxel Communications Czech s.r.o.
- https://www.zyxel.com/cz/cs

## Denmark

- Zyxel Communications A/S
- https://www.zyxel.com/dk/da

## Finland

- Zyxel Communications
- https://www.zyxel.com/fi/fi

## France

- Zyxel France
- https://www.zyxel.com/fr/fr

# Germany

- Zyxel Deutschland GmbH.
- https://www.zyxel.com/de/de

## Hungary

- Zyxel Hungary & SEE
- https://www.zyxel.com/hu/hu

## Italy

- Zyxel Communications Italy S.r.l.
- https://www.zyxel.com/it/it

## Norway

- Zyxel Communications A/S
- https://www.zyxel.com/no/no

# Poland

- Zyxel Communications Poland
- https://www.zyxel.com/pl/pl

## Romania

- Zyxel Romania
- https://www.zyxel.com/ro/ro

## **Russian Federation**

- Zyxel Communications Corp.
- https://www.zyxel.com/ru/ru

## Slovakia

- Zyxel Slovakia
- https://www.zyxel.com/sk/sk

## Spain

- Zyxel Iberia
- https://www.zyxel.com/es/es

## Sweden

- Zyxel Communications A/S
- https://www.zyxel.com/se/sv

## Switzerland

- Studerus AG
- https://www.zyxel.com/ch/de-ch
- https://www.zyxel.com/fr/fr

## Turkey

- Zyxel Turkey A.S.
- https://www.zyxel.com/tr/tr

## UK

- Zyxel Communications UK Ltd.
- https://www.zyxel.com/uk/en-gb

## Ukraine

- Zyxel Ukraine
- https://www.zyxel.com/ua/uk-ua

## South America

## Argentina

- Zyxel Communications Corp.
- https://www.zyxel.com/co/es-co

## Brazil

• Zyxel Communications Brasil Ltda.

https://www.zyxel.com/br/pt

## Colombia

- Zyxel Communications Corp.
- https://www.zyxel.com/co/es-co

# Ecuador

- Zyxel Communications Corp.
- https://www.zyxel.com/co/es-co

# South America

- Zyxel Communications Corp.
- https://www.zyxel.com/co/es-co

# Middle East

## Israel

- Zyxel Communications Corp.
- https://il.zyxel.com

# North America

# USA

- Zyxel Communications, Inc. North America Headquarters
- https://www.zyxel.com/us/en-us

# APPENDIX B Legal Information

## Copyright

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## **Regulatory Notice and Statement**

## **UNITED STATES of AMERICA**



The following information applies if you use the product within USA area. US Importer: Zyxel Communications, Inc, 1130 North Miller Street Anaheim, CA92806-2001, https://www.zyxel.com/us/en/

#### FCC EMC Statement

- The device complies with Part 15 of 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.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.
- This product has been tested and complies with the specifications for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used according to the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
- If this device does cause harmful interference to radio or television reception, which is found by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna
  - · Increase the separation between the devices
  - · Connect the equipment to an outlet other than the receiver's
  - Consult a dealer or an experienced radio/TV technician for assistance

The following information applies if you use the product with RF function within USA area.

#### FCC Radiation Exposure Statement

- This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.
- This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.
- Operation of this device is restricted to indoor use only, except for relevant user's manual mention that this device can be installed into the external environment.

#### Caution:

- FCC regulations restrict the operation of this device to indoor use only.
- The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet.
- Operation of transmitters in the 5.925 7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

#### **EUROPEAN UNION and UNITED KINGDOM**



The following information applies if you use the product within the European Union and United Kingdom.

#### Declaration of Conformity with Regard to EU Directive 2014/53/EU (Radio Equipment Directive, RED) and **UK Regulation**

- Compliance information for wireless products relevant to the EU, United Kingdom and other Countries following the EU Directive 2014/53/EU (RED) and UK regulation. And this product may be used in all EU countries (and other countries following the EU Directive 2014/53/EU) and United Kingdom without any limitation except for the countries mentioned below table:
- In the majority of the EU, United Kingdom, and other European countries, the 5 GHz bands have been made available for the use of wireless local area networks (LANs). Later in this document you will find an overview of countries in which additional restrictions or requirements or both are applicable. The requirements for any country may evolve. Zyxel recommends that you check with the local authorities for the latest status of their national regulations for the 5 GHz wireless LANs. If this device for operation in the band 5,150 – 5,350 MHz, it is for indoor use only. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.
- - The maximum RF power operating for each band as follow:
  - The band 2,400 2,483.5 MHz is 85.31 mW
  - The band 5,150 5,350 MHz is 161.81 mW
  - The band 5,470 5,725 MHz is 334.20 mW
  - The band 5,925 MHz to 6,425 MHz is 168.27 mW

Български (Bulgarian)	С настоящото Zyxel декларира, че това оборудване е в съответствие със съществените изисквания и другите приложими разпоредбите на Директива 2014/53/ЕС.			
	National Restrictions			
	<ul> <li>The Belgian Institute for Postal Services and Telecommunications (BIPT) must be notified of any outdoor wireless link having a range exceeding 300 meters. Please check http://www.bipt.be for more details.</li> <li>Draadloze verbindingen voor buitengebruik en met een reikwijdte van meer dan 300 meter dienen aangemeld te worden bij het Belgisch Instituut voor postdiensten en telecommunicatie (BIPT). Zie http://www.bipt.be voor meer gegevens.</li> <li>Les liaisons sans fil pour une utilisation en extérieur d'une distance supérieure à 300 mètres doivent être notifiées à l'Institut Belge des services Postaux et des Télécommunications (IBPT). Visitez http://www.ibpt.be pour de plus amples détails.</li> </ul>			
Español (Spanish)	Por medio de la presente Zyxel declara que el equipo cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 2014/53/UE.			
Čeština (Czech)	Zyxel tímto prohlašuje, že tento zařízení je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 2014/53/EU.			
Dansk (Danish)	Undertegnede Zyxel erklærer herved, at følgende udstyr udstyr overholder de væsentlige krav og øvrige relevante krav i direktiv 2014/53/EU.			
Deutsch (German)	Hiermit erklärt Zyxel, dass sich das Gerät Ausstattung in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 2014/53/EU befindet.			
Eesti keel (Estonian)	Käesolevaga kinnitab Zyxel seadme seadmed vastavust direktiivi 2014/53/EL põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.			
Ελληνικά (Greek)	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ ΖΥΧΘΙ ΔΗΛΩΝΕΙ ΟΤΙ εξοπλισμός ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 2014/53/ΕΕ.			
English	Hereby, Zyxel declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.			
Français (French)	Par la présente Zyxel déclare que l'appareil équipements est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 2014/53/UE.			
Hrvatski (Croatian)	Zyxel ovime izjavljuje da je radijska oprema tipa u skladu s Direktivom 2014/53/UE.			
Íslenska (Icelandic)	Hér með lýsir, Zyxel því yfir að þessi búnaður er í samræmi við grunnkröfur og önnur viðeigandi ákvæði tilskipunar 2014/53/ UE.			
Italiano (Italian)	Con la presente Zyxel dichiara che questo attrezzatura è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 2014/53/UE.			
	National Restrictions			
	<ul> <li>This product meets the National Radio Interface and the requirements specified in the National Frequency Allocation Table for Italy. Unless this wireless LAN product is operating within the boundaries of the owner's property, its use requires a "general authorization." Please check https://www.mise.gov.it/it/ for more details.</li> <li>Questo prodotto è conforme alla specifiche di Interfaccia Radio Nazionali e rispetta il Piano Nazionale di ripartizione delle frequenze in Italia. Se non viene installato all'interno del proprio fondo, l'utilizzo di prodotti Wireless LAN richiede una "Autorizzazione Generale". Consultare https://www.mise.gov.it/it/ per maggiori dettagli.</li> </ul>			

SCR 50AXE Local GUI User's Guide

Latviešu valoda (Latvian)	Ar šo Zyxel deklarē, ka iekārtas atbilst Direktīvas 2014/53/ES būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.		
Lietuvių kalba (Lithuanian)	Šiuo Zyxel deklaruoja, kad šis įranga atitinka esminius reikalavimus ir kitas 2014/53/ES Direktyvos nuostatas.		
Magyar (Hungarian)	Alulírott, Zyxel nyilatkozom, hogy a berendezés megfelel a vonatkozó alapvető követelményeknek és az 2014/53/EU irányelv egyéb előírásainak.		
Malti (Maltese)	Hawnhekk, Zyxel, jiddikjara li dan tagħmir jikkonforma mal-ħtiģijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 2014/53/UE.		
Nederlands (Dutch)	Hierbij verklaart Zyxel dat het toestel uitrusting in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 2014/53/EU.		
Polski (Polish)	Niniejszym Zyxel oświadcza, że sprzęt jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniar Dyrektywy 2014/53/UE.		
Português (Portuguese)	Zyxel declara que este equipamento está conforme com os requisitos essenciais e outras disposições da Directiva 2014/5. UE.		
Română (Romanian)	Prin prezenta, Zyxel declară că acest echipament este în conformitate cu cerințele esențiale și alte prevederi relevante ale Directivei 2014/53/UE.		
Slovenčina (Slovak)	Zyxel týmto vyhlasuje, že zariadenia spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 2014/53/EÚ.		
Slovenščina (Slovene)	Zyxel izjavlja, da je ta oprema v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 2014/53/EU.		
Suomi (Finnish)	Zyxel vakuuttaa täten että laitteet tyyppinen laite on direktiivin 2014/53/EU oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.		
Svenska (Swedish)	Härmed intygar Zyxel att denna utrustning står I överensstämmelse med de väsentliga egenskapskrav och övriga relevan bestämmelser som framgår av direktiv 2014/53/EU.		
Norsk (Norwegian)	Erklærer herved Zyxel at dette utstyret er I samsvar med de grunnleggende kravene og andre relevante bestemmelser I direktiv 2014/53/EU.		
(Norwegian)	direktiv 2014/53/EU.		

#### Notes:

- Although Norway, Switzerland and Liechtenstein are not EU member states, the EU Directive 2014/53/EU has also been implemented in those countries.
- The regulatory limits for maximum output power are specified in EIRP. The EIRP level (in dBm) of a device can be calculated by adding the gain of the antenna used (specified in dBi) to the output power available at the connector (specified in dBm).

#### List of national codes

COUNTRY	ISO 3166 2 LETTER CODE	COUNTRY	ISO 3166 2 LETTER CODE
Austria	AT	Liechtenstein	LI
Belgium	BE	Lithuania	LT
Bulgaria	BG	Luxembourg	LU
Croatia	HR	Malta	MT
Cyprus	CY	Netherlands	NL
Czech Republic	CZ	Norway	NO
Denmark	DK	Poland	PL
Estonia	EE	Portugal	PT
Finland	FI	Romania	RO
France	FR	Serbia	RS
Germany	DE	Slovakia	SK
Greece	GR	Slovenia	SI
Hungary	HU	Spain	ES
Iceland	IS	Switzerland	СН
Ireland	IE	Sweden	SE
Italy	IT	Turkey	TR
Latvia	LV	United Kingdom	GB

#### Safety Warnings

• Do not use this product near water, for example, in a wet basement or near a swimming pool.

Do not expose your device to dampness, dust or corrosive liquids.

- Do not store things on the device.
- Do not obstruct the device ventilation slots as insufficient airflow may harm your device. For example, do not place the device in an enclosed space such as a box or on a very soft surface such as a bed or sofa.
- Do not install or service this device during a thunderstorm. There is a remote risk of electric shock from lightning.
- Connect ONLY suitable accessories to the device.
- Do not open the device or unit. Opening or removing covers can expose you to dangerous high voltage points or other risks. Only qualified service personnel should service or disassemble this device. Please contact your vendor for further information.
- Make sure to connect the cables to the correct ports.
- Place connecting cables carefully so that no one will step on them or stumble over them. Always disconnect all cables from this device before servicing or disassembling.
- Do not remove the plug and connect it to a power outlet by itself; always attach the plug to the power adaptor first before connecting it to a power outlet.
- Do not allow anything to rest on the power adaptor or cord and do NOT place the product where anyone can walk on the power adaptor or cord.
- Please use the provided or designated connection cables/power cables/ adaptors. Connect it to the right supply voltage (for example, 120V AC in North America or 230V AC in Europe). If the power adaptor or cord is damaged, it might cause electrocution. Remove it from the device and the power source, repairing the power adapter or cord is prohibited. Contact your local vendor to order a new one.
- Do not use the device outside, and make sure all the connections are indoors. There is a remote risk of electric shock from lightning.
- The following warning statements apply, where the disconnect device is not incorporated in the device or where the plug on the power supply cord is intended to serve as the disconnect device,
  - For permanently connected devices, a readily accessible disconnect device shall be incorporated external to the device;
  - For pluggable devices, the socket-outlet shall be installed near the device and shall be easily accessible.

#### **Environment Statement**

#### ErP (Energy-related Products)

Zyxel products put on the EU and United Kingdom market in compliance with the requirement of the European Parliament and the Council published Directive 2009/125/EC and UK regulation establishing a framework for the setting of ecodesign requirements for energy-related products (recast), so called as "ErP Directive (Energy-related Products directive) as well as ecodesign requirement laid down in applicable implementing measures, power consumption has satisfied regulation requirements which are:

- Network standby power consumption < 8 W, and/or
- Off mode power consumption < 0.5 W, and/or
- Standby mode power consumption < 0.5 W.

(Wireless setting, please refer to the chapter about wireless setting for more detail.)

#### Disposal and Recycling Information

The symbol below means that according to local regulations your product and/or its battery shall be disposed of separately from domestic waste. If this product is end of life, take it to a recycling station designated by local authorities. At the time of disposal, the separate collection of your product and/or its battery will help save natural resources and ensure that the environment is sustainable development.

Die folgende Symbol bedeutet, dass Ihr Produkt und/oder seine Batterie gemäß den örtlichen Bestimmungen getrennt vom Hausmüll entsorgt werden muss. Wenden Sie sich an eine Recyclingstation, wenn dieses Produkt das Ende seiner Lebensdauer erreicht hat. Zum Zeitpunkt der Entsorgung wird die getrennte Sammlung von Produkt und/oder seiner Batterie dazu beitragen, natürliche Ressourcen zu sparen und die Umwelt und die menschliche Gesundheit zu schützen.

El símbolo de abajo indica que según las regulaciones locales, su producto y/o su batería deberán depositarse como basura separada de la doméstica. Cuando este producto alcance el final de su vida útil, llévelo a un punto limpio. Cuando llegue el momento de desechar el producto, la recogida por separado éste y/o su batería ayudará a salvar los recursos naturales y a proteger la salud humana y medioambiental.

Le symbole ci-dessous signifie que selon les réglementations locales votre produit et/ou sa batterie doivent être éliminés séparément des ordures ménagères. Lorsque ce produit atteint sa fin de vie, amenez-le à un centre de recyclage. Au moment de la mise au rebut, la collecte séparée de votre produit et/ou de sa batterie aidera à économiser les ressources naturelles et protéger l'environnement et la santé humaine.

Il simbolo sotto significa che secondo i regolamenti locali il vostro prodotto e/o batteria deve essere smaltito separatamente dai rifiuti domestici. Quando questo prodotto raggiunge la fine della vita di servizio portarlo a una stazione di riciclaggio. Al momento dello smaltimento, la raccolta separata del vostro prodotto e/o della sua batteria aiuta a risparmiare risorse naturali e a proteggere l'ambiente e la salute umana.

Symbolen innebär att enligt lokal lagstiftning ska produkten och/eller dess batteri kastas separat från hushållsavfallet. När den här produkten når slutet av sin livslängd ska du ta den fill en återvinningsstation. Vid tiden för kasseringen bidrar du till en bättre miljö och mänsklig hälsa genom att göra dig av med den på ett återvinningsställe.







以下訊息僅適用於產品具有無線功能且銷售至台灣地區

- 取得審驗證明之低功率射頻器材,非經核准,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
- 低功率射頻器材之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並改善至無干擾時方得繼續使用。前述合法通信,指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。
- 使用無線產品時,應避免影響附近雷達系統之操作。
- 高增益指向性天線只得應用於固定式點對點系統。

以下訊息僅適用於產品屬於專業安裝並銷售至台灣地區

• 本器材須經專業工程人員安裝及設定,始得設置使用,且不得直接販售給一般消費者。

安全警告 - 為了您的安全,請先閱讀以下警告及指示:

- 請勿將此產品接近水、火焰或放置在高溫的環境。
- 避免設備接觸:
  - 任何液體 切勿讓設備接觸水、雨水、高濕度、污水腐蝕性的液體或其他水份。
- 灰塵及污物 切勿接觸灰塵、污物、沙土、食物或其他不合適的材料。
- 雷雨天氣時,不要安裝或維修此設備。有遭受電擊的風險。
- 切勿重摔或撞擊設備,並勿使用不正確的電源變壓器。
- 若接上不正確的電源變壓器會有爆炸的風險。
- 請勿隨意更換產品內的電池。
- 如果更換不正確之電池型式,會有爆炸的風險,請依製造商說明書處理使用過之電池。
- 請將廢電池丟棄在適當的電器或電子設備回收處。
- 請勿將設備解體。
- 請勿阻礙設備的散熱孔,空氣對流不足將會造成設備損害。
- 請使用隨貨提供或指定的連接線/電源線/電源變壓器,將其連接到合適的供應電壓(如:台灣供應電壓 110 伏特)。
- 假若電源變壓器或電源變壓器的纜線損壞,請從插座拔除,若您還繼續插電使用,會有觸電死亡的風險。
- 請勿試圖修理電源變壓器或電源變壓器的纜線,若有毀損,請直接聯絡您購買的店家,購買一個新的電源變壓器。
- 請勿將此設備安裝於室外,此設備僅適合放置於室內。
- 請勿隨一般垃圾丟棄。
- 請參閱產品背貼上的設備額定功率。
- 請參考產品型錄或是彩盒上的作業溫度。
- 產品沒有斷電裝置或者採用電源線的插頭視為斷電裝置的一部分,以下警語將適用:
  - 對永久連接之設備, 在設備外部須安裝可觸及之斷電裝置;
  - 對插接式之設備, 插座必須接近安裝之地點而且是易於觸及的。

#### About the Symbols

Various symbols are used in this product to ensure correct usage, to prevent danger to the user and others, and to prevent property damage. The meaning of these symbols are described below. It is important that you read these descriptions thoroughly and fully understand the contents.

SYMBOL	EXPLANATION
$\sim$	Alternating current (AC): AC is an electric current in which the flow of electric charge periodically reverses direction.
	Direct current (DC):
	DC if the unidirectional flow or movement of electric charge carriers.
	Earth; ground:
$\bigcirc$	A wiring terminal intended for connection of a Protective Earthing Conductor.
	Class II equipment:
	The method of protection against electric shock in the case of class II equipment is either double insulation or reinforced insulation.

#### **Viewing Certifications**

Go to *http://www.zyxel.com* to view this product's documentation and certifications.

#### **Zyxel Limited Warranty**

Zyxel warrants to the original end user (purchaser) that this product is free from any defects in material or workmanship for a specific period (the Warranty Period) from the date of purchase. The Warranty Period varies by region. Check with your vendor and/or the authorized Zyxel local distributor for details about the Warranty Period of this product. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials. Zyxel will, at its discretion, repair or replace the defective products or components without charge for either parts or labor, and to whatever extent it shall deem necessary to restore the product of equal or higher value, and will be solely at the discretion of Zyxel. This warranty shall not apply if the product has been modified, misused, tampered with, damaged by an act of God, or subjected to abnormal working conditions.

#### Note

Repair or replacement, as provided under this warranty, is the exclusive remedy of the purchaser. This warranty is in lieu of all other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular use or purpose. Zyxel shall in no event be held liable for indirect or consequential damages of any kind to the purchaser.

To obtain the services of this warranty, contact your vendor. You may also refer to the warranty policy for the region in which you bought the device at *https://www.zyxel.com/global/en/support/warranty-information*.

#### Registration

Register your product online at www.zyxel.com to receive email notices of firmware upgrades and related information.

#### **Open Source Licenses**

This product may contain in part some free software distributed under GPL license terms and/or GPL-like licenses. To request the source code covered under these licenses, please go to: https://www.zyxel.com/form/gpl\_oss\_software\_notice.shtml

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