

Lenovo IdeaPad C340-14IWL/IdeaPad C340-  
15IWL/IdeaPad C340-14API  
User Guide



Lenovo

## **Read this first**

Before using this documentation and the product it supports, ensure that you read and understand the following:

- Appendix A “Important safety information” on page 43
- *Safety and Warranty Guide*
- *Setup Guide*

**First Edition (December 2018)**

**© Copyright Lenovo 2018.**

LIMITED AND RESTRICTED RIGHTS NOTICE: If data or software is delivered pursuant to a General Services Administration “GSA” contract, use, reproduction, or disclosure is subject to restrictions set forth in Contract No. GS-35F-05925.

---

# Contents

About this documentation . . . . .	iii
------------------------------------	-----

## Chapter 1. Meet your computer . . . . . 1

Front . . . . .	1
Base . . . . .	2
Left . . . . .	3
Right . . . . .	4
Features. . . . .	6

## Chapter 2. Get started with your computer. . . . . 7

Get started with Windows 10 . . . . .	7
Windows account . . . . .	7
Windows user interface . . . . .	8
Windows label . . . . .	9
Connect to networks. . . . .	9
Connect to the wired Ethernet . . . . .	9
Connect to the wired Ethernet . . . . .	9
Connect to Wi-Fi . . . . .	10
Connect to a cellular network. . . . .	10
Use Lenovo Vantage . . . . .	10
Interact with your computer . . . . .	11
Use the keyboard shortcuts . . . . .	12
Use the multi-touch screen . . . . .	13
Use multimedia . . . . .	15
Use audio . . . . .	15
Use the camera . . . . .	15
Connect to an external display . . . . .	15
Get to know YOGA modes . . . . .	17
Use Lenovo Pen (for selected models) . . . . .	17

## Chapter 3. Explore your computer . . . . . 19

Manage power . . . . .	19
Check the battery status . . . . .	19
Charge the battery . . . . .	19
Check the battery temperature . . . . .	19
Maximize the battery life . . . . .	19
Set power button behaviors . . . . .	19
Set the power plan . . . . .	20
Transfer data . . . . .	20
Set up a Bluetooth connection . . . . .	20
Set up a NFC connection . . . . .	20
Use a media card or smart card. . . . .	21
Airplane mode . . . . .	22
Color sensor (for selected models) . . . . .	22

## Chapter 4. Secure your computer and information . . . . . 23

Lock the computer . . . . .	23
Use passwords . . . . .	25
Password types . . . . .	25
Set, change, and remove a password . . . . .	26
Use fingerprint authentication (for selected models) . . . . .	26
Use face authentication (for selected models) . . . . .	27
Use firewalls and antivirus programs. . . . .	27

## Chapter 5. Configure advanced settings. . . . . 29

UEFI BIOS . . . . .	29
What is UEFI BIOS . . . . .	29
Enter the BIOS menu . . . . .	29
Navigate in the BIOS interface . . . . .	29
Change the startup sequence . . . . .	29
Set the system date and time. . . . .	30
Update UEFI BIOS . . . . .	30
RAID . . . . .	30
What is RAID . . . . .	30
Storage drive requirements for RAID levels . . . . .	30
Enter the Intel RST configuration utility . . . . .	31
Create RAID volumes . . . . .	31
Delete RAID volumes . . . . .	32
Reset storage drives to non-RAID . . . . .	32
Rebuild RAID 1 volumes. . . . .	32
Recovery information . . . . .	33
Restore system files and settings to an earlier point . . . . .	33
Restore your files from a backup . . . . .	33
Reset your computer . . . . .	33
Use advanced options . . . . .	33
Windows automatic recovery. . . . .	33
Create and use a recovery USB device . . . . .	34
Install Windows 10 and drivers . . . . .	34

## Chapter 6. Help and support . . . . . 37

FAQ . . . . .	37
Error messages . . . . .	38
Beep errors . . . . .	39
Self-help resources . . . . .	40
Call Lenovo . . . . .	41
Before you contact Lenovo . . . . .	41
Lenovo Customer Support Center. . . . .	41
Purchase additional services. . . . .	42

<b>Appendix A. Important safety information. . . . .</b>	<b>43</b>	<b>Appendix D. Compliance information. . . . .</b>	<b>63</b>
<b>Appendix B. Accessibility and ergonomic information . . . . .</b>	<b>57</b>	<b>Appendix E. Notices and trademarks. . . . .</b>	<b>77</b>
<b>Appendix C. Supplemental information about the Ubuntu operating system . . . . .</b>	<b>61</b>		

---

## About this documentation

- Illustrations in this documentation might look different from your product.
- Depending on the model, some optional accessories, features, and software programs might not be available on your computer.
- Depending on the version of operating systems, some user interface instructions might not be applicable to your computer.
- Documentation content is subject to change without notice. Lenovo makes constant improvements on the documentation of your computer, including this *User Guide*. To get the latest documentation, go to <https://support.lenovo.com>.
- Microsoft® makes periodic feature changes to the Windows® operating system through Windows Update. As a result, some information in this documentation might become outdated. Refer to Microsoft resources for the latest information.

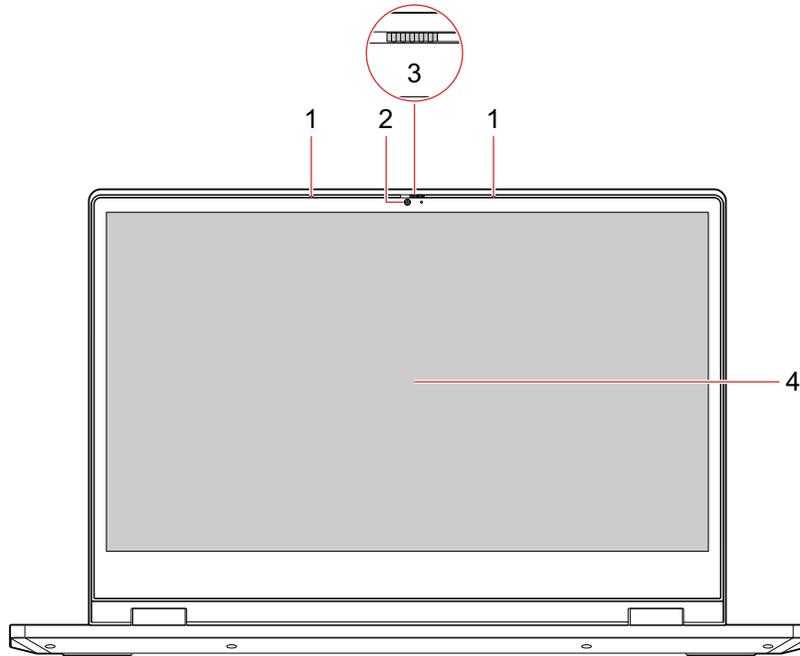


---

## Chapter 1. Meet your computer

---

### Front

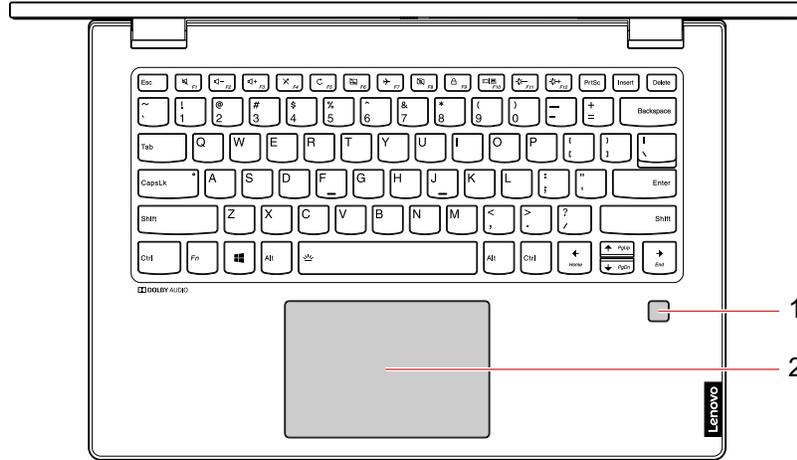


---

1. Microphones	Capture or record sound and voice.
2. Camera	Take pictures or record videos by clicking <b>Camera</b> from the Start menu. The indicator next to the camera is on when the camera is in use..
3. Shutter	Slide the shutter to cover or uncover the camera lens. It is designed to protect your privacy.
4. Multi-touch screen	Enable you to use your computer with simple touch gestures. See “Use the multi-touch screen” on page 13.

---

## Base



1. Fingerprint reader\*

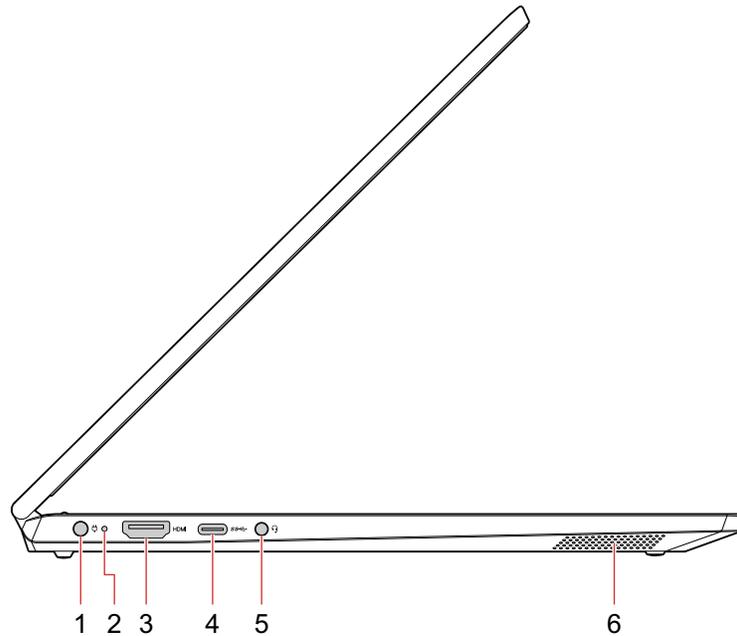
Log in to your computer with enrolled fingerprints. See “Use fingerprint authentication (for selected models)” on page 26.

2. Touchpad

Perform finger touch and all the functions of a traditional mouse.

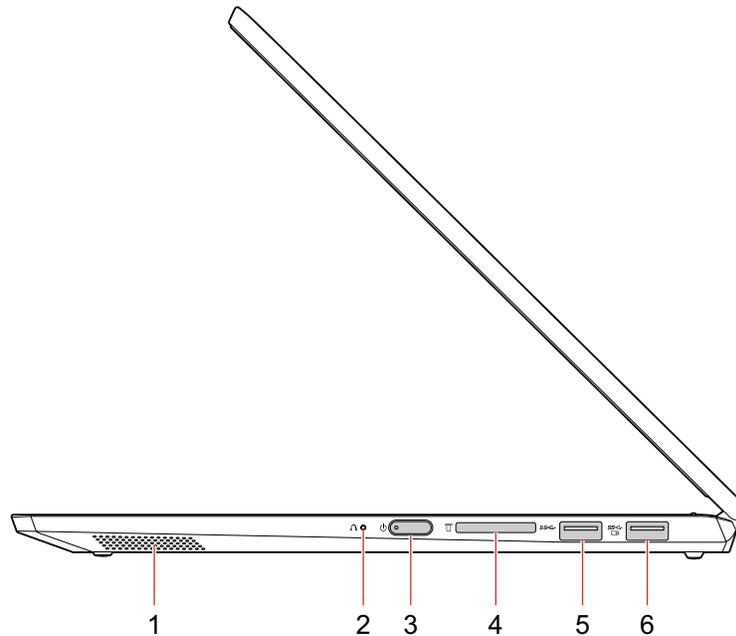
\* for selected models

## Left



1. Power connector	Connect to ac power through an ac power adapter.
2. Battery/Charging status indicator	This indicator shows the ac power and battery power status of the computer. <ul style="list-style-type: none"><li>• <b>Solid White:</b> Connected to ac power (battery power 91%–100%)</li><li>• <b>Solid amber:</b> Connected to ac power (battery power 1%–90%)</li><li>• <b>Off:</b> Not connected to ac power</li></ul>
3. HDMI™ connector	Connect to a compatible digital audio device or video monitor, such as an HDTV.
4. USB-C™ connector	Use the connector to transfer data, charge your device, connect to external displays, or connect to USB-C accessories to help expand your computer functionality. To purchase USB-C accessories, go to <a href="https://www.lenovo.com/accessories">https://www.lenovo.com/accessories</a> . <b>Note:</b> When the battery power is below 10%, the connected USB-C accessories might not work correctly.
5. Audio connector	Connect headphones or a headset with a 3.5-mm (0.14-inch), 4-pole plug to listen to the sound from the computer. <b>Note:</b> The audio connector does not support conventional microphones.
6. Speaker	Produce sound.

## Right



1. Speaker	Produce sound.
2. Novo button	When the computer is off, press this button to start the System Recovery or to enter the boot menu.
3. Power button	<p>Press to turn on the computer or put the computer to sleep mode.</p> <p>To turn off the computer, open the Start menu, click  <b>Power</b>, and then select <b>Shut down</b>.</p> <p>The indicator in the power button shows the system status of your computer.</p> <ul style="list-style-type: none"> <li>• <b>Blinking for three times:</b> The computer is initially connected to power.</li> <li>• <b>On:</b> The computer is on.</li> <li>• <b>Off:</b> The computer is off or in hibernation mode.</li> <li>• <b>Blinking slowly:</b> The computer is in sleep mode.</li> </ul>
4. Media-card slot	Insert a flash media card for data access or storage. See “Use a media card or smart card” on page 21.
5. USB 3.1 connector Gen 1	Connect a USB-compatible device, such as a USB keyboard, USB mouse, USB storage device, or USB printer.
6. Always On USB 3.1 connector Gen 1	<p>To charge the USB-compatible devices when your computer is off, in sleep mode, or in hibernation mode, enable the Always On USB feature on your computer.</p> <p>To configure the Always On USB settings:</p> <ol style="list-style-type: none"> <li>1. Open the Start menu and click <b>Lenovo Vantage</b>.</li> <li>2. Select <b>Hardware Settings</b> → <b>Power</b>.</li> <li>3. Locate the <b>Always On USB</b> section and follow the on-screen instructions to select options of your preference.</li> </ol> <p><b>Note:</b> The Always On USB 3.1 connector Gen 1 does not work if you click <b>Charge from Sleep</b> and your computer is off without connecting to ac power.</p>



---

## Features

---

<b>Size</b>	<ul style="list-style-type: none"><li>• <b>Lenovo IdeaPad C340-14IWL/Lenovo IdeaPad C340-14API:</b><ul style="list-style-type: none"><li>– Length: 328 mm (12.9 inches)</li><li>– Width: 229 mm (9.0 inches)</li><li>– Thickness: 17.9 mm (0.7 inches)</li></ul></li><li>• <b>Lenovo IdeaPad C340-15IWL:</b><ul style="list-style-type: none"><li>– Length: 364 mm (14.3 inches)</li><li>– Width: 250 mm (9.8 inches)</li><li>– Thickness: 20.5 mm (0.8 inches)</li></ul></li></ul>
<b>Microprocessor</b>	To view the microprocessor information of your computer, right-click the <b>Start</b> button and then click <b>System</b> .
<b>Memory</b>	Double data rate 4 (DDR4) small outline dual in-line memory module (SODIMM) + on-board memory
<b>Storage device</b>	M.2 solid-state drive
<b>Display</b>	<ul style="list-style-type: none"><li>• Display size: 355.6 mm ( 14.0 inches )</li><li>• Display resolution: 1366 x 768 pixels or 1920 x 1080 pixels</li><li>• Multi-touch technology</li></ul>
<b>Keyboard</b>	<ul style="list-style-type: none"><li>• Function keys</li><li>• Six-row keyboard</li></ul>
<b>Connectors and slots</b>	<ul style="list-style-type: none"><li>• ac power connector</li><li>• Audio connector</li><li>• Two USB 3.1 connectors Gen 1 (including one Always On USB 3.1 connector Gen 1)</li><li>• HDMI connector</li><li>• Media-card slot</li><li>• USB-C connector</li><li>• Novo button</li></ul>
<b>Security features</b>	<ul style="list-style-type: none"><li>• Fingerprint reader*</li><li>• Password</li></ul>
<b>Wireless features</b>	<ul style="list-style-type: none"><li>• Bluetooth</li><li>• Wireless LAN</li></ul>
<b>Others</b>	<ul style="list-style-type: none"><li>• Camera</li><li>• Microphones</li></ul>

---

\* for selected models

---

## Chapter 2. Get started with your computer

---

### Get started with Windows 10

Learn the basics of Windows 10 and start working with it right away. For more information about Windows 10, see the Windows help information.

### Windows account

To use the Windows operating system, a user account is required. It can either be a Windows user account, or a Microsoft account.

#### Windows user account

When you start Windows for the first time, you are prompted to create a Windows user account. This first account you created is of the “Administrator” type. With an Administrator account, you can create additional user accounts or change account types by doing the following:

1. Open the Start menu and select **Settings → Accounts → Family & other people**.
2. Follow the on-screen instructions.

#### Microsoft account

You can also log in to the Windows operating system with a Microsoft account.

To create a Microsoft account, go to the Microsoft sign-up page at <https://signup.live.com/> and follow the on-screen instructions.

With a Microsoft account, you can:

- Enjoy one-time signing in if you are using other Microsoft services, such as OneDrive, Skype, and Outlook.com.
- Sync personalized settings across other Windows-based devices.

# Windows user interface



1. <b>Account</b> 	Change account settings, lock the computer, or sign out from the current account.
2. <b>Settings</b> 	Launch Settings.
3. <b>Power</b> 	Shut down, restart, or put the computer into sleep.
4. <b>Start button</b> 	Open the Start menu.
5. <b>Windows search</b> 	Type what you are looking for in the search box and get search results from your computer and the Web.
6. <b>Task View</b> 	Display all opened apps and switch among them.
7. <b>Windows notification area</b>	Display notifications and status of some features.
8. <b>Battery status icon</b>	Display power status and change battery or power settings. When your computer is not connected to ac power, the icon changes to  .
9. <b>Network icon</b>	Connect to an available wireless network and display the network status. When connected to a wired network, the icon changes to  .
10. <b>Action center</b> 	Display the latest notifications from apps and provide quick access to some features.

## Open the Start menu

- Click the **Start** button.
- Press the Windows logo key on the keyboard.

## Access Control Panel

- Open the Start menu and click **Windows System → Control Panel**.
- Use Windows search.

## Launch an app

- Open the Start menu and select the app you want to launch.
- Use Windows search.

## Windows label

Your computer might have a Windows 10 Genuine Microsoft label affixed to its cover depending on the following factors:

- Your geographic location
- Edition of Windows 10 that is preinstalled

Go to <https://www.microsoft.com/en-us/howtotell/Hardware.aspx> for illustrations of the various types of Genuine Microsoft labels.

- In the People's Republic of China, the Genuine Microsoft label is required on all computer models preinstalled with any version of Windows 10.
- In other countries and regions, the Genuine Microsoft label is required only on computer models licensed for Windows 10 Pro.

The absence of a Genuine Microsoft label does not indicate that the preinstalled Windows version is not genuine. For details on how to tell whether your preinstalled Windows product is genuine, refer to the information provided by Microsoft at:

<https://www.microsoft.com/en-us/howtotell/default.aspx>

There are no external, visual indicators of the Product ID or Windows version for which the computer is licensed. Instead, the Product ID is recorded in the computer firmware. Whenever a Windows 10 product is installed, the installation program checks the computer firmware for a valid, matching Product ID to complete the activation.

In some cases, an earlier Windows version might be preinstalled under the terms of the Windows 10 Pro license downgrade rights.

---

## Connect to networks

Your computer helps you connect to the world through a wired or wireless network.

### Connect to the wired Ethernet

Connect your computer to a local network through the Ethernet connector on your computer with an Ethernet cable.

**Note:** If the computer is connected to a supported docking station or dock, use the Ethernet connector on the docking station or dock instead of the one on the computer.

### Connect to the wired Ethernet

Connect your computer to a local network through the mini Ethernet connector on your computer with an Ethernet cable.

To attach an Ethernet cable to your computer, you need an Ethernet extension adapter. The Ethernet extension adapter is available as an option and shipped with some computer models. You can purchase one from Lenovo at <https://www.lenovo.com/accessories>.

## Connect to Wi-Fi

1. Click the network icon in the Windows notification area. A list of available wireless networks is displayed.
2. Select a network to connect. Provide required information if needed.

## Connect to a cellular network

If your computer has a wireless wide area network (WAN) card and a micro-SIM card installed, you can connect to a cellular data network and get online using the cellular signal.

**Note:** The cellular service is provided by authorized mobile service carriers in some countries or regions. You must have a cellular plan from a service carrier to connect to the cellular network.

To establish cellular connection:

1. Locate the micro-SIM card slot and insert a micro-SIM card as shown. Note the orientation of the card and ensure that it is seated correctly.



2. Click the network icon in the Windows notification area, and then select the cellular network icon  from the list.
3. Provide required information if needed.

---

## Use Lenovo Vantage



The preinstalled Lenovo Vantage is a customized one-stop solution to help you maintain your computer with automated updates and fixes, configure hardware settings, and get personalized support.

## Access Lenovo Vantage

Open the Start menu and click **Lenovo Vantage**. You also can type **Lenovo Vantage** in the search box.

To download the latest version of **Lenovo Vantage**, go to Microsoft Store and search by the app name.

## Key features

Lenovo Vantage makes periodic updates of the features to keep improving your experience with your computer.

**Note:** The available features vary depending on the computer model.

- **System Update**

Download and install firmware and driver updates to keep your computer up-to-date. You can configure the options to install updates automatically when available.

- **Hardware Settings**

Configure intelligent settings of the following hardware to make your computer smarter to use:

- Always On USB
- Battery
- Camera
- Computer display
- Keyboard
- Microphone
- Speakers
- Trackpad
- Trackpoint

- **Health & Support**

Monitor your computer health and get personalized support of your computer. You can:

- Scan the computer hardware and diagnose hardware problems.
- Look up computer warranty status (online).
- Access *User Guide*.
- Read tips and tricks articles customized for your computer.

- **Lenovo Wi-Fi Security**

Protect your computer from malicious Wi-Fi networks.

---

## Interact with your computer

Your computer provides you various ways to navigate the screen.

## Use the keyboard shortcuts

The special keys on the keyboard help you work more easily and effectively.

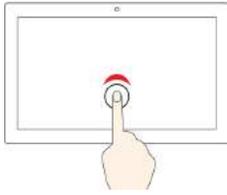
1. Numeric keypad	Input numbers quickly when the Numeric Lock indicator is on.
2. Windows logo key	Open the Start menu. For information about using this key with other keys, see the Windows help information.
3. Caps Lock key	Switch the letter case between the upper case and lower case. When the key indicator is on, you can type uppercase letters.
4. F1–F12 function keys	Invoke the special function printed as an icon on each key or standard function. To choose whether to invoke the special function or standard function: <ol style="list-style-type: none"><li>Go to Control Panel and view by Large icons or Small icons.</li><li>Click <b>Keyboard</b> or <b>Lenovo - Keyboard Manager</b> and select the option of your preference.</li></ol> Switch the function of the F1–F12 keys between the standard function and special function printed as an icon on each key. When the Fn Lock indicator is on: <ul style="list-style-type: none"><li>Press F1-F12 to use the standard function.</li><li>Press Fn+F1-F12 to use the special function.</li></ul> When the Fn Lock indicator is off: <ul style="list-style-type: none"><li>Press Fn+F1-F12 to use the standard function.</li><li>Press F1-F12 to use the special function.</li></ul>
	
	Mute or unmute the speakers. When the key indicator is on, the speakers are muted. If you mute the speakers and turn off your computer, the speakers remain muted when you turn on your computer.
	Decrease the speaker volume.
	Increase the speaker volume.
	Mute or unmute the microphones. When the key indicator is on, the microphones are muted.
	Darken the computer display.
	Brighten the computer display.
	Manage external displays.
	Enable or disable the built-in wireless features.
	Open the Settings window.

	Enable or disable the built-in Bluetooth features.
	Open a keyboard setting page.
	<p>Invoke the function defined by yourself:</p> <ol style="list-style-type: none"> <li>1. Open the Start menu and click <b>Lenovo Vantage</b>.</li> <li>2. Click <b>Hardware Settings</b> and then click <b>Input</b>.</li> <li>3. Locate the <b>Keyboard: User-defined Key</b> section and follow the on-screen instructions to complete the setting.</li> </ol> <p>On this setting page, you can also define different functions for the key combinations with F12, such as Shift+F12, Alt+F12, or Ctrl+F12.</p>
	Open the calculator.
	Put your computer to sleep mode.
	Open the Snipping Tool program.
Fn+Spacebar	Switch between different keyboard backlight statuses if your computer supports keyboard backlight.
Fn+B	Equal the Break key on a conventional external keyboard.
Fn+K	Equal the ScrLK or Scroll Lock key on a conventional external keyboard.
Fn+P	Equal the Pause key on a conventional external keyboard.
Fn+S	Equal the SysRq key on a conventional external keyboard.
Fn+4	Put the computer to sleep mode. To wake up the computer, press Fn or the power button.
Fn+Left arrow key	Equal the Home key.
Fn+Right arrow key	Equal the End key.

## Use the multi-touch screen

If your computer display supports the multi-touch function, you can navigate the screen with simple touch gestures.

**Note:** Some gestures might not be available depending on the app you use.



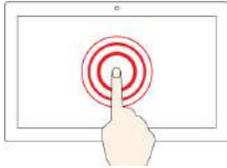
### Tap once

- From the Start menu: Open an app or item.
- From the desktop: Select an app or item.
- In an open app: Perform an action such as **Copy**, **Save**, and **Delete**, depending on the app.



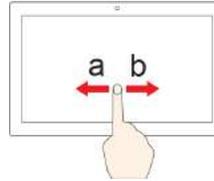
### Tap twice quickly

Open an app or item from the desktop.



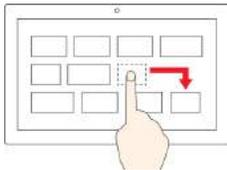
### Tap and hold

Open a shortcut menu.



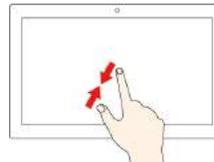
### Slide

Scroll through items, such as lists, pages, and photos.



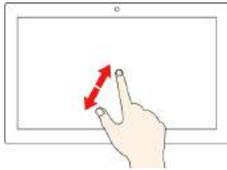
### Drag an item to the location you want

Move an object.



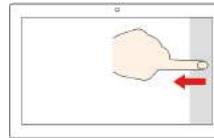
### Move two fingers closer together

Zoom out.



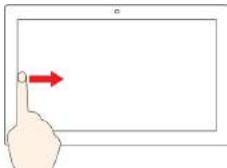
### Move two fingers farther apart

Zoom in.



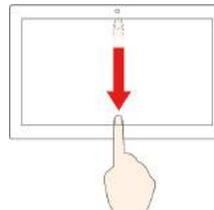
### Swipe in from the right edge

Open the action center to see your notifications and quick actions.



### Swipe in from the left edge

View all your open windows in task view.



- **Swipe downwards shortly from the top edge (for full-screened app or when your computer is in the tablet mode)**

Show a hidden title bar.

- **Swipe in from the top edge to the bottom edge (when your computer is in the tablet mode)**

Close the current app.

## Tips

- Turn off the computer before cleaning the multi-touch screen.
- Use a dry, soft, and lint-free cloth or a piece of absorbent cotton to remove fingerprints or dust from the multi-touch screen. Do not apply solvents to the cloth.
- The multi-touch screen is a glass panel covered with a plastic film. Do not apply pressure or place any metallic object on the screen, which might damage the touch panel or cause it to malfunction.
- Do not use fingernails, gloved fingers, or inanimate objects for input on the screen.
- Regularly calibrate the accuracy of the finger input to avoid a discrepancy.

---

## Use multimedia

Use your computer for business or entertainment with the built-in components (camera, speakers, and audio features) or connected external devices (an external projector, monitor, and HDTV).

### Use audio

To enhance your listening experience, connect speakers, headphones, or a headset with a 3.5-mm (0.14-inch), 4-pole plug to the audio connector.

#### Adjust the volume

Press  to increase the volume or press  to decrease the volume.

#### Change the sound settings

1. Go to Control Panel and view by category.
2. Click **Hardware and Sound** → **Sound**.
3. Change the settings as you prefer.

#### Protect your hearing

Smart audio helps protect against hearing loss. The feature limits the computer's maximum volume to 130 mV when a headset or headphone is connected. To change the setting:

1. Go to Control Panel and view by Large icons.
2. Click **SmartAudio**. In the window displayed, click the **Disable Headphone Limiter** icon. Then, follow the on-screen instructions.

### Use the camera

You can use the built-in camera to take photos or record videos. The indicator next to the camera turns on when the camera is in use.

To take photos or record a video:

1. Open the Start menu and click **Camera**.
2. To take a photo, click the camera icon. If you want to record video, click the video icon to switch to video mode.

If you use other programs that provide features such as photographing, video capturing, and video conference, the camera starts automatically when you enable the camera-required feature.

To configure the camera settings:

1. Open the Start menu and click **Lenovo Vantage** → **Hardware Settings** → **Audio/Visual**.
2. Locate the **Camera** section and then follow the on-screen instructions.

### Connect to an external display

Connect your computer to a projector or a monitor to give presentations or expand your workspace.

#### Connect to a wired display

1. Connect the external display to an appropriate video connector on your computer, such as the HDMI connector or Mini DisplayPort connector.

2. Connect the external display to an electrical outlet.
3. Turn on the external display.

If your computer cannot detect the external display, right-click a blank area on the desktop, and then click **Display settings → Detect**.

### Supported resolution

The following table lists the supported maximum resolution of the external display.

Connect the external display to	Supported resolution
the USB-C connector or the Mini DisplayPort connector	Up to 3840 x 2160 pixels / 60 Hz
the HDMI connector	Up to 3840 x 2160 pixels / 30 Hz

### Connect to a wireless display

To use a wireless display, ensure that both your computer and the external display support the Miracast® feature.

- Open the Start menu, and then click **Settings → Devices → Bluetooth & other devices → Add Bluetooth or other device**. In the Add a device window, click **Wireless display or dock**. Then, follow the instructions on the screen.
- Click the action center icon  in the Windows notification area and click **Connect**. Select the wireless display and follow the on-screen instructions.

### Set the display mode

Press  or  +  and then select a display mode of your preference.

- **PC screen only:** Displays the video output only on your computer screen.
  - Note:** Depending on the situation, you might see **Disconnect**, **PC screen only**, **Computer only**, or **Disconnect projector**.
- **Duplicate:** Displays the same video output on both your computer screen and an external display.
- **Extend:** Extends the video output from your computer display to an external display. You can drag and move items between the two displays.
- **Second screen only:** Displays the video output only on an external display.

**Note:** Depending on the situation, you might see **Projector only** or **Second screen only**.

If you show programs using DirectDraw or Direct3D® in full-screen mode, only the main display shows the video output.

### Change display settings

1. Right-click a blank area on the desktop and select **Display settings**.
2. Select the display that you want to configure.
3. Change display settings of your preference.

You can change the settings for both the computer display and the external display. For example, you can define which one is the main display and which one is the secondary display. You also can change the resolution and orientation.

**Note:** If you set a higher resolution for the computer display than the external display, only part of the screen can be displayed on the external display.

---

## Get to know YOGA modes

Your computer display can be rotated to any angle up to 360 degrees.

**Attention:** Do not rotate the computer display with too much force, or apply too much force to the upper-right or upper-left corner of the computer display. Otherwise the computer display or hinges might get damaged.

Your computer features the following four YOGA modes. You can switch among different modes according to your preference.

**Note:** The keyboard and the pointing devices are automatically disabled in the stand mode, tent mode, and tablet mode. Use the touch screen to control your computer instead.

---

## Use Lenovo Pen (for selected models)

The Lenovo Pen is an electronic pen stored in the pen slot. To use the pen, slide it out of the slot.

### Notes:

- The Lenovo Pen is not waterproof. Keep the pen away from water and excessive moisture.
- To purchase the Lenovo Pen, go to <https://www.lenovo.com/accessories>.

### Use the Lenovo Pen



**1** Eraser button

**2** Click button

You can perform the following operations with the Lenovo Pen:

- To click or make a selection, tap the display once.
- To double-click, tap twice without pausing.
- To right-click, tap the display and hold the pen there for one second. Alternatively, you can press and hold the click button **2** and tap the display.
- To erase ink, press and hold the eraser button **1**, tap the display, and drag the pen across the ink you want to erase.

### Charge the Lenovo Pen

1. Ensure that your computer is on or in sleep mode.
2. Insert the pen back into the pen slot. The pen is 80% charged in about 15 seconds and 100% charged in about five minutes.



---

## Chapter 3. Explore your computer

---

### Manage power

Use the information in this section to achieve the best balance between performance and power efficiency.

### Check the battery status

The battery status icon  or  is in the Windows notification area. You can check the battery status, view the current power plan, and access battery settings quickly.

Click the battery status icon to display the percentage of battery power remaining and change the power mode. A warning message is displayed when the battery is low.

### Charge the battery

When the battery power is low, charge your battery by connecting your computer to ac power.

The battery is fully charged in about four to eight hours. If the power adapter shipped with your computer supports the rapid charge function, the battery is xx% charged in about xx hour when the computer is turned off. The actual charging time depends on the battery size, the physical environment, and whether you are using the computer.

Battery charging is also affected by the battery temperature. The recommended battery temperature range for charging the battery is between 10°C (50°F) and 35°C (95°F).

**Note:** To maximize the life of the battery, the computer does not recharge the battery if the remaining power is greater than 95%.

### Check the battery temperature

1. Open the Start menu and click **Lenovo Vantage**.
2. Click **Hardware Settings → Power**.
3. Locate the **Power Status** section and then click **Show Details** to view the battery temperature.

### Maximize the battery life

- Lower the brightness of the computer display.
- Turn off the wireless features when not in use.
- Use the battery until the charge is depleted.
- Recharge the battery completely before using it.

### Set power button behaviors

You can define what the power button does according to your preference. For example, by pressing the power button, you can turn off the computer or put the computer to sleep or hibernation mode.

To change what the power button does:

1. Right-click the battery status icon in the Windows notification area.
2. Click **Power Options → Choose what the power button does**.
3. Change the settings as you prefer.

## Set the power plan

For ENERGY STAR® compliant computers, the following power plan takes effect when your computers have been idle for a specified duration:

Table 1. Default power plan (when plugged into ac power)

- |  |
|--|
| <ul style="list-style-type: none"><li>• Turn off the display: After 10 minutes</li><li>• Put the computer to sleep: After 30 minutes</li></ul> |
|--|

To reset the power plan to achieve the best balance between performance and power saving:

1. Right-click the battery status icon and select **Power Options**.
2. Choose or customize a power plan of your preference.

---

## Transfer data

Quickly share your files using the built-in Bluetooth or NFC technology among devices with the same features. You also can insert a media card or smart card to transfer data.

## Set up a Bluetooth connection

You can connect all types of Bluetooth device to your computer, such as a keyboard, a mouse, a smartphone, or speakers. The devices must be within a short distance, usually 10 meters (33 feet), from the computer.

1. Turn on Bluetooth on the computer.

- Press  or  + .

- Open the Start menu, and then click **Settings → Devices → Bluetooth & other devices**. Turn on the **Bluetooth** switch.
2. Click **Add Bluetooth or other device → Bluetooth**.
  3. Select a Bluetooth device, and then follow the on-screen instructions.

Your Bluetooth device and computer will automatically connect the next time if the two devices are in range of each other with Bluetooth turned on. You can use Bluetooth for data transfer or remote control and communication.

## Set up a NFC connection

If your computer supports NFC, you will see an NFC mark or label  around the trackpad area.

NFC is a high-frequency and short-range wireless communication technology. By using NFC, you can simply tap and connect your computer and another NFC-enabled device over a few centimeters or inches.

### Turn on NFC

1. Open the Start menu and click **Settings → Network & Internet → Airplane mode**.
2. Turn off the Airplane mode.
3. Turn on the NFC function.

## Pair with an NFC card or NFC-enabled smartphone

Before you start, ensure that:

- The card is in NFC Data Exchange Format (NDEF), otherwise the card cannot be detected.
- The smartphone screen is facing upward.

To pair with an NFC card or smartphone:

1. Tap the card or smartphone closely above the NFC mark or label on your computer.
2. Slowly move the card or smartphone around the NFC mark or label until you are prompted that the device has been successfully detected.

**Attention:** During the data transfer, do not put your computer to sleep mode or lock the smartphone; otherwise, your data might get damaged.

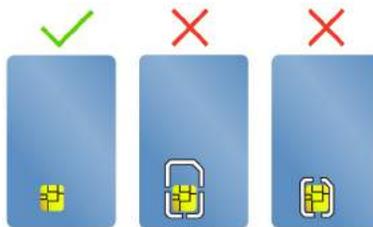
## Use a media card or smart card

If your computer has a media-card slot or smart-card slot, read the following information.

### Supported smart card

Supported smart card specifications: 85.60 mm (3.37 inches) x 53.98 mm (2.13 inches)

**Attention:** Smart cards with slits are not supported. Do not insert such a smart card into the smart-card reader of your computer. Otherwise the reader might get damaged.



### Install the card

1. Locate the card slot. See “Right” on page 4.
2. Insert the card firmly into the card slot until it is secured in place.

#### Notes:

- For the media card, ensure that the metal contacts are facing down and pointing toward the card slot.
- For the smart card, ensure that the metal contacts are facing upward and pointing toward the card slot.

### Remove the card

**Attention:** Before removing a card, eject the card from the Windows operating system first. Otherwise, data on the card might get corrupted or lost.

1. Click the triangular icon in the Windows notification area to show hidden icons. Then, right-click the **Safely Remove Hardware and Eject Media** icon.
2. Select the corresponding item to eject the card from the Windows operating system.
3. Press the card and remove it from your computer. Store the card safely for future use.

---

## Airplane mode

When the Airplane mode is enabled, all wireless features are disabled.

To enable or disable the Airplane mode:

1. Open the Start menu.
2. Click **Settings → Network & Internet → Airplane mode**.
3. Turn on or turn off the **Airplane mode** switch.

---

## Color sensor (for selected models)

The color sensor enables you to measure and adjust the color accuracy of your computer display. Therefore, a color image or graphic is rendered as close as possible to its original intent. The color profile for computer displays is preinstalled on your computer. If you want to install a different color profile, go to:

<https://support.lenovo.com>

To use the color sensor, open the Start menu, click **X-Rite → PANTONE Color Calibrator**, and then follow the on-screen instructions.

When the color sensor is in use, the color-sensor indicator on the computer outer lid blinks twice at regular intervals. When the color measuring and adjustment finishes, the color-sensor indicator stays on.

After you use the color sensor for the first time, a calibration profile `ECCM2SensorData.dat` is generated. Back up this calibration profile on an external storage device in case that both the color sensor and the internal storage device are replaced.

To locate the DAT file, go to **This PC → Documents → X-Rite**.

The display provides a color profile that can work with the Microsoft Image Color Management (ICM) function. If the graphics software you are using is compatible with ICM, you can display a color image on your monitor and match it with the same quality one on another device, such as a scanner or a printer.

For more information about the Microsoft ICM, see the Windows help information.

---

## Chapter 4. Secure your computer and information

---

### Lock the computer

Lock your computer to a desk, table, or other fixtures through a compatible security cable lock.

**Note:** You are responsible for evaluating, selecting, and implementing the locking device and security feature. Lenovo makes no comments, judgments, or warranties about the function, quality, or performance of the locking device and security feature. Cable locks for your product are available from Lenovo at <https://www.lenovoquickpick.com>.



Lock your computer to a desk, table, or other fixtures through a compatible security cable lock.

**Note:** The slot supports cable locks that conform to the Kensington MiniSaver® lock standards using Cleat™ locking technology. Do not attempt to use other types of cable locks that use a rotating T-bar™ locking mechanism. You are responsible for evaluating, selecting, and implementing the locking device and security feature. Lenovo makes no comments, judgments, or warranties about the function, quality, or performance of the locking device and security feature. Cable locks for your product are available from Lenovo at <https://www.lenovoquickpick.com/>.



Lock your computer to a desk, table, or other fixtures through a compatible security cable lock.

**Note:** The slot supports cable locks that conform to the Kensington MicroSaver® lock standards (using T-bar™ locking technology) or MiniSaver® lock standards (using Cleat™ locking technology). You are responsible for evaluating, selecting, and implementing the locking device and security feature. Lenovo makes no comments, judgments, or warranties about the function, quality, or performance of the locking device and security feature. Cable locks for your product are available from Lenovo at <https://www.lenovoquickpick.com/>.



---

## Use passwords

This section introduces types of passwords in UEFI (Unified Extensible Firmware Interface) BIOS (Basic Input/Output System) and how to set, change, and remove a password.

### Password types

You can set a power-on password, supervisor password, or hard disk password in UEFI BIOS to prevent unauthorized access to your computer. However, you are not prompted to enter any UEFI BIOS password when your computer resumes from sleep mode.

#### Power-on password

If you set a power-on password, the icon  is displayed on the screen when you turn on the computer. Enter the correct password to use the computer.

#### Supervisor password

The supervisor password protects the system information stored in UEFI BIOS. When entering the BIOS

menu, enter the correct supervisor password when you are prompted by the icon . You also can press Enter to skip the password prompt. However, you cannot change most of the system configuration options in UEFI BIOS.

If you have set both the supervisor password and power-on password, you can use the supervisor password to access your computer when you turn it on. The supervisor password overrides the power-on password.

#### Hard disk passwords

The hard disk password prevents unauthorized access to the data on the storage drive. When a hard disk password is set, you are prompted to type a correct password each time you try to access the storage drive.

To set the hard disk password, select one of the following types:

- **User hard disk password only**

When a user hard disk password is set without a master hard disk password, the user must enter the user hard disk password to access files and applications on the storage drive.

- **Master hard disk password + User hard disk password**

The master hard disk password is set and used by a system administrator. It enables the administrator to access any storage drive in a system or any computer connected in the same network. The administrator can also assign a user hard disk password for each computer in the network. The user of the computer can change the user hard disk password as desired, but only the administrator can remove the user hard disk password.

When prompted to enter a hard disk password, press F1 to switch between the master hard disk password

 and user hard disk password .

**Attention:** Record your hard disk password and store it in a safe place. If you forget the hard disk password, Lenovo cannot reset your passwords or recover data from the storage drive. You must take your computer to a Lenovo reseller or a marketing representative to have the storage drive replaced. Proof of purchase is required, and a fee will be charged for parts and service.

**Note:** The hard disk password is not available in the following situations:

- A Trusted Computing Group (TCG) Opal-compliant storage drive and a TCG Opal management software program are installed in the computer, and the TCG Opal management software program is activated.
- An eDrive storage drive is installed in the computer preinstalled with the Windows 10 operating system.

## Set, change, and remove a password

Before you start, print these instructions.

1. Restart the computer. When the logo screen is displayed, press F1 to enter the BIOS menu.
2. Select **Security** → **Password** by using the arrow keys.
3. Select the password type. Then, follow the on-screen instructions to set, change, or remove a password.

You might want to record your password and store it in a safe place. Otherwise, if you forget the password, you have to take your computer to a Lenovo reseller or a marketing representative to have the password canceled. However, if you forget the hard disk password, Lenovo cannot reset your passwords or recover data from the storage drive.

---

## Use fingerprint authentication (for selected models)

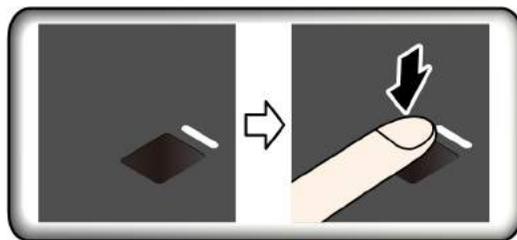
Fingerprint authentication can replace your passwords, such as the Windows password, power-on password, and hard disk password and enables you to log in to your computer simply and securely.

### Enroll your fingerprints

Open the Start menu and then click **Settings** → **Accounts** → **Sign-in options**. Then, follow the on-screen instructions to finish the enrollment.

During the enrollment, the fingerprints are associated with the Windows password automatically. It is recommended that you enroll more than one fingerprint in case of any injuries to your fingers.

### Log in with your fingerprint



If the fingerprint reader indicator blinks in amber, the authentication is not successful.

### Associate your fingerprints with your power-on password and hard disk password

1. Turn off and then turn on the computer.
2. When prompted, scan your finger on the fingerprint reader.
3. Enter your power-on password, hard disk password, or both as required. The connection is created.

When you start the computer again, you can use your fingerprints to log in to the computer without entering your Windows password, power-on password, or hard disk password. To change the settings, go to the BIOS menu.

**Attention:** If you always use your fingerprint to log in to the computer, you might forget your passwords. Write down your passwords, and keep them in a safe place.

- If you forget your power-on password, take your computer to a Lenovo-authorized servicer or a marketing representative to have the password canceled.
- If you forget your hard disk password, Lenovo cannot reset your password or recover data from the storage drive. Take your computer to a Lenovo-authorized servicer or a marketing representative to have the storage drive replaced. Proof of purchase is required, and a fee will be charged for parts and service.

### Maintain the fingerprint reader

To ensure that the fingerprint reader works correctly, do not:

- Scratch the surface of the reader with anything hard.
- Use or touch the reader with a wet, dirty, wrinkled, or injured finger.

---

## Use face authentication (for selected models)

The infrared camera provides a personal and secure way for you to sign in to your computer with face authentication. After setting the infrared camera for face authentication, you can unlock your computer by scanning your face instead of using a password.

### Create face ID

1. Open the Start menu and click **Settings → Accounts → Sign-in options**.
2. Scroll down to the **Password** section and click **Add** to create a password.
3. Follow the on-screen instructions to create a Personal Identification Number (PIN).
4. Locate the **Windows Hello** section and click **Set up** under **Face Recognition**. Then, click **Get Started**.
5. Enter the PIN you have set earlier. The camera preview starts.
6. Follow the on-screen instructions to complete the setup.
7. Click **Improve Recognition** to improve the image so that **Windows Hello** can recognize you in different light conditions or when your appearance changes.

### Log in with face authentication

1. On the Windows lock screen, select the smiling face icon  from the sign-in options.
2. Follow the on-screen instructions and ensure that you are centered and looking directly at the camera. When the program recognizes your face, it automatically unlocks the screen and signs you in to the Windows operating system.

---

## Use firewalls and antivirus programs

Your computer might be preinstalled with a firewall program. The firewall protects against computer Internet security threats, unauthorized access, intrusions, and Internet attacks. It also protects your privacy.

A full version of antivirus program is provided with a free 30-day subscription. After 30 days, you must renew the license to continue receiving the antivirus program updates.

For more information, see the help system of the program.



---

## Chapter 5. Configure advanced settings

This chapter provides information about UEFI BIOS, RAID, recovery, operating system installation, and system management.

---

### UEFI BIOS

This section introduces what is UEFI BIOS and the operations you can perform in UEFI BIOS.

#### What is UEFI BIOS

UEFI BIOS is the first program that the computer runs when the computer is turned on. UEFI BIOS initializes the hardware components and loads the operating system and other programs. You can configure UEFI BIOS to select the preferred settings for your computer. UEFI BIOS is also called the ThinkPad Setup program on your computers.

#### Enter the BIOS menu

Restart the computer. When the logo screen is displayed, press F1 to enter the BIOS menu.

**Note:** If you have set the supervisor password, enter the correct password when prompted. You also can press Enter to skip the password prompt and enter the BIOS menu. However, you cannot change the system configurations that are protected by the supervisor password.

#### Navigate in the BIOS interface

**Attention:** The default configurations are already optimized for you in **boldface**. Improper change of the configurations might cause unexpected results.

You can navigate in the BIOS interface by pressing the following keys:

F1	Display the General Help screen.
F9	Restore to the default settings.
F10	Save your configuration and exit.
F5	Change to a lower value.
F6	Change to a higher value.
↑ ↓	Locate an item.
← →	Select a tab.
Esc	Exit the submenu and return to the parent menu.
Enter	Enter the selected tab or submenu.

#### Change the startup sequence

1. Restart the computer. When the logo screen is displayed, press F1.
2. Select **Startup** → **Boot**. Then, press Enter. The default device order list is displayed.

**Note:** The **Boot** menu is displayed if the computer cannot start from any devices or the operating system cannot be found.

3. Set the startup sequence as desired.
4. Press F10 to save the changes and restart the computer.

To change the startup sequence temporarily:

1. Restart the computer. When the logo screen is displayed, press F12.
2. Select the device that you want the computer to start from and press Enter.

## Set the system date and time

1. Restart the computer. When the logo screen is displayed, press F1.
2. Select **Date/Time** and set the system date and time as desired.
3. Press F10 to save changes and exit.

## Update UEFI BIOS

When you install a new program, device driver, or hardware component, you might need to update UEFI BIOS.

Download and install the latest UEFI BIOS update package by one of the following methods:

- From Lenovo Vantage:
  1. Open the Start menu and click **Lenovo Vantage**.
  2. Click **System Update**. In the **Lenovo System Update** section, click **Check For Updates**. The available update packages are displayed and categorized by critical, recommended, or optional.
  3. If the latest UEFI BIOS update package is available, select the package and click **Install selected**. Then, the update package will be downloaded and installed automatically.
- From the Lenovo Support Web site:

Go to <https://support.lenovo.com> and select the entry for your computer. Then, follow the on-screen instructions to download and install the latest UEFI BIOS update package.

---

## RAID

This section introduces RAID-related information.

### What is RAID

Redundant Array of Independent Disks (RAID) is a technology that provides increased storage functions and reliability through redundancy. It also can improve data storage reliability and fault tolerance compared with single-drive storage systems. Data loss resulting from a drive failure can be prevented by reconstructing missing data from the remaining drives.

When a group of independent physical storage drives is set up to use RAID technology, they are in a RAID array. This array distributes data across multiple storage drives, but the array appears to the host computer as one single storage unit. Creating and using RAID arrays provides high performance, such as the expedited I/O performance, because several drives can be accessed simultaneously.

### Storage drive requirements for RAID levels

Your computer supports the following internal storage drives:

- 2.5-inch form factor, 7-mm (0.28-inch) height hard disk drive
- M.2 Non-Volatile Memory Express (NVMe) solid-state drive (for selected models)

**Note:** Ensure that your computer has two identical storage drives installed (two hard disk drives, or M.2 NVMe solid-state drives with the same capacity) for supported RAID levels. If only one drive is installed, or two different types of drives are installed, the following information does not apply.

Your computer supports the following RAID levels:

- RAID 0: striped disk array (missing data resulting from a drive failure cannot be reconstructed)
  - Consists of two identical storage drives
  - Supported strip size: 4 KB, 8 KB, 16 KB, 32 KB, 64 KB, or 128 KB
  - Better performance without fault tolerance
  - Higher risk of data loss resulting from a member drive failure compared with non-RAID configuration
- RAID 1: mirrored disk array
  - Consists of two identical storage drives
  - Improved reading performance and 100% redundancy

## Enter the Intel RST configuration utility

1. Ensure that RAID is enabled in the BIOS menu:
  - a. Restart the computer. When the logo screen is displayed, press F1 to enter the BIOS menu.
  - b. Select **Config** → **Storage** → **Controller Mode** → **RST mode** and then press Enter.
  - c. Press F10 to save changes and exit.
2. Restart the computer. When the logo screen is displayed, press F1 to enter the BIOS menu.
3. Select **Config** → **Storage** → **Intel (R) Rapid Storage Technology** and then press Enter.

The Intel (R) Rapid Storage Technology window opens and the following options are displayed:

- **Create RAID Volume:** Create a RAID volume. If no internal storage drives can be used, this option is not available.
  - **RAID Volumes:** Confirm the information of the created RAID volumes.
  - **Non-RAID Physical Disks:** Confirm the information of all non-RAID drives.
4. Press the up and down arrow keys to select an option. Press Enter to enter the menu for the selected option. Press Esc to exit the Intel RST configuration utility.

## Create RAID volumes

**Attention:** All the existing data stored on the selected drives will be erased while the RAID volume is being created.

1. Enter the Intel RST configuration utility.
2. Select **Create RAID Volume**, and then press Enter to open the CREATE RAID VOLUME window.
3. Select and configure the options one by one.
  - a. **Name:** Use the default name or type a preferred name for the RAID volume.
  - b. **RAID Level:** Press Enter to change the RAID between RAID 0 (Stripe) and RAID 1 (Mirror).
  - c. **Select Disks:** Select a drive and press Spacebar or Enter to add it into a group. The drive that cannot be used to create a RAID volume is not selectable. An **X** mark is displayed next to the selected drive.
  - d. **Strip Size:** Select a strip size and press Enter to complete the configuration. This option is only available for RAID 0.
  - e. **Capacity:** Customize the capacity of the RAID volume. The default RAID volume is the largest value.
  - f. **Create Volume:** Press Enter to finish configurations of the preceding options and create a volume.

**Note:** The **Create Volume** option might not be selectable for some reasons, for example, if different types of drives are selected, the option is not selectable. If it is not selectable, see the message displayed under **Create Volume** for reference.

After the RAID volume is created, the Intel (R) Rapid Storage Technology window is displayed, and the created volume is displayed under **RAID Volumes**.

4. Press F10 to save changes and exit.

## Delete RAID volumes

**Attention:** All the existing data stored on the selected drives will be erased after you delete RAID volumes.

1. Enter the Intel RST configuration utility.
2. Select the volume that you want to delete under **RAID Volumes**. Press Enter to open the RAID VOLUME INFO window.
3. Select **Delete** and press Enter to delete it from the **RAID Volumes** list.
4. When prompted, select **Yes** to confirm the deletion of the selected RAID volume.

After you delete the RAID volume, the Intel (R) Rapid Storage Technology window is displayed. Member drives of the deleted volume are displayed under **Non-RAID Physical Disks**.

5. Press F10 to save changes and exit.

## Reset storage drives to non-RAID

**Attention:** All the existing data stored on the selected drive will be erased after you reset it to non-RAID.

1. Enter the Intel RST configuration utility.
2. Select the volume that you want to reset under **RAID Volumes**. Press Enter to open the RAID VOLUME INFO window.
3. Select the drive that you want to reset under **RAID Member Disks**. Press Enter to open the PHYSICAL DISK INFO window.
4. Select **Reset to Non-RAID** and press Enter. When prompted, select **Yes** to confirm the reset action.

After the reset process finishes, the Intel (R) Rapid Storage Technology window is displayed. The reset drive is listed under **Non-RAID Physical Disks**, and the volume of the reset drive is still listed under **RAID Volumes**. However, the status is changed from **Normal** to **Failed** or **Degraded**.

5. Press F10 to save changes and exit.

## Rebuild RAID 1 volumes

If the status of a RAID 1 volume is **Failed** or **Degraded**, you can rebuild it through the Intel RST configuration utility. To rebuild a RAID 1 volume, ensure that at least one member drive of the RAID 1 volume works correctly. Replace the failed storage drive with a new one that has the same capacity before you rebuild a RAID 1 volume.

1. Enter the Intel RST configuration utility.
2. Select the volume that you want to rebuild under **RAID Volumes**. Press Enter to open the RAID VOLUME INFO window.
3. Select **Rebuild** and press Enter to open the Rebuild Volume window.
4. Select the drive that you want to rebuild and press Enter to initiate the rebuild process.

After you initiate the rebuild process, the Intel (R) Rapid Storage Technology window is displayed. The RAID 1 volume under rebuilding is displayed under **RAID Volumes** with a **Rebuilding** mark.

5. Wait a few minutes. When the rebuild process finishes successfully, the **Rebuilding** mark is changed to the **Normal** mark.
6. Press F10 to save changes and exit.

---

## Recovery information

This section introduces the recovery information of the Windows 10 operating system. Ensure that you read and follow the on-screen recovery instructions. The data on your computer might be deleted during the recovery process. To avoid data loss, make a backup copy of all the data that you want to keep.

### Restore system files and settings to an earlier point

1. Go to Control Panel and view by Large icons or Small icons.
2. Click **Recovery** → **Open System Restore**. Then, follow the on-screen instructions.

### Restore your files from a backup

**Note:** If you use the File History tool to restore your files from a backup, ensure that you backed up your data earlier with the tool.

1. Go to Control Panel and view by Large icons or Small icons.
2. Click **File History** → **Restore personal files**. Then, follow the on-screen instructions.

### Reset your computer

In the resetting process, you can choose to keep your files or remove them when you reinstall the operating system.

**Note:** The items in the graphical user interface (GUI) might change without notice.

1. Open the Start menu, and then click **Settings** → **Update & Security** → **Recovery**.
2. In the **Reset this PC** section, click **Get started**.
3. Follow the on-screen instructions to reset your computer.

### Use advanced options

**Note:** The items in the graphical user interface (GUI) might change without notice.

1. Open the Start menu, and then click **Settings** → **Update & security** → **Recovery**.
2. In the **Advanced startup** section, click **Restart now** → **Troubleshoot** → **Advanced options**.
3. Select a preferred option from the following list, and then follow the on-screen instructions.
  - Restore the Windows operating system from a restore point recorded on your computer
  - Restore the Windows operating system from a specific system image
  - Fix problems that prevent the Windows operating system from loading
  - Use the Command Prompt for advanced troubleshooting
  - Change the UEFI firmware settings on your computer
  - Change the startup settings of the Windows operating system
  - Go back to the previous build

### Windows automatic recovery

**Note:** Ensure that your computer is connected to ac power during the recovery process.

The Windows recovery environment on your computer operates independently from the Windows 10 operating system. It enables you to recover or repair the operating system even if the Windows 10 operating system fails to start.

After two consecutive failed boot attempts, the Windows recovery environment starts automatically. Then you can choose repair and recovery options by following the on-screen instructions.

## Create and use a recovery USB device

It is recommended that you create a recovery USB drive as early as possible as a backup for the Windows recovery programs. With the recovery USB drive, you can troubleshoot and fix the problems even if the preinstalled Windows recovery programs are damaged. If you did not create a recovery USB drive as a precautionary measure, you can contact Lenovo Customer Support Center and purchase one from Lenovo. For a list of the Lenovo Support phone numbers for your country or region, go to:

<https://pcsupport.lenovo.com/supportphonenumberlist>

### Create a recovery USB drive

**Attention:** The creation process deletes anything stored on the USB drive. To avoid data loss, make a backup copy of all the data that you want to keep.

1. Ensure that your computer is connected to ac power.
2. Prepare a USB drive with at least 16 GB of storage capacity. The actual USB capacity required depends on the size of the recovery image.
3. Connect the prepared USB drive to the computer.
4. Type `recovery` in the search box. Then, click **Create a recovery drive**.
5. Click **Yes** in the User Account Control window to allow the Recovery Media Creator program to start.
6. In the Recovery Drive window, follow the on-screen instructions to create a recovery USB drive.

### Use the recovery USB drive

1. Ensure that your computer is connected to ac power.
2. Connect the recovery USB drive to the computer.
3. Turn on or restart the computer. When the logo screen is displayed, press F12. The Boot Menu window opens.
4. Select the recovery USB drive as the boot device.
5. Click **Troubleshoot** to display optional recovery solutions.
6. Select a recovery solution as desired. Then, follow the on-screen instructions to complete the process.

---

## Install Windows 10 and drivers

This section provides instructions on installing a Windows 10 operating system and device drivers.

### Install a Windows 10 operating system

Microsoft constantly makes updates to the Windows 10 operating system. Before installing a particular Windows 10 version, check the compatibility list for the Windows version. For details, go to <https://support.lenovo.com/us/en/solutions/windows-support>.

#### Attention:

- It is recommended that you update your operating system through official channels. Any unofficial update might cause security risks.

- The process of installing a new operating system deletes all the data on your internal storage drive, including the data stored in a hidden folder.
1. If you are using the Windows BitLocker Drive Encryption feature and your computer has a Trusted Platform Module, ensure that you have disabled the feature.
  2. Ensure that the security chip is set to **Active**.
    - a. Restart the computer. When the logo screen is displayed, press F1 to enter the BIOS menu.
    - b. Select **Security → Security Chip** and press Enter. The **Security Chip** submenu opens.
    - c. Ensure that the security chip for TPM 2.0 is set to **Active**.
    - d. Press F10 to save the settings and exit the BIOS menu.
  3. Connect the drive that contains the operating system installation program to the computer.
  4. Restart the computer. When the logo screen is displayed, press F1 to enter the BIOS menu.
  5. Select **Startup → Boot** to display the **Boot Priority Order** submenu.
  6. Select the drive that contains the operating system installation program, for example, **USB HDD**. Then, press Esc.

**Attention:** After you change the startup sequence, ensure that you select the correct device during a copy, a save, or a format operation. If you select the wrong device, the data on that device might be erased or overwritten.

7. Select **Restart** and ensure that **OS Optimized Defaults** is enabled. Then, press F10 to save the settings and exit the BIOS menu.
8. Follow the on-screen instructions to install the device drivers and necessary programs.
9. After installing the device drivers, apply Windows Update to get the latest updates, for example the security patches.
10. Go to Microsoft Store to download and install the latest version of Lenovo Vantage.

**Note:** After installing the operating system, do not change the initial **UEFI/Legacy Boot** setting in the BIOS menu. Otherwise, the operating system will not start correctly.

### Install device drivers

You should download the latest driver for a component when you notice poor performance from that component or when you added a component. This action might eliminate the driver as the potential cause of a problem. Download and install the latest driver by one of the following methods:

- From Lenovo Vantage:
  1. Open the Start menu and click **Lenovo Vantage**.
  2. Click **System Update**. In the **Lenovo System Update** section, click **Check For Updates**. The available update packages are displayed and categorized by critical, recommended, or optional.
  3. Select the update packages you want and click **Install selected**. Then, the update packages will be downloaded and installed automatically.

- From the Lenovo Support Web site:

Go to <https://support.lenovo.com> and select the entry for your computer. Then, follow the on-screen instructions to download and install necessary drivers and software.



---

## Chapter 6. Help and support

---

### FAQ

---

How do I access Control Panel?	<ul style="list-style-type: none"><li>• Open the Start menu and click <b>Windows System → Control Panel</b>.</li><li>• Use Windows search.</li></ul>
How do I turn off my computer?	Open the Start menu and click  <b>Power</b> . Then, click <b>Shut down</b> .
How do I partition my storage drive?	<a href="https://support.lenovo.com/solutions/ht503851">https://support.lenovo.com/solutions/ht503851</a>
What do I do if my computer stops responding.	<ol style="list-style-type: none"><li>1. Press and hold the power button until the computer turns off. Then, restart the computer.</li><li>2. If step 1 does not work:<ul style="list-style-type: none"><li>• For models with an emergency reset hole: Insert a straightened paper clip into the emergency reset hole to cut off power supply temporarily. Then, restart the computer with ac power connected.</li><li>• For models without an emergency reset hole: Remove the battery pack and disconnect all power sources. Then, reconnect to ac power and restart the computer.</li></ul></li></ol>
What do I do if I spill liquid on the computer?	<ol style="list-style-type: none"><li>1. Carefully unplug the ac power adapter and turn off the computer immediately. The more quickly you stop the current from passing through the computer the more likely you will reduce damage from short circuits. <b>Attention:</b> Although you might lose some data or work by turning off the computer immediately, leaving the computer on might make your computer unusable.</li><li>2. Do not try to drain out the liquid by turning over the computer. If your computer has keyboard drainage holes on the bottom, the liquid will be drained out through the holes.</li><li>3. Wait until you are certain that all the liquid is dry before turning on your computer.</li></ol>
How do I enter the BIOS menu?	Restart the computer. When the logo screen is displayed, press F1 to enter the BIOS menu.
How do I disable my trackpad?	<ol style="list-style-type: none"><li>1. Go to Control Panel and view by Large icons or Small icons.</li><li>2. Click <b>Mouse</b>. The Mouse Properties window is displayed.</li><li>3. Follow the on-screen instructions to complete the setting.</li></ol>
Where can I get the latest device drivers and UEFI BIOS?	<ul style="list-style-type: none"><li>• From Lenovo Vantage. See “Install Windows 10 and drivers” on page 34 and “Update UEFI BIOS” on page 30.</li><li>• Download from Lenovo Support Web site at <a href="https://support.lenovo.com">https://support.lenovo.com</a>.</li></ul>

---

---

## Error messages

If you see a message that is not included in the following table, record the error message first, then shut down the computer and call Lenovo for help. See “Lenovo Customer Support Center” on page 41.

Message	Solution
0190: Critical low-battery error	The computer turned off because the battery power is low. Connect the ac power adapter to the computer and charge the batteries.
0191: System Security - Invalid remote change requested	The system configuration change has failed. Confirm the operation and try again.
0199: System Security - Security password retry count exceeded.	This message is displayed when you enter a wrong supervisor password more than three times. Confirm the supervisor password and try again.
0271: Check Date and Time settings.	The date or the time is not set in the computer. Enter the BIOS menu and set the date and time.
1802: Unauthorized network card is plugged in - Power off and remove the network card.	The wireless network card is not supported on this computer. Replace with a supported wireless network card.
1820: More than one external fingerprint readers are attached.	Turn off and remove all but the reader that you set up within your main operating system.
210x/211x: Detection/Read error on HDDx/SSDx	The storage drive is not working. Reinstall the storage drive. If the problem still exists, replace the storage drive.

**Note:**

This error indicates that the operating system or programs cannot create, modify, or delete data in the non-volatile system UEFI variable storage due to insufficient storage space after POST.

The non-volatile system UEFI variable storage is used by the UEFI BIOS and by the operating system or programs. This error occurs when the operating system or programs store large amounts of data in the variable storage. All data needed for POST, such as UEFI BIOS setup settings, chipset, or platform configuration data, are stored in a separate UEFI variable storage.

Press F1 after the error message is displayed to enter the BIOS menu. A dialog asks for confirmation to clean up the storage. If you select “Yes”, all data that were created by the operating system or programs will be deleted except global variables defined by the Unified Extensible Firmware Interface Specification. If you select “No”, all data will be kept, but the operating system or programs will not be able to create, modify, or delete data in the storage.

If this error happens at a service center, Lenovo authorized service personnel will clean up the non-volatile system UEFI variable storage using the preceding solution.

Error: The non-volatile system UEFI variable storage is nearly full.

---

## Beep errors

Lenovo SmartBeep technology enables you to decode beep errors with your smartphone when a black screen occurs with beeps from your computer. To decode the beep error with Lenovo SmartBeep technology:

1. Go to <https://support.lenovo.com/smartbeep> or scan the following QR Code.



2. Download the proper diagnostic app and install it on your smartphone.
3. Run the diagnostic app and place the smartphone near the computer.
4. Press Fn on your computer to emit the beep again. The diagnostic app decodes the beep error and shows possible solutions on the smartphone.

**Note:** Do not attempt to service a product yourself unless instructed to do so by the Customer Support Center or product documentation. Only use a Lenovo-authorized service provider to repair your product.

---

## Self-help resources

Use the following self-help resources to learn more about the computer and troubleshoot problems.

---

Resources	How to access?
Use Lenovo Vantage to: <ul style="list-style-type: none"><li>• Download and install the latest drivers and firmware.</li><li>• Configure hardware settings.</li><li>• Diagnose computer hardware problems.</li><li>• Check the computer warranty status.</li><li>• Protect you computer from malicious Wi-Fi networks.</li></ul>	<ul style="list-style-type: none"><li>• Open the Start menu and click <b>Lenovo Vantage</b>.</li><li>• Use Windows search.</li></ul>
Product documentation: <ul style="list-style-type: none"><li>• <i>Safety and Warranty Guide</i></li><li>• <i>Setup Guide</i></li><li>• This <i>User Guide</i></li><li>• <i>Regulatory Notice</i></li></ul>	<ol style="list-style-type: none"><li>1. Go to <a href="https://support.lenovo.com">https://support.lenovo.com</a>.</li><li>2. Detect your computer or select computer model manually.</li><li>3. Select <b>Documentation</b> and filter out the documentation you want.</li></ol>
Lenovo Support Web site with the latest support information of the following: <ul style="list-style-type: none"><li>• Drivers and software</li><li>• Diagnostic solutions</li><li>• Product and service warranty</li><li>• Product and parts details</li><li>• Knowledge base and frequently asked questions</li></ul>	<p><a href="https://support.lenovo.com">https://support.lenovo.com</a></p>
Windows help information	<ul style="list-style-type: none"><li>• Open the Start menu and click <b>Get Help</b> or <b>Tips</b>.</li><li>• Use Windows search or the Cortana® personal assistant.</li><li>• Microsoft support Web site: <a href="https://support.microsoft.com">https://support.microsoft.com</a></li></ul>

---

---

## Call Lenovo

If you have tried to correct the problem yourself and still need help, you can call Lenovo Customer Support Center.

## Before you contact Lenovo

Prepare the following before you contact Lenovo:

1. Record the problem symptoms and details:
  - What is the problem? Is it continuous or intermittent?
  - Any error message or error code?
  - What operating system are you using? Which version?
  - Which software applications were running at the time of the problem?
  - Can the problem be reproduced? If so, how?
2. Record the system information:
  - Product name
  - Machine type and serial number

The following illustration shows where to find the machine type and serial number of your computer.



## Lenovo Customer Support Center

During the warranty period, you can call Lenovo Customer Support Center for help.

### Telephone numbers

For a list of the Lenovo Support phone numbers for your country or region:

- Go to <https://pcsupport.lenovo.com/supportphonenumberlist> for the latest phone numbers.
- Refer to the *Safety and Warranty Guide* that comes with your computer.

**Note:** Phone numbers are subject to change without notice. If the number for your country or region is not provided, contact your Lenovo reseller or Lenovo marketing representative.

### Services available during the warranty period

- Problem determination - Trained personnel are available to assist you with determining if you have a hardware problem and deciding what action is necessary to fix the problem.
- Lenovo hardware repair - If the problem is determined to be caused by Lenovo hardware under warranty, trained service personnel are available to provide the applicable level of service.

- Engineering change management - Occasionally, there might be changes that are required after a product has been sold. Lenovo or your reseller, if authorized by Lenovo, will make selected Engineering Changes (ECs) that apply to your hardware available.

### **Services not covered**

- Replacement or use of parts not manufactured for or by Lenovo or nonwarranted parts
- Identification of software problem sources
- Configuration of UEFI BIOS as part of an installation or upgrade
- Changes, modifications, or upgrades to device drivers
- Installation and maintenance of network operating systems (NOS)
- Installation and maintenance of programs

For the terms and conditions of the Lenovo Limited Warranty that apply to your Lenovo hardware product, see “Warranty information” in the *Safety and Warranty Guide* that comes with your computer.

---

## **Purchase additional services**

During and after the warranty period, you can purchase additional services from Lenovo at <https://www.lenovo.com/services>.

Service availability and service name might vary by country or region.

---

## Appendix A. Important safety information

---

### Safety notices

This information can help you safely use your computer. Follow and retain all information included with your computer. The information in this document does not alter the terms of your purchase agreement or the Limited Warranty. For more information, see "Warranty Information" in the *Safety and Warranty Guide* that comes with your computer.

Customer safety is important. Our products are developed to be safe and effective. However, personal computers are electronic devices. Power cords, power adapters, and other features can create potential safety risks that can result in physical injury or property damage, especially if misused. To reduce these risks, follow the instructions included with your product, observe all warnings on the product and in the operating instructions, and review the information included in this document carefully. By carefully following the information contained in this document and provided with your product, you can help protect yourself from hazards and create a safer computer work environment.

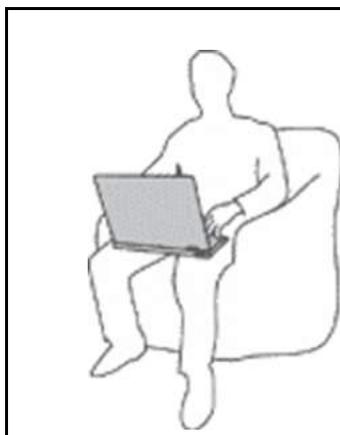
**Note:** This information includes references to power adapters and batteries. In addition, some products (such as speakers and monitors) ship with external power adapters. If you have such a product, this information applies to your product. In addition, computer products contain a coin-sized internal battery that provides power to the system clock even when the computer is unplugged, so the battery safety information applies to all computer products.

---

### Important information about using your computer

Ensure that you follow the important tips given here to get the most use and enjoyment out of your computer. Failure to do so might lead to discomfort or injury, or cause the computer to fail.

#### Protect yourself from the heat that your computer generates.



When your computer is turned on or the battery is charging, the base, the palm rest, and some other parts may become hot. The temperature they reach depends on the amount of system activity and the level of charge in the battery.

Extended contact with your body, even through clothing, could cause discomfort or even a skin burn.

- Avoid keeping your hands, your lap, or any other part of your body in contact with a hot section of the computer for any extended time.
- Periodically take hands from using the keyboard by lifting your hands from the palm rest.

### Protect yourself from the heat generated by the ac power adapter.



When the ac power adapter is connected to an electrical outlet and your computer, it generates heat.

Extended contact with your body, even through clothing, may cause a skin burn.

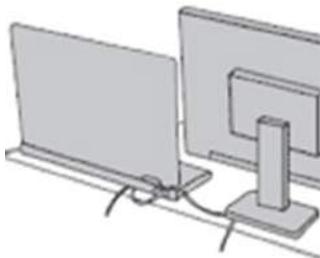
- Do not place the ac power adapter in contact with any part of your body while it is in use.
- Never use it to warm your body.
- Do not wrap the cords around the ac power adapter while in use.

### Prevent your computer from getting wet.



To avoid spills and the danger of electrical shock, keep liquids away from your computer.

### Protect the cables from being damaged.



Applying strong force to cables may damage or break them.

Route communication lines, or the cables of an ac power adapter, a mouse, a keyboard, a printer, or any other electronic device, so that they cannot be walked on, tripped over, pinched by your computer or other objects, or in any way subject to treatment that could interfere with the operation of your computer.

### Protect your computer and data when moving it.

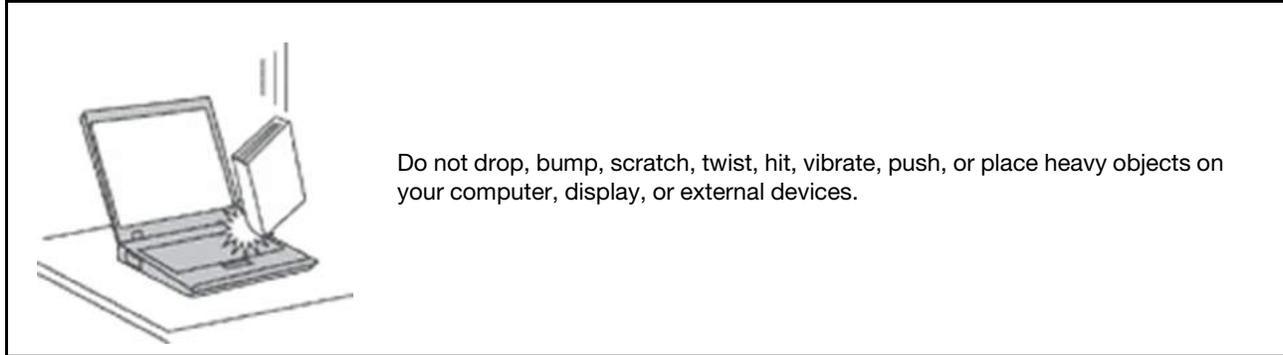


Before moving a computer equipped with a hard disk drive, do one of the following:

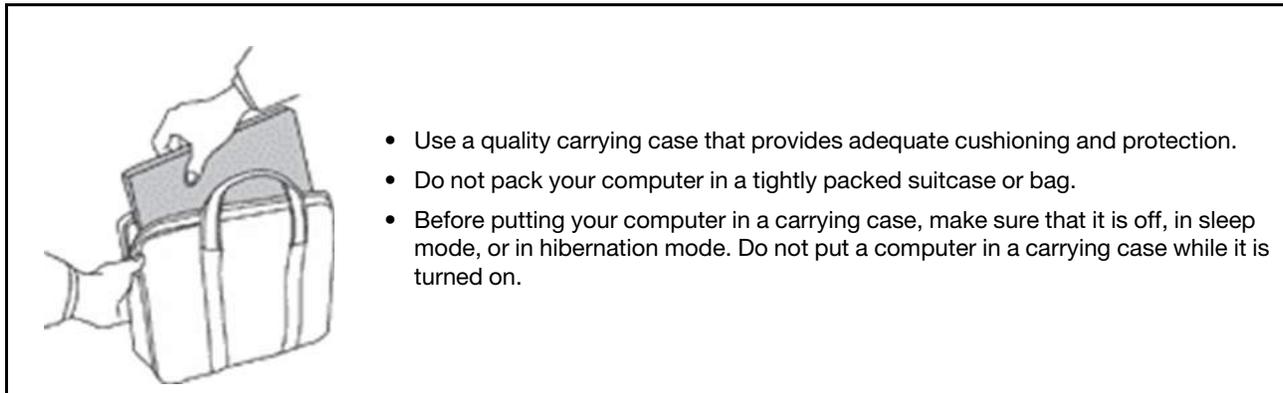
- Turn it off.
- Put it in sleep mode.
- Put it in hibernation mode.

This helps to prevent damage to the computer, and possible loss of data.

### Handle your computer gently.



### Carry your computer carefully.



---

## Conditions that require immediate action

Products can become damaged due to misuse or neglect. Some product damage is serious enough that the product should not be used again until it has been inspected and, if necessary, repaired by an authorized servicer.

As with any electronic device, pay close attention to the product when it is turned on.

On very rare occasions, you might notice an odor or see a puff of smoke or sparks vent from your product. Or you might hear sounds like popping, cracking, or hissing. These might merely mean that an internal electronic component has failed in a safe and controlled manner. Or, they might indicate a potential safety issue. Do not take risks or attempt to diagnose the situation yourself. Contact the Customer Support Center for further guidance. For a list of Service and Support phone numbers, see the following Web site:

<https://pcsupport.lenovo.com/supportphonenumberlist>

Frequently inspect your computer and its components for damage or wear or signs of danger. If you have any question about the condition of a component, do not use the product. Contact the Customer Support Center or the product manufacturer for instructions on how to inspect the product and have it repaired, if necessary.

In the unlikely event that you notice any of the following conditions, or if you have any safety concerns with your product, stop using the product and unplug it from the power source and telecommunication lines until you can speak to the Customer Support Center for further guidance.

- Power cords, plugs, power adapters, extension cords, surge protectors, or power supplies that are cracked, broken, or damaged.
- Signs of overheating, smoke, sparks, or fire.
- Damage to a battery (such as cracks, dents, or creases), discharge from a battery, or a buildup of foreign substances on the battery.
- A cracking, hissing, or popping sound, or strong odor that comes from the product.
- Signs that liquid has been spilled or an object has fallen onto the computer product, the power cord, or power adapter.
- The computer product, power cord, or power adapter has been exposed to water.
- The product has been dropped or damaged in any way.
- The product does not operate normally when you follow the operating instructions.

**Note:** If you notice these conditions with a product (such as an extension cord) that is not manufactured for or by Lenovo, stop using that product until you can contact the product manufacturer for further instructions, or until you get a suitable replacement.

---

## Service and upgrades

Do not attempt to service a product yourself unless instructed to do so by the Customer Support Center or your documentation. Only use a Service Provider who is approved to repair your particular product.

**Note:** Some computer parts can be upgraded or replaced by the customer. Upgrades typically are referred to as options. Replacement parts approved for customer installation are referred to as Customer Replaceable Units, or CRUs. Lenovo provides documentation with instructions when it is appropriate for customers to install options or replace CRUs. You must closely follow all instructions when installing or replacing parts. The Off state of a power indicator does not necessarily mean that voltage levels inside a product are zero. Before you remove the covers from a product equipped with a power cord, always ensure that the power is turned off and that the product is unplugged from any power source. If you have any questions or concerns, contact the Customer Support Center.

Although there are no moving parts in your computer after the power cord has been disconnected, the following warnings are required for your safety.



Keep fingers and other parts of your body away from hazardous, moving parts. If you suffer an injury, seek medical care immediately.



Avoid contact with hot components inside the computer. During operation, some components become hot enough to burn the skin. Before you open the computer cover, turn off the computer, disconnect power, and wait approximately 10 minutes for the components to cool.



After replacing a CRU, reinstall all protective covers, including the computer cover, before connecting power and operating the computer. This action is important to help prevent unexpected electrical shock and help ensure the containment of an unexpected fire that could happen under extremely rare conditions.



When replacing CRUs, be cautious of sharp edges or corners that might cause injury. If you suffer an injury, seek medical care immediately.

---

## Power cords and power adapters



**Use only the power cords and power adapters supplied by the product manufacturer.**

**The power cords shall be safety approved. For Germany, it shall be H03VV-F, 3G, 0.75 mm<sup>2</sup>, or better. For other countries, the suitable types shall be used accordingly.**

**Never wrap a power cord around a power adapter or other object. Doing so can stress the cord in ways that can cause the cord to fray, crack, or crimp. This can present a safety hazard.**

**Always route power cords so that they will not be walked on, tripped over, or pinched by objects.**

**Protect power cords and power adapters from liquids. For instance, do not leave your power cord or power adapter near sinks, tubs, toilets, or on floors that are cleaned with liquid cleansers. Liquids can cause a short circuit, particularly if the power cord or power adapter has been stressed by misuse. Liquids also can cause gradual corrosion of power cord terminals and/or the connector terminals on a power adapter, which can eventually result in overheating.**

**Ensure that all power cord connectors are securely and completely plugged into receptacles.**

**Do not use any power adapter that shows corrosion at the ac input pins or shows signs of overheating (such as deformed plastic) at the ac input pins or anywhere on the power adapter.**

**Do not use any power cords where the electrical contacts on either end show signs of corrosion or overheating or where the power cord appears to have been damaged in any way.**

**To prevent possible overheating, do not cover the power adapter with clothing or other objects when the power adapter is plugged into an electrical outlet.**

---

## Extension cords and related devices

Ensure that extension cords, surge protectors, uninterruptible power supplies, and power strips that you use are rated to handle the electrical requirements of the product. Never overload these devices. If power strips are used, the load should not exceed the power strip input rating. Consult an electrician for more information if you have questions about power loads, power requirements, and input ratings.

---

## Plugs and outlets



If a receptacle (power outlet) that you intend to use with your computer equipment appears to be damaged or corroded, do not use the outlet until it is replaced by a qualified electrician.

Do not bend or modify the plug. If the plug is damaged, contact the manufacturer to obtain a replacement.

Do not share an electrical outlet with other home or commercial appliances that draw large amounts of electricity; otherwise, unstable voltage might damage your computer, data, or attached devices.

Some products are equipped with a three-pronged plug. This plug fits only into a grounded electrical outlet. This is a safety feature. Do not defeat this safety feature by trying to insert it into a non-grounded outlet. If you cannot insert the plug into the outlet, contact an electrician for an approved outlet adapter or to replace the outlet with one that enables this safety feature. Never overload an electrical outlet. The overall system load should not exceed 80 percent of the branch circuit rating. Consult an electrician for more information if you have questions about power loads and branch circuit ratings.

Be sure that the power outlet you are using is properly wired, easily accessible, and located close to the equipment. Do not fully extend power cords in a way that will stress the cords.

Be sure that the power outlet provides the correct voltage and current for the product you are installing.

Carefully connect and disconnect the equipment from the electrical outlet.

---

## Power supply statement

Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

---

## External devices

### CAUTION:

Do not connect or disconnect any external device cables other than Universal Serial Bus (USB) and 1394 cables while the computer power is on; otherwise, you might damage your computer. To avoid possible damage to attached devices, wait at least five seconds after the computer is shut down to disconnect external devices.

---

## General battery notice



Batteries supplied by Lenovo for use with your product have been tested for compatibility and should only be replaced with approved parts. A battery other than the one specified by Lenovo, or a disassembled or modified battery is not covered by the warranty.

Battery abuse or mishandling can cause overheating, liquid leakage, or an explosion. To avoid possible injury, do the following:

- Do not open, disassemble, or service any battery.
- Do not crush or puncture the battery.
- Do not short-circuit the battery, or expose it to water or other liquids.
- Keep the battery away from children.
- Keep the battery away from fire.

Stop using the battery if it is damaged, or if you notice any discharge or the buildup of foreign materials on the battery leads.

Store the rechargeable batteries or products containing the rechargeable batteries at room temperature, charged to approximately 30 to 50% of capacity. We recommend that the batteries be charged about once per year to prevent overdischarge.

Do not put the battery in trash that is disposed of in landfills. When disposing of the battery, comply with local ordinances or regulations.

---

## Notice for removable rechargeable battery



Only recharge the battery strictly according to instructions included in the product documentation.

If the battery is incorrectly replaced, there is danger of an explosion. The battery contains a small amount of harmful substances.

---

## Notice for built-in rechargeable battery



Do not attempt to remove or replace the built-in rechargeable battery. Replacement of the battery must be done by a Lenovo-authorized repair facility or technician.

Only recharge the battery strictly according to instructions included in the product documentation.

The Lenovo-authorized repair facilities or technicians recycle Lenovo batteries according to local laws and regulations.

---

## Lithium coin-cell battery notice



**Danger of explosion if battery is incorrectly replaced.**

**If the coin-cell battery is not a CRU, do not attempt to replace the coin-cell battery. Replacement of the battery must be done by a Lenovo-authorized repair facility or technician.**

**The Lenovo-authorized repair facilities or technicians recycle Lenovo batteries according to local laws and regulations.**



When replacing the lithium coin-cell battery, use only the same type or equivalent type that is recommended by the manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of. Swallowing the lithium coin-cell battery will cause choking or severe internal burns in just two hours and might even result in death.

Keep batteries away from children. If the lithium coin-cell battery is swallowed or placed inside any part of the body, seek medical care immediately.

### **Do not:**

- Throw or immerse into water
- Heat to more than 100 °C (212°F).
- Repair or disassemble
- Leave in an extremely low air pressure environment
- Leave in an extremely high-temperature environment
- Crush, puncture, cut, or incinerate

Dispose of the battery as required by local ordinances or regulations.

The following statement applies to users in the state of California, U.S.A.

California Perchlorate Information:

Products containing manganese dioxide lithium coin-cell batteries may contain perchlorate.

Perchlorate Material - special handling may apply, see <https://www.dtsc.ca.gov/hazardouswaste/perchlorate/>.

---

## Heat and product ventilation



Computers, ac power adapters, and many accessories can generate heat when turned on and when batteries are charging. Notebook computers can generate a significant amount of heat due to their compact size. Always follow these basic precautions:

- When your computer is turned on or the battery is charging, the base, the palm rest, and some other parts may become hot. Avoid keeping your hands, your lap, or any other part of your body in contact with a hot section of the computer for any extended length of time. When you use the keyboard, avoid keeping your palms on the palm rest for a prolonged period of time. Your computer generates some heat during normal operation. The amount of heat depends on the amount of system activity and the battery charge level. Extended contact with your body, even through clothing, could cause discomfort or even a skin burn. Periodically take breaks from using the keyboard by lifting your hands from the palm rest; and be careful not to use the keyboard for any extended length of time.
- Do not operate your computer or charge the battery near flammable materials or in explosive environments.
- Ventilation slots, fans and/or heat sinks are provided with the product for safety, comfort, and reliable operation. These features might inadvertently become blocked by placing the product on a bed, sofa, carpet, or other flexible surface. Never block, cover, or disable these features.
- When the ac power adapter is connected to an electrical outlet and your computer, it generates heat. Do not place the adapter in contact with any part of your body while using it. Never use the ac power adapter to warm your body. Extended contact with your body, even through clothing, may cause a skin burn.

For your safety, always follow these basic precautions with your computer:

- Keep the cover closed whenever the computer is plugged in.
- Regularly inspect the outside of the computer for dust accumulation.
- Remove dust from vents and any perforations in the bezel. More frequent cleanings might be required for computers in dusty or high-traffic areas.
- Do not restrict or block any ventilation openings.
- Do not operate your computer inside furniture, as this might increase the risk of overheating.
- Airflow temperatures into the computer should not exceed 35°C (95°F).

---

## Electrical current safety information



Electric current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- Do not use your computer during a lightning storm.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded electrical outlet.
- Connect properly wired outlets to any equipment that will be attached to this product.
- Whenever possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, battery, and all the cables before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Do not use your computer until all internal parts enclosures are fastened into place. Never use the computer when internal parts and circuits are exposed.



Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

**To connect:**

1. Turn everything OFF.
2. First, attach all cables to devices.
3. Attach signal cables to connectors.
4. Attach power cords to outlets.
5. Turn devices ON.

**To disconnect:**

1. Turn everything OFF.
2. First, remove power cords from outlets.
3. Remove signal cables from connectors.
4. Remove all cables from devices.

The power cord must be disconnected from the wall outlet or receptacle before installing all other electrical cables connected to the computer.

The power cord may be reconnected to the wall outlet or receptacle only after all other electrical cables have been connected to the computer.



During electrical storms, do not perform any replacement and do not connect the telephone cable to or disconnect it from the telephone outlet on the wall.

---

## Laser safety information

### CAUTION:

When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.
- Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.



Some laser products contain an embedded Class 3B laser diode. Note the following:  
Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

---

## Liquid crystal display (LCD) notice

### CAUTION:

The liquid crystal display (LCD) is made of glass, and rough handling or dropping the computer can cause the LCD to break. If the LCD breaks and the internal fluid gets into your eyes or on your hands, immediately wash the affected areas with water for at least 15 minutes; if any symptoms are present after washing, get medical care.

**Note:** For products with mercury-containing fluorescent lamps (for example, non-LED), the fluorescent lamp in the liquid crystal display (LCD) contains mercury; dispose of according to local, state, or federal laws.

---

## Use headphones or earphones



Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphone and headphone output voltage and the sound pressure level. Therefore, to protect your hearing, adjust the equalizer to an appropriate level.

Excessive use of headphones or earphones for a long period of time at high volume can be dangerous if the output of the headphone or earphone connectors do not comply with specifications of EN 50332-2. The headphone output connector of your computer complies with EN 50332-2 Sub clause 7. This specification limits the computer's maximum wide band true RMS output voltage to 150 mV. To help protect against hearing loss, ensure that the headphones or earphones you use also comply with EN 50332-2 (Clause 7 limits) for a wide band characteristic voltage of 75 mV. Using headphones that do not comply with EN 50332-2 can be dangerous due to excessive sound pressure levels.

If your Lenovo computer came with headphones or earphones in the package, as a set, the combination of the headphones or earphones and the computer already complies with the specifications of EN 50332-1. If different headphones or earphones are used, ensure that they comply with EN 50332-1 (Clause 6.5 Limitation Values). Using headphones that do not comply with EN 50332-1 can be dangerous due to excessive sound pressure levels.

---

## Choking hazard notice



CHOKING HAZARD – Product contains small parts.

Keep away from children under three years.

---

## Plastic bag notice



<p><b>Plastic bags can be dangerous. Keep plastic bags away from babies and children to avoid danger of suffocation.</b></p>
--

---

## Glass parts notice

### CAUTION:

**Some parts of your product may be made of glass. This glass could break if the product is dropped on a hard surface or receives a substantial impact. If glass breaks, do not touch or attempt to remove it. Stop using your product until the glass is replaced by trained service personnel.**

---

## Static electricity prevention

Static electricity, although harmless to you, can seriously damage computer components and options. Improper handling of static-sensitive parts can damage the part. When you unpack an option or CRU, do not open the static-protective package containing the part until the instructions direct you to install it.

When you handle options or CRUs, or perform any work inside the computer, take the following precautions to avoid static-electricity damage:

- Limit your movement. Movement can cause static electricity to build up around you.
- Always handle components carefully. Handle adapters, memory modules, and other circuit boards by the edges. Never touch exposed circuitry.
- Prevent others from touching components.
- When you install a static-sensitive option or CRU, touch the static-protective package containing the part to a metal expansion-slot cover or other unpainted metal surface on the computer for at least two seconds. This reduces static electricity in the package and your body.
- When possible, remove the static-sensitive part from the static-protective packaging and install the part without setting it down. When this is not possible, place the static-protective packaging on a smooth, level surface and place the part on it.
- Do not place the part on the computer cover or other metal surface.

---

## Operating environment

### Maximum altitude (without pressurization)

3048 m (10 000 ft)

### Temperature

- At altitudes up to 2438 m (8000 ft)
  - Operating: 5°C to 35°C (41°F to 95°F)
  - Storage: 5°C to 43°C (41°F to 109°F)
- At altitudes above 2438 m (8000 ft)
  - Maximum temperature when operating under the unpressurized condition: 31.3°C (88°F)

**Note:** When you charge the battery, its temperature must be no lower than 10°C (50°F).

### Relative humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage: 5% to 95% at wet-bulb temperature 27°C (81°F)

---

## Cleaning and maintenance

With appropriate care and maintenance your computer will serve you reliably. The following topics offer information to help you keep your computer working with best performance.

### Basic maintenance tips

Here are some basic points about keeping your computer functioning properly:

- If possible, place your computer in a well-ventilated and dry area without direct exposure to sunshine.
- Store packing materials safely out of the reach of children to prevent the risk of suffocation from plastic bags.
- Keep your computer away from magnets, activated cellular phones, electrical appliances, or speakers (more than 13 cm or 5 inches).
- Avoid subjecting your computer to extreme temperatures (below 5°C/41°F or above 35°C/95°F).
- Avoid placing any objects (including paper) between the display and the keyboard or the palm rest.
- Computer display might be designed to be opened and used at a certain angle. Do not open the display with force. Otherwise, the computer hinge might get damaged.
- Do not turn your computer over when the ac power adapter is plugged in, otherwise, it could break the adapter plug.
- Before moving your computer, be sure to remove any media, turn off attached devices, and disconnect cords and cables.
- When picking up your open computer, hold it by the bottom. Do not pick up or hold your computer by the display.
- Only an authorized Lenovo repair technician should disassemble and repair your computer.
- Do not modify or tape the latches to keep the display open or closed.
- Avoid directly exposing your computer and peripherals to the air from an appliance that can produce negative ions. Wherever possible, ground your computer to facilitate safe electrostatic discharge.

## **Clean your computer**

It is a good practice to clean your computer periodically to protect the surfaces and ensure trouble-free operation.

**Clean the computer cover:** Wipe it with a lint-free cloth dampened in mild soap and water. Avoid applying liquids directly to the cover.

**Clean the keyboard:** Wipe the keys one by one with a lint-free cloth dampened in mild soap and water. If you wipe several keys at a time, the cloth might hook onto an adjacent key and possibly damage it. Avoid spraying cleaner directly onto the keyboard. To remove any crumbs or dust from beneath the keys, you can use a camera blower with a brush or use cool air from a hair dryer.

**Clean the computer screen:** Scratches, oil, dust, chemicals, and ultraviolet light can affect the performance of your computer screen. Use a dry, soft lint-free cloth to wipe the screen gently. If you see a scratchlike mark on your screen, it might be a stain. Wipe or dust the stain gently with a soft, dry cloth. If the stain remains, moisten a soft, lint-free cloth with water or eyeglass cleaner, but do not apply liquids directly to your computer screen. Ensure that the computer screen is dry before closing it.

---

## Appendix B. Accessibility and ergonomic information

This chapter provides information about accessibility and ergonomics.

---

### Accessibility information

Lenovo is committed to providing users who have hearing, vision, and mobility limitations with greater access to information and technology. This section provides information about the ways these users can get the most out of their computer experience. You also can get the most up-to-date accessibility information from the following Web site:

<https://www.lenovo.com/accessibility>

#### Keyboard shortcuts

The following list contains keyboard shortcuts that can help make your computer easier to use.

**Note:** Depending on your keyboard, some of the following keyboard shortcuts might not be available.

- **Windows logo key + U:** Open Ease of Access Center
- **Right Shift for eight seconds:** Turn on or turn off Filter Keys
- **Shift five times:** Turn on or turn off Sticky Keys
- **Num Lock for five seconds:** Turn on or turn off Toggle Keys
- **Left Alt+Left Shift+Num Lock:** Turn on or turn off Mouse Keys
- **Left Alt+Left Shift+PrtScn (or PrtSc):** Turn on or turn off High Contrast

For more information, go to <https://windows.microsoft.com>, and then search using any of the following keywords: keyboard shortcuts, key combinations, shortcut keys.

#### Ease of Access Center

Ease of Access Center on the Windows operating system enables you to configure your computers to suit their physical and cognitive needs.

To access Ease of Access Center:

1. Go to Control Panel and view by Category.
2. Click **Ease of Access → Ease of Access Center**.
3. Choose the appropriate tool by following the on-screen instructions.

Ease of Access Center mainly includes the following tools:

- **Magnifier**  
Magnifier is a useful utility that enlarges the entire screen or part of the screen so that you can see the items better.
- **Narrator**  
Narrator is a screen reader that reads what is displayed on the screen aloud and describes events such as error messages.
- **On-Screen Keyboard**  
If you prefer to type or enter data into your computer using a mouse, joystick, or other pointing device instead of a physical keyboard, you can use On-Screen Keyboard. On-Screen Keyboard displays a visual

keyboard with all the standard keys. You can select keys using the mouse or another pointing device, or you can tap to select the keys if your computer supports multi-touch screen.

- **High Contrast**

High Contrast is a feature that heightens the color contrast of some text and images on your screen. As a result, those items are more distinct and easier to identify.

- **Personalized keyboard**

Adjust keyboard settings to make your keyboard easier to use. For example, you can use your keyboard to control the pointer and make the keyboard easier to type certain key combinations.

- **Personalized mouse**

Adjust mouse settings to make your mouse easier to use. For example, you can change the pointer appearance and make your mouse easier to manage windows.

## **Speech Recognition**

Speech Recognition enables you to control your computer by voice.

You can use verbal instructions to control the keyboard and mouse. With verbal instructions, you can start programs, open menus, click objects on the screen, dictate text into documents, and write and send e-mails.

To use Speech Recognition:

1. Go to Control Panel and view by Category.
2. Click **Ease of Access → Speech Recognition**.
3. Follow the on-screen instructions.

## **Screen-reader technologies**

Screen-reader technologies are primarily focused on software program interfaces, help systems, and various online documents. For additional information about screen readers, see the following:

- Use PDFs with screen readers:  
<https://www.adobe.com/accessibility.html?promoid=DJGVE>
- Use the JAWS screen reader:  
<https://www.freedomscientific.com/Products/Blindness/JAWS>
- Use the NVDA screen reader:  
<https://www.nvaccess.org/>

## **Screen resolution**

You can make the text and images on your screen easier to read by adjusting the screen resolution of your computer.

To adjust the screen resolution:

1. Right-click a blank area on the desktop and then click **Display settings → Display**.
2. Follow the on-screen instructions.

**Note:** Setting a resolution too low might prevent some items from fitting on the screen.

## **Customizable item size**

You can make the items on your screen easier to read by changing the item size.

- To change the item size temporarily, use the Magnifier tool in Ease of Access Center.
- To change the item size permanently:

- Change the size of all the items on your screen.
  1. Right-click a blank area on the desktop and then click **Display settings → Display**.
  2. Change the item size by following the on-screen instructions. For some applications, your configuration might not take effect until you sign out and then sign in again.
- Change the size of the items on a Web page.

Press and hold Ctrl, and then press the plus-sign key (+) to enlarge or the minus-sign key (–) to reduce the text size.
- Change the size of the items on the desktop or a window.

**Note:** This function might not work on some windows.

If your mouse has a wheel, press and hold Ctrl, and then scroll the wheel to change the item size.

### Industry-standard connectors

Your computer provides industry-standard connectors that enable you to connect assistive devices.

### Documentation in accessible formats

Lenovo provides electronic documentation in accessible formats, such as properly tagged PDF files or HyperText Markup Language (HTML) files. Lenovo electronic documentation is developed to ensure that visually impaired users can read the documentation through a screen reader. Each image in the documentation also includes adequate alternative text so that visually impaired users can understand the image when they use a screen reader.

---

## Ergonomic information

Good ergonomic practice is important to get the most from your personal computer and to avoid discomfort. Arrange your workplace and the equipment you use to suit your individual needs and the kind of work that you perform. In addition, use healthy work habits to maximize your performance and comfort when using your computer.

Working in the virtual office might mean adapting to frequent changes in your environment. Adapting to the surrounding light sources, active seating, and the placement of your computer hardware, can help you improve your performance and achieve greater comfort.

This example shows someone in a conventional setting. Even when not in such a setting, you can follow many of these tips. Develop good habits, and they will serve you well.



**General posture:** Make minor modifications in your working posture to deter the onset of discomfort caused by long periods of working in the same position. Frequent short breaks from your work also help to prevent minor discomfort associated with your working posture.

**Display:** Position the display to maintain a comfortable viewing distance of 510 mm to 760 mm (20 inches to 30 inches). Avoid glare or reflections on the display from overhead lighting or outside sources of light. Keep the display screen clean and set the brightness to levels that enable you to see the screen clearly. Press the brightness control keys to adjust display brightness.

**Head position:** Keep your head and neck in a comfortable and neutral (vertical, or upright) position.

**Chair:** Use a chair that gives you good back support and seat height adjustment. Use chair adjustments to best suit your comfort posture.

**Arm and hand position:** If available, use chair arm rests or an area on your working surface to provide weight support for your arms. Keep your forearms, wrists, and hands in a relaxed and neutral (horizontal) position. Type with a soft touch without pounding the keys.

**Leg position:** Keep your thighs parallel to the floor and your feet flat on the floor or on a footrest.

### **What if you are traveling?**

It might not be possible to observe the best ergonomic practices when you are using your computer while on the move or in a casual setting. Regardless of the setting, try to observe as many of the tips as possible. Sitting properly and using adequate lighting, for example, helps you maintain desirable levels of comfort and performance. If your work area is not in an office setting, ensure to take special note of employing active sitting and taking work breaks. Many product solutions are available to help you modify and expand your computer to best suit your needs. You can find some of these options at <https://www.lenovo.com/accessories>. Explore your options for docking solutions and external products that provide the adjustability and features that you want.

### **Questions about vision?**

The visual display screens of notebook computers are designed to meet the highest standards. These visual display screens provide you with clear, crisp images and large, bright displays that are easy to see, yet easy on the eyes. Any concentrated and sustained visual activity can be tiring. If you have questions on eye fatigue or visual discomfort, consult a vision-care specialist for advice.

---

## Appendix C. Supplemental information about the Ubuntu operating system

In limited countries or regions, Lenovo offers customers an option to order computers with the preinstalled Ubuntu® operating system.

If the Ubuntu operating system is available on your computer, read the following information before you use the computer. Ignore any information related to Windows-based programs, utilities, and Lenovo preinstalled applications in this documentation.

### Access the Lenovo Limited Warranty

This product is covered by the terms of the Lenovo Limited Warranty (LLW), version L505-0010-02 08/2011. You can view the LLW in a number of languages from the following Web site. Read the Lenovo Limited Warranty at:

[https://www.lenovo.com/warranty/llw\\_02](https://www.lenovo.com/warranty/llw_02)

The LLW also is preinstalled on the computer. To access the LLW, go to the following directory:

```
/usr/share/doc/lenovo-doc
```

If you cannot view the LLW either from the Web site or from your computer, contact your local Lenovo office or reseller to obtain a printed version of the LLW.

### Access the Ubuntu help system

The Ubuntu help system provides information about how to use the Ubuntu operating system. To access the help system from the Unity, move your pointer to the Launch bar, and then click the **Help** icon. If you cannot find the **Help** icon from the Launch bar, click the **Search** icon, and type Help to search it.

To learn more about the Ubuntu operating system, go to:

<https://www.ubuntu.com>

### Get support information

If you need help, service, technical assistance, or more information about the Ubuntu operating system or other applications, contact the provider of the Ubuntu operating system or the provider of the application. If you need the service and support for hardware components shipped with your computer, contact Lenovo. For more information about how to contact Lenovo, refer to the *User Guide* and *Safety and Warranty Guide*.

To access the latest *User Guide* and *Safety and Warranty Guide*, go to:

<https://support.lenovo.com>



---

## Appendix D. Compliance information

This chapter provides regulatory, environmental, RoHS, and ENERGY STAR information about Lenovo products.

---

### Radio frequency compliance statements

Computer models equipped with wireless communications comply with the radio frequency and safety standards of any country or region in which it has been approved for wireless use.

Besides this document, ensure that you read the *Regulatory Notice* for your country or region before using the wireless devices contained in your computer.

### Wireless-related information

This topic provides wireless-related information about Lenovo products.

#### Wireless interoperability

Wireless-LAN card is designed to be interoperable with any wireless-LAN product that is based on Direct Sequence Spread Spectrum (DSSS), Complementary Code Keying (CCK), and/or Orthogonal Frequency Division Multiplexing (OFDM) radio technology, and is compliant to:

- The 802.11b/g Standard, 802.11a/b/g, 802.11n, or 802.11ac on wireless-LANs, as defined and approved by the Institute of Electrical and Electronics Engineers.
- The Wireless Fidelity (Wi-Fi®) certification as defined by the Wi-Fi Alliance®.

#### Usage environment and your health

This computer contains integrated wireless cards that operate within the guidelines identified by radio frequency (RF) safety standards and recommendations; therefore, Lenovo believes that this product is safe for use by consumers. These standards and recommendations reflect the consensus of the worldwide scientific community, and result from deliberations of panels and committees of scientists, who continually review and interpret the extensive research literature.

In some situations or environments, the use of wireless devices might be restricted by the proprietor of a building or responsible representatives of an organization. For example, these situations and areas might include the following:

- On board of airplanes, in hospitals or near petrol stations, blasting areas (with electro-explosive devices), medical implants or body-worn electronic medical devices, such as pace makers.
- In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies to the use of wireless devices in a specific area (such as an airport or hospital), you are encouraged to ask for authorization to use a wireless device prior to turning on the computer.

#### Locate the UltraConnect wireless antennas

Your computer has a UltraConnect™ wireless antenna system. You can enable wireless communication wherever you are.

The following illustration shows the antenna locations on your computer:



- ❶ Wireless-LAN antenna (auxiliary)
- ❷ Wireless-WAN antenna (auxiliary, for selected models)
- ❸ Wireless-WAN antenna (main, for selected models)
- ❹ Wireless-LAN antenna (main)

## Locate wireless regulatory notices

For more information about the wireless regulatory notices, refer to the *Regulatory Notice* at <https://support.lenovo.com>.

## European Union – compliance with the Radio Equipment Directive

This product is in conformity with all the requirements and essential norms that apply to EU Council Radio Equipment Directive 2014/53/EU on the approximation of the laws of the Member States relating to radio equipment. The full text of the system EU declaration of conformity and the EU wireless module declarations are available at the following Internet addresses:

- For notebook computers: [https://www.lenovo.com/us/en/social\\_responsibility/EU\\_DoC\\_notebooks](https://www.lenovo.com/us/en/social_responsibility/EU_DoC_notebooks)
- For tablet computers: [https://www.lenovo.com/us/en/social\\_responsibility/EU\\_DoC\\_notebooks](https://www.lenovo.com/us/en/social_responsibility/EU_DoC_notebooks)
- For wireless peripheral devices: [https://www.lenovo.com/us/en/social\\_responsibility/EU\\_DoC\\_wireless\\_options](https://www.lenovo.com/us/en/social_responsibility/EU_DoC_wireless_options)

Lenovo cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the installation of option cards from other manufacturers. This product has been tested and found to comply with the limits for Class B equipment according to European Standards harmonized in the Directives in compliance. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

## Brazil

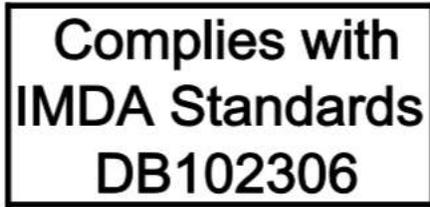
Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

This equipment is not protected against harmful interference and may not cause interference with duly authorized systems.

## Mexico

**Advertencia:** En Mexico la operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

## Singapore



## Korea

무선설비 전파 혼신 (사용주파수 2400~2483.5 , 5725~5825 무선제품해당)

해당 무선설비가 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

### SAR 정보

본 장치는 전파 노출에 대한 가이드라인을 충족합니다.

본 장치는 무선 송수신기입니다. 본 장치는 국제 가이드라인으로 권장되는 전파 노출에 대한 제한을 초과하지 않도록 설계되었습니다. 장치 액세서리 및 최신 부품을 사용할 경우 SAR 값이 달라질 수 있습니다. SAR 값은 국가 보고 및 테스트 요구 사항과 네트워크 대역에 따라 다를 수 있습니다. 본 장치는 사람의 신체에서 20mm 이상의 거리에서 사용할 수 있습니다.

---

## Environmental information of countries and regions

This section provides environmental, recycling, and RoHS information about Lenovo products.

### Recycling and environmental information

Lenovo encourages owners of information technology (IT) equipment to responsibly recycle their equipment when it is no longer needed. Lenovo offers a variety of programs and services to assist equipment owners in recycling their IT products. For information about recycling Lenovo products, go to:

<https://www.lenovo.com/recycling>

The latest environmental information about our products is available at:

<https://www.lenovo.com/ecodeclaration>

### Important WEEE information



The WEEE marking on Lenovo products applies to countries with WEEE and e-waste regulations (for example, the European WEEE Directive, India E-Waste Management Rules). Appliances are labeled in accordance with local regulations concerning waste electrical and electronic equipment (WEEE). These regulations determine the framework for the return and recycling of used appliances as applicable within each geography. This label is applied to various products to indicate that the product is not to be thrown away, but rather put in the established collection systems for reclaiming these end of life products.

Users of electrical and electronic equipment (EEE) with the WEEE marking must not dispose of end of life EEE as unsorted municipal waste, but use the collection framework available to them for the return, recycle, and recovery of WEEE and to minimize any potential effects of EEE on the environment and human health due to the presence of hazardous substances. Lenovo electrical and electronic equipment (EEE) may contain parts and components, which at end-of-life might qualify as hazardous waste.

EEE and waste electrical and electronic equipment (WEEE) can be delivered free of charge to the place of sale or any distributor that sells electrical and electronic equipment of the same nature and function as the used EEE or WEEE.

For additional WEEE information, go to:

<https://www.lenovo.com/recycling>

### **WEEE information for Hungary**

Lenovo, as a producer, bears the cost incurred in connection with the fulfillment of Lenovo's obligations under Hungary Law No. 197/2014 (VIII.1.) subsections (1)-(5) of section 12.

## **Japan recycling statements**

### **Collect and recycle a disused Lenovo computer or monitor**

If you are a company employee and need to dispose of a Lenovo computer or monitor that is the property of the company, you must do so in accordance with the Law for Promotion of Effective Utilization of Resources. Computers and monitors are categorized as industrial waste and should be properly disposed of by an industrial waste disposal contractor certified by a local government. In accordance with the Law for Promotion of Effective Utilization of Resources, Lenovo Japan provides, through its PC Collecting and Recycling Services, for the collecting, reuse, and recycling of disused computers and monitors. For details, visit the Lenovo Web site at:

<https://www.lenovo.com/recycling/japan>

Pursuant to the Law for Promotion of Effective Utilization of Resources, the collecting and recycling of home-used computers and monitors by the manufacturer was begun on October 1, 2003. This service is provided free of charge for home-used computers sold after October 1, 2003. For details, go to:

<https://www.lenovo.com/recycling/japan>

### **Dispose of Lenovo computer components**

Some Lenovo computer products sold in Japan may have components that contain heavy metals or other environmental sensitive substances. To properly dispose of disused components, such as a printed circuit board or drive, use the methods described above for collecting and recycling a disused computer or monitor.

### **Dispose of disused lithium batteries from Lenovo computers**

A button-shaped lithium battery is installed inside your Lenovo computer to provide power to the computer clock while the computer is off or disconnected from the main power source. If you need to replace it with a new one, contact your place of purchase or contact Lenovo for service. If you need to dispose of a disused lithium battery, insulate it with vinyl tape, contact your place of purchase or an industrial-waste-disposal operator, and follow their instructions.

Disposal of a lithium battery must comply with local ordinances and regulations.

## Dispose of a disused battery from Lenovo notebook computers

Your Lenovo notebook computer has a lithium ion battery or a nickel metal hydride battery. If you are a company employee who uses a Lenovo notebook computer and need to dispose of a battery, contact the proper person in Lenovo sales, service, or marketing, and follow that person's instructions. You also can refer to the instructions at:

<https://www.lenovo.com/jp/ja/environment/recycle/battery/>

If you use a Lenovo notebook computer at home and need to dispose of a battery, you must comply with local ordinances and regulations. You also can refer to the instructions at:

<https://www.lenovo.com/jp/ja/environment/recycle/battery/>

## Recycling information for Brazil

*Declarações de Reciclagem no Brasil*

*Descarte de um Produto Lenovo Fora de Uso*

Equipamentos elétricos e eletrônicos não devem ser descartados em lixo comum, mas enviados à pontos de coleta, autorizados pelo fabricante do produto para que sejam encaminhados e processados por empresas especializadas no manuseio de resíduos industriais, devidamente certificadas pelos órgãos ambientais, de acordo com a legislação local.

A Lenovo possui um canal específico para auxiliá-lo no descarte desses produtos. Caso você possua um produto Lenovo em situação de descarte, ligue para o nosso SAC ou encaminhe um e-mail para: [reciclar@lenovo.com](mailto:reciclar@lenovo.com), informando o modelo, número de série e cidade, a fim de enviarmos as instruções para o correto descarte do seu produto Lenovo.

## Battery recycling information for the European Union



**Notice:** This mark applies only to countries within the European Union (EU).

Batteries or packaging for batteries are labeled in accordance with European Directive 2006/66/EC concerning batteries and accumulators and waste batteries and accumulators. The Directive determines the framework for the return and recycling of used batteries and accumulators as applicable throughout the European Union. This label is applied to various batteries to indicate that the battery is not to be thrown away, but rather reclaimed upon end of life per this Directive.

In accordance with the European Directive 2006/66/EC, batteries and accumulators are labeled to indicate that they are to be collected separately and recycled at end of life. The label on the battery may also include a chemical symbol for the metal concerned in the battery (Pb for lead, Hg for mercury, and Cd for cadmium). Users of batteries and accumulators must not dispose of batteries and accumulators as unsorted municipal waste, but use the collection framework available to customers for the return, recycling, and treatment of batteries and accumulators. Customer participation is important to minimize any potential effects of batteries

and accumulators on the environment and human health due to the potential presence of hazardous substances.

Before placing electrical and electronic equipment (EEE) in the waste collection stream or in waste collection facilities, the end user of equipment containing batteries and/or accumulators must remove those batteries and accumulators for separate collection.

### **Dispose of lithium batteries and battery packs from Lenovo products**

A coin-cell type lithium battery might be installed inside your Lenovo product. You can find details about the battery in the product documentation. If the battery needs to be replaced, contact your place of purchase or contact Lenovo for service. If you need to dispose of a lithium battery, insulate it with vinyl tape, contact your place of purchase or a waste-disposal operator, and follow their instructions.

### **Dispose of battery packs from Lenovo products**

Your Lenovo device might contain a lithium-ion battery pack or a nickel metal hydride battery pack. You can find details on the battery pack in the product documentation. If you need to dispose of a battery pack, insulate it with vinyl tape, contact Lenovo sales, service, or your place of purchase, or a waste-disposal operator, and follow their instructions. You also can refer to the instructions provided in the user guide for your product.

For proper collection and treatment, go to:

<https://www.lenovo.com/lenovo/environment>

## **Recycling information for China**

《废弃电器电子产品回收处理管理条例》提示性说明

联想鼓励拥有联想品牌产品的用户当不再需要此类产品时，遵守国家废弃电器电子产品回收处理相关法律法规，将其交给当地具有国家认可的回收处理资质的厂商进行回收处理。更多回收服务信息，请点击进入<http://support.lenovo.com.cn/activity/551.htm>

## **Battery recycling information for Taiwan**



廢電池請回收

## **Battery recycling information for the United States and Canada**



US & Canada Only

## **Restriction of Hazardous Substances (RoHS) Directive of countries and regions**

The latest environmental information about Lenovo products is available at:

<https://www.lenovo.com/ecodeclaration>

### **European Union RoHS**

This Lenovo product, with included parts (cables, cords, and so on) meets the requirements of Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("RoHS recast" or "RoHS 2").

For more information about Lenovo worldwide compliance on RoHS, go to:

<https://www.lenovo.com/rohs-communication>

### **Turkish RoHS**

The Lenovo product meets the requirements of the Republic of Turkey Directive on the Restriction of the Use of Certain Hazardous Substances in Waste Electrical and Electronic Equipment (WEEE).

### **Türkiye AEEE Yönetmeliğine Uygunluk Beyanı**

Bu Lenovo ürünü, T.C. Çevre ve Orman Bakanlığı'nın "Atık Elektrik ve Elektronik Eşyalarda Bazı Zararlı Maddelerin Kullanımının Sınırlandırılmasına Dair Yönetmelik (AEEE)" direktiflerine uygundur.

AEEE Yönetmeliğine Uygundur.

### **Ukraine RoHS**

Цим підтверджуємо, що продукція Леново відповідає вимогам нормативних актів України, які обмежують вміст небезпечних речовин

### **India RoHS**

RoHS compliant as per E-Waste (Management) Rules.

### **China RoHS**

The information in the following table is applicable to products manufactured on or after January 1, 2015 for sale in the People's Republic of China.

## 产品中有害物质的名称及含量

部件名称	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI) )	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板组件	X	○	○	○	○	○
硬盘	X	○	○	○	○	○
光驱	X	○	○	○	○	○
LCD 面板 (LED 背光源)	X	○	○	○	○	○
键盘	X	○	○	○	○	○
内存	X	○	○	○	○	○
电池	X	○	○	○	○	○
电源适配器	X	○	○	○	○	○
底壳、顶盖和扬声器	X	○	○	○	○	○

注：

本表依据SJ/T 11364的规定编制。

○：表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 标准规定的限量要求以下。

X：表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572 标准规定的限量要求。标有“X”的部件，皆因全球技术发展水平限制而无法实现有害物质的替代。印刷电路板组件包括印刷电路板（PCB）及其组件、集成电路（IC）和连接器。某些型号的产品可能不包含上表中的某些部件，请以实际购买机型为准。

图示：



在中华人民共和国境内销售的电子信息产品上将印有“环保使用期限”（EPuP）符号。圆圈中的数字代表产品的正常环保使用期限。

## Taiwan RoHS

單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr <sup>+6</sup> )	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
印刷電路板組件	-	○	○	○	○	○
硬碟機	-	○	○	○	○	○
LCD面板 (LED背光源)	-	○	○	○	○	○
鍵盤	-	○	○	○	○	○
記憶體	-	○	○	○	○	○
電源供應器	-	○	○	○	○	○
底殼、頂蓋和喇叭	-	○	○	○	○	○
麥克風	-	○	○	○	○	○
攝影機	-	○	○	○	○	○
風扇	-	○	○	○	○	○
分離式電源線組	-	○	○	○	○	○
固態硬碟	-	○	○	○	○	○

備考1. “超出0.1 wt %” 及 “超出0.01 wt %” 係指限用物質之百分比含量超出百分比含量基準值。  
 Note 1 : “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.

備考2. “○” 係指該項限用物質之百分比含量未超出百分比含量基準值。  
 Note 2 : “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考3. “-” 係指該項限用物質為排除項目。  
 Note 3 : The “-” indicates that the restricted substance corresponds to the exemption.

## Electromagnetic emission notices

### Federal Communications Commission (FCC) Supplier’s Declaration of Conformity

The following information refers to Lenovo IdeaPad C340-14IWL/IdeaPad C340-15IWL/IdeaPad C340-14API, machine types: 81N4, 81RL, 81N5 and 81N6.

This equipment has been tested and found to comply with the limits 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 equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with 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 equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment 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 equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an authorized dealer or service representative for help.

Lenovo is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

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.

Responsible Party:  
Lenovo (United States) Incorporated  
7001 Development Drive  
Morrisville, NC 27560  
Email: FCC@lenovo.com



## FCC ID and IC Certification information

The FCC and IC Certification information is identified by a label on the computer as shown in the following illustration.

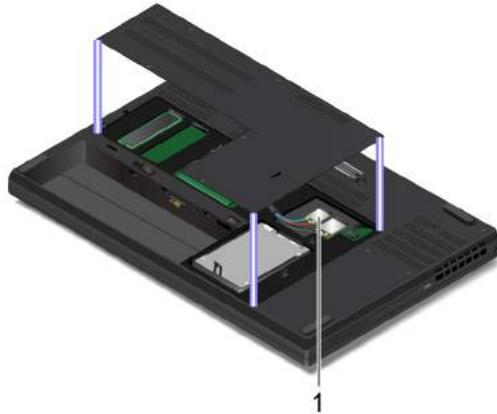
**Note:** Depending on the model, your computer might look different from the following illustration.

- For a factory-preinstalled wireless module, this label identifies the actual FCC ID and IC certification number for the wireless module installed by Lenovo.

**Note:** Do not remove or replace a factory-preinstalled wireless module by yourself. For replacement, you must contact Lenovo service first. Lenovo is not responsible for any damage caused by unauthorized replacement.



- For a user-installable wireless WAN module, the actual FCC ID and IC certification number is affixed to the wireless WAN module **1** installed in the computer. To view the FCC ID and IC certification number, you must remove the computer base cover assembly. For instructions, see “” on page .



**Note:** For the user-installable wireless module, ensure that you use only a Lenovo-authorized wireless module specifically tested for this computer model. Otherwise, the computer will generate an error-code beep sequence when you turn on the computer.

## FCC ID and IC Certification information

You can find the FCC and IC Certification information through one of the following methods:

- Through an electronic-label screen (E-label screen) preinstalled on your computer. To view the E-label screen, see “Regulatory labels” on page 75.
- On a physical label attached to the outside of your computer shipping carton.

## Industry Canada compliance statement

CAN ICES-3(B)/NMB-3(B)

## European Union conformity

EU Contact: Lenovo, Einsteinova 21, 851 01 Bratislava, Slovakia



### Compliance with the EMC Directive

This product is in conformity with the protection requirements of EU Council Directive 2014/30/EU on the approximation of the laws of the Member States relating to electromagnetic compatibility.

This product has been tested and found to comply with the limits for Class B equipment according to European Standards harmonized in the Directives in compliance. The Class B requirements for equipment are intended to offer adequate protection to broadcast services within residential environments.

## German Class B compliance statement

*Hinweis zur Einhaltung der Klasse B zur elektromagnetischen Verträglichkeit*

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie zur elektromagnetischen Verträglichkeit Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der Klasse B der Norm gemäß Richtlinie.

Um dieses sicherzustellen, sind die Geräte wie in den Handbüchern beschrieben zu installieren und zu betreiben. Des Weiteren dürfen auch nur von der Lenovo empfohlene Kabel angeschlossen werden. Lenovo übernimmt keine Verantwortung für die Einhaltung der Schutzanforderungen, wenn das Produkt ohne Zustimmung der Lenovo verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung der Lenovo gesteckt/eingebaut werden.

Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Betriebsmitteln, EMVG vom 20. Juli 2007 (früher Gesetz über die elektromagnetische Verträglichkeit von Geräten), bzw. der EU Richtlinie 2014/30/EU, der EU Richtlinie 2014/53/EU Artikel 3.1b), für Geräte der Klasse B.

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen. Verantwortlich für die Konformitätserklärung nach Paragraf 5 des EMVG ist die Lenovo (Deutschland) GmbH, Meitnerstr. 9, D-70563 Stuttgart.

## Japan VCCI Class B compliance statement

この装置は、クラスB機器です。この装置は、住宅環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。  
取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

## Japan compliance statement for products which connect to the power mains with rated current less than or equal to 20 A per phase

日本の定格電流が 20A/相 以下の機器に対する高調波電流規制  
高調波電流規格 JIS C 61000-3-2 適合品

## Japan notice for ac power cord

The ac power cord shipped with your product can be used only for this specific product. Do not use the ac power cord for other devices.

本製品およびオプションに電源コード・セットが付属する場合は、それぞれ専用のものになっていますので他の電気機器には使用しないでください。

---

## Other compliance information

This section provides other compliance information about Lenovo products.

## Certification-related information

**Product name:** xxxxxx

**Compliance ID:** xxxxxx

**Machine types:** xxxx and xxxx

The latest compliance information is available at:

<https://www.lenovo.com/compliance>

## Regulatory labels

Depending on your country or region, you can find the government-required regulatory information through one of the following methods:

- On a physical label attached to the outside of your computer shipping carton
- On a physical label attached to your computer
- Through an electronic-label screen (E-label screen) preinstalled on your computer

To access the E-label screen, do one of the following:

- Restart the computer. When the logo screen is displayed, press F9. The E-label screen is displayed.
- Restart the computer. When the logo screen is displayed, press Enter or tap the prompt to enter the Startup Interrupt menu. Then, press F9 or tap the Regulatory Information option. The E-label screen is displayed.

### Korean E-label notice

이 제품은 전자적표시(e-labelling)가 되어있습니다.

## TCO certification

To obtain the TCO certification information for your computer, go to:

<https://www.lenovo.com/tco-cert>

## Export classification notice

This product is subject to the United States Export Administration Regulations (EAR) and has an Export Classification Control Number (ECCN) of 5A992.c. It can be re-exported except to any of the embargoed countries in the EAR E1 country list.

## Lenovo product service information for Taiwan

委製商/進口商名稱: 荷蘭商聯想股份有限公司台灣分公司  
進口商地址: 台北市中山區北安路780號7樓  
進口商電話: 0800-000-702 (代表號)

## Taiwan precautionary vision statement

警語：使用過度恐傷害視力

注意事項：

- 使用30分鐘請休息10分鐘。
- 2歲以下幼兒不看螢幕，2歲以上每天看螢幕不要超過1小時。

## Eurasian compliance mark



## Brazil audio notice

Ouvir sons com mais de 85 decibéis por longos períodos pode provocar danos ao sistema auditivo.

## ENERGY STAR model information



ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy aimed at saving money and protecting the environment through energy efficient products and practices.

Lenovo is proud to offer our customers products with an ENERGY STAR compliant designation. The following machine types have been designed and tested to conform to the ENERGY STAR program requirement for computers at the time of manufacture.

81N4, 81RL, 81N5 and 81N6

For more information about Lenovo ENERGY STAR certified products, go to:

[https://www.lenovo.com/us/en/social\\_responsibility/energy/](https://www.lenovo.com/us/en/social_responsibility/energy/)

By using ENERGY STAR compliant products and taking advantage of the power management features of your computer, you reduce the consumption of electricity. Reduced electrical consumption contributes to potential financial savings, a cleaner environment, and the reduction of greenhouse gas emissions.

For more information about ENERGY STAR, go to:

<https://www.energystar.gov>

Lenovo encourages you to make efficient use of energy an integral part of your day-to-day operations. To help in this endeavor, Lenovo has preset a default power plan. To change the power plan, see “Set the power plan” on page 20.

---

## Appendix E. Notices and trademarks

### Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service.

Lenovo may have patents or pending patent programs covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

*Lenovo (United States), Inc.  
1009 Think Place - Building One  
Morrisville, NC 27560  
U.S.A.  
Attention: Lenovo Director of Licensing*

LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

Changes are made periodically to the information herein; these changes will be incorporated in new editions of the publication. To provide better service, Lenovo reserves the right to improve and/or modify the products and software programs described in the manuals included with your computer, and the content of the manual, at any time without additional notice.

The software interface and function and hardware configuration described in the manuals included with your computer might not match exactly the actual configuration of the computer that you purchase. For the configuration of the product, refer to the related contract (if any) or product packing list, or consult the distributor for the product sales. Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

This document is copyrighted by Lenovo and is not covered by any open source license, including any Linux agreement(s) which may accompany software included with this product. Lenovo may update this document at any time without notice.

For the latest information or any questions or comments, contact or visit the Lenovo Web site:

<https://support.lenovo.com>

### **Trademarks**

LENOVO and LENOVO logo are trademarks of Lenovo. Microsoft, Windows, Direct3D, BitLocker, and Cortana are trademarks of the Microsoft group of companies. Ubuntu is a registered trademark of Canonical Ltd. The terms HDMI and HDMI High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries. Wi-Fi, Wi-Fi Alliance, WiGig, and Miracast are registered trademarks of Wi-Fi Alliance. USB-C is a trademark of USB Implementers Forum. All other trademarks are the property of their respective owners. © 2018 Lenovo.







## Regulatory Notice for Wireless LAN modules

**First edition (January 2018)**

**© Copyright Lenovo 2018.**

# Contents

## Chapter 1. Notice for users in USA and Canada . . . . . 1

Approved wireless devices . . . . .	1
Preinstalled wireless LAN module . . . . .	2
Simultaneous use of RF transmitters. . . . .	2
Canada — Industry Canada (IC) . . . . .	2
Approved wireless devices. . . . .	2
Preinstalled wireless LAN module . . . . .	3
Low power license-exempt radiocommunication devices (RSS-210, RSS-247) . . . . .	3
Exposure of humans to RF fields (RSS-102) . . . . .	4
Canada — Industrie Canada (IC) . . . . .	4
Périphériques sans fil homologués . . . . .	4
Module réseau local sans fil préinstallé . . . . .	5
Appareils de radio-communication basse tension sans licence d'utilisation (CNR-210, CNR-247) . . . . .	5
Conformité des appareils de radiocommunication aux limites d'exposition humaine aux radiofréquences (CNR-102) . . . . .	5
Electronic emission notices . . . . .	6
Federal Communications Commission (FCC) Declaration of Conformity . . . . .	6
Usage environment and your health . . . . .	6

## Chapter 2. Europe — EU Declaration of Conformity (wireless module). . . . . 9

English . . . . .	9
RF exposure information . . . . .	9
Bulgarian . . . . .	10
Информация за излагане на радиочестоти . . . . .	10
Croatian . . . . .	10
Informacije o izlaganju radijskoj frekvenciji . . . . .	10
Czech . . . . .	10
Informace o vystavení radiofrekvenčnímu záření . . . . .	11
Danish . . . . .	11
Oplysninger om radiobølgeeksponering . . . . .	11
Dutch . . . . .	11
Informatie over blootstelling aan radiogolven. . . . .	12
Estonian. . . . .	12
Raadiosagedusliku kiirguse teave . . . . .	12
Finnish . . . . .	12
Tietoja radiotaajuiselle säteilylle altistumisesta . . . . .	12

French . . . . .	13
Informations sur l'exposition aux RF . . . . .	13
German . . . . .	13
Informationen zur HF-Exposition . . . . .	13
Greek . . . . .	13
Πληροφορίες σχετικά με την έκθεση στις ραδιοσυχνότητες (RF). . . . .	14
Hungarian . . . . .	14
RF-kitettségre vonatkozó információk . . . . .	14
Italian . . . . .	14
Informazioni sull'esposizione RF . . . . .	15
Latvian . . . . .	15
Informācija par pakļaušanu RF starojumam . . . . .	15
Lithuanian . . . . .	15
Informacija apie radijo dažnių poveikį . . . . .	15
Norwegian . . . . .	16
Informasjon om RF-eksponering . . . . .	16
Polish . . . . .	16
Informacje o ekspozycji na częstotliwości radiowe . . . . .	16
Portuguese . . . . .	16
Informações sobre exposição a RF . . . . .	17
Romanian . . . . .	17
Informații privind expunerea la frecvențele radio . . . . .	17
Slovenian . . . . .	17
Informacije o izpostavljenosti RF-sevanju . . . . .	17
Slovakian . . . . .	18
Informácie o vystavení rádiofrekvenčnému žiareniu . . . . .	18
Spanish . . . . .	18
Información de exposición a RF. . . . .	18
Swedish . . . . .	18
Information om exponering för radiovågor. . . . .	19
Turkish . . . . .	19
RF maruz kalma bilgileri . . . . .	19

## Chapter 3. Regulatory notices for other countries. . . . . 21

Notice for users in Argentina (Nota para uso en Argentina) . . . . .	21
Modelo: Intel 3165NGW . . . . .	21
Modelo: Intel 7265NGW . . . . .	21
Modelo: Intel 8265NGW . . . . .	21
Modelo: Qualcomm QCNFA344A . . . . .	21
Modelo: Qualcomm QCNFA364 . . . . .	21
Modelo: Qualcomm QCNFA435 . . . . .	21
Modelo: Realtek RTL8821CE . . . . .	21

Modelo: Realtek RTL8822BE . . . . .	22	Notice for users in Nigeria . . . . .	27
Modelo: Intel 9260NGW . . . . .	22	Notice for users in Saudi Arabia . . . . .	28
Modelo: Intel 9560NGW . . . . .	22	For model: 3165NGW. . . . .	28
Modelo: Intel 9462NGW . . . . .	22	For model: 7265NGW. . . . .	29
Notice for users in Brazil (Aviso para usuarios no Brasil) . . . . .	22	For model: 8265NGW. . . . .	30
For model: 3165NGW. . . . .	22	For model: Qualcomm QCNFA344A . . . . .	31
For model: 7265NGW. . . . .	22	For model: Qualcomm QCNFA364 . . . . .	32
For model: 8265NGW. . . . .	23	For model: Qualcomm QCNFA435 . . . . .	33
For model: QCNFA344A. . . . .	23	For model: RTL8821CE . . . . .	34
For model: QCNFA364 . . . . .	23	For model: RTL8822BE . . . . .	35
For model: QCNFA435 . . . . .	23	For model: 9260NGW. . . . .	36
For model: RTL8821CE . . . . .	23	For model: 9560NGW. . . . .	37
For model: RTL8822BE . . . . .	23	For model: 9462NGW. . . . .	38
For model: 9260NGW. . . . .	24	Notice for users in Serbia . . . . .	39
For model: 9560NGW. . . . .	24	Notice for users in South Africa . . . . .	39
For model: 9462NGW. . . . .	24	For model: 3165NGW. . . . .	39
Notice for users in India. . . . .	24	For model: 7265NGW. . . . .	39
Modelo: 3165NGW . . . . .	24	For model: 8265NGW. . . . .	39
Modelo: 7265NGW . . . . .	24	For model: QCNFA344A. . . . .	39
Modelo: 8265NGW . . . . .	24	For model: QCNFA364 . . . . .	39
Modelo: QCNFA344A . . . . .	24	For model: QCNFA435 . . . . .	39
Modelo: QCNFA364 . . . . .	24	For model: RTL8821CE . . . . .	40
Modelo: QCNFA435 . . . . .	25	For model: RTL8822BE . . . . .	40
Modelo: RTL8821CE . . . . .	25	For model: 9260NGW. . . . .	40
Modelo: RTL8822BE . . . . .	25	For model: 9560NGW. . . . .	40
Modelo: 9260NGW . . . . .	25	For model: 9462NGW. . . . .	40
Modelo: 9560NGW . . . . .	25	Notice for users in Taiwan . . . . .	40
Modelo: 9462NGW . . . . .	25	根據NCC低功率電波輻射性電機管理辦法規 定 . . . . .	40
Notice for users in Mexico (Nota para uso en Mexico) . . . . .	25	Notice for users in the UAE . . . . .	41
Modelo: 3165NGW . . . . .	25	For model: 3165NGW. . . . .	41
Modelo: 7265NGW . . . . .	25	For model: 7265NGW. . . . .	41
Modelo: 8265NGW . . . . .	25	For model: 8265NGW. . . . .	41
Modelo: QCNFA344A . . . . .	25	For model: QCNFA344A. . . . .	41
Modelo: QCNFA364 . . . . .	26	For model: QCNFA364 . . . . .	41
Modelo: QCNFA435 . . . . .	26	For model: QCNFA435 . . . . .	41
Modelo: RTL8821CE . . . . .	26	For model: RTL8821CE . . . . .	42
Modelo: RTL8822BE . . . . .	26	For model: RTL8822BE . . . . .	42
Modelo: 9260NGW . . . . .	26	For model: 9260NGW. . . . .	42
Modelo: 9560NGW . . . . .	26	For model: 9560NGW. . . . .	42
Modelo: 9462NGW . . . . .	26	For model: 9462NGW. . . . .	42
Notice for users in Morocco . . . . .	26	Trademarks . . . . .	xliii

## About this manual

This publication contains regulatory information for wireless modules that may be included by Lenovo computers. Different wireless modules are supported by different computer products. The table below lists product names for Lenovo computers in rows. All supported wireless modules by a product are marked with a circle.

Product Name	QCNFA 344A	QCNFA 435	QCNFA 364	7265 NGW	8265 NGW	3165 NGW	RTL 8821CE	RTL 8822BE	9260 NGW	9560 NGW	9462 NGW
Lenovo 500e Chromebook				○							
Lenovo 100e				○							
Yoga 530-14IKB		○			○	○	○	○			
Yoga 530-15IKB		○			○	○	○	○			
ideapad 330-15ICH		○				○	○			○	
ideapad 330-17ICH		○				○	○			○	
Legion Y530-15ICH		○				○	○	○		○	
ideapad FLEX 6-14IKB		○			○	○	○	○			
ideapad FLEX 6-14ARR		○					○	○			
Lenovo V330-14ARR		○					○				
ideapad 530s-14IKB		○			○	○	○	○			
ideapad 530s-15IKB		○			○	○	○	○			
Lenovo V130-15IKB		○			○	○	○	○			
Lenovo V130-15IGM		○				○	○				
Lenovo V130-14IGM		○				○	○				
ideapad 330S-15IKB GTX1050		○				○	○				

Product Name	QCNFA 344A	QCNFA 435	QCNFA 364	7265 NGW	8265 NGW	3165 NGW	RTL 8821CE	RTL 8822BE	9260 NGW	9560 NGW	9462 NGW
ideapad 530s-14ARR		o									
ideapad 330-14IGM		o				o	o				
ideapad 330-15IGM		o				o	o				
ideapad 330-15ICN		o				o	o				
ideapad 330-15ARR		o					o				
ideapadd 330-15ARR Touch		o					o				
Lenovo B330-15IGM		o				o	o				
Lenovo S130-11IGM		o				o	o				o
Lenovo S130-14IGM		o				o	o				o
Lenovo 130S-11IGM		o				o	o				o
Lenovo 130S-14IGM		o				o	o				o
Yoga 530-14ARR		o					o	o			
Lenovo B330-15IKBR		o				o	o				
Yoga C930-13IKB	o								o		
Yoga C930-13IKB Glass	o								o		
Legion Y7000P		o				o	o	o		o	
Yoga S730-13IWL		o				o	o	o	o	o	o
ideapad 730S-13IWL		o				o	o	o	o	o	o
Legion Y730-15ICH	o							o		o	

Product Name	QCNFA 344A	QCNFA 435	QCNFA 364	7265 NGW	8265 NGW	3165 NGW	RTL 8821CE	RTL 8822BE	9260 NGW	9560 NGW	9462 NGW
Legion Y730-15ICHg								o		o	
Legion Y730-17ICH	o							o		o	
Legion Y730-17ICHg								o		o	
Yoga 730-13IWL								o	o		
Yoga 730-15IWL								o	o		
Legion Y530-15ICH-1060		o				o	o	o		o	
Legion Y7000P-1060		o				o	o	o		o	
Lenovo S50 Scuderia Ferrari Edition		o					o				
ideapad S530-13IWL		o				o		o		o	
Lenovo 100e Windows 2nd Gen									o	o	
Lenovo 300e Windows 2nd Gen									o	o	
Legion Y740-15ICHg								o		o	
Legion Y740-17ICHg								o		o	
Lenovo 100e Chromebook 2nd Gen										o	
Lenovo 300e Chromebook 2nd Gen										o	
Lenovo 500e Chromebook 2nd Gen										o	
IdeaPad S340-14IWL		o					o	o		o	o

Product Name	QCNFA 344A	QCNFA 435	QCNFA 364	7265 NGW	8265 NGW	3165 NGW	RTL 8821CE	RTL 8822BE	9260 NGW	9560 NGW	9462 NGW
IdeaPad S340-15IWL		o					o	o		o	o
IdeaPad S340-15IWL Touch		o					o	o		o	o
IdeaPad S340-14API		o					o	o			
IdeaPad S340-15API		o					o	o			
IdeaPad S340-15API Touch		o					o	o			
IdeaPad S540-14IWL		o					o	o		o	o
IdeaPad S540-14API		o					o	o			
IdeaPad C340-14IWL		o					o	o		o	o
IdeaPad C340-15IWL		o					o	o		o	o
IdeaPad C340-14API		o					o	o			
IdeaPad FLEX-14API		o					o	o			
Yoga S940-14IWL										o	
IdeaPad S940-14IWL										o	
IdeaPad FLEX-14IWL		o					o	o		o	o
IdeaPad FLEX-15IWL		o					o	o		o	o

---

## Chapter 1. Notice for users in USA and Canada

Read this document before using your computer. This computer complies with the radio frequency and safety standards of any country or region in which it has been approved for wireless use. Install and use your computer according to the following instructions.

The latest Regulatory Notice manual is available on the Lenovo Web site. To download the manual, go to <http://www.lenovo.com/support> and then follow the on-screen instructions.

Lisez ce document avant d'utiliser votre ordinateur. Cet ordinateur est conforme aux normes de fréquence radioélectrique et de sécurité du pays ou de la région où son utilisation sans fil est autorisée. Installez et utilisez votre ordinateur en vous conformant aux instructions ci-dessous.

La dernière version du manuel Regulatory Notice est disponible sur le site Web de Lenovo. Pour télécharger le document, rendez-vous sur <http://www.lenovo.com/support> et suivez les instructions à l'écran.

---

### Approved wireless devices

This system contains the following wireless devices and underwent the certification process of FCC CFR 47 Part 2 section 1093, Part 15 Subpart C and Subpart E, Part 27, Part 22 Subpart H, Part 24 Subpart E, and Part 90 under each respective FCC ID below. The FCC ID is indicated on the bottom cover of your system.

#### Preinstalled wireless LAN modules with Bluetooth function

- FCC ID: PD97265NGU (Model: 7265NGW)
- FCC ID: PD93165NGU (Model: 3165NGW)
- FCC ID: PD98265NG (Model: 8265NGW)
- FCC ID: PPD-QCNFA435 (Model: QCNFA435)
- FCC ID: PPD-QCNFA364AH (Model: QCNFA364)
- FCC ID: PPD-QCNFA344AH (Model: QCNFA344A)
- FCC ID: TX2-RTL8821CE (Model: RTL8821CE)
- FCC ID: TX2-RTL8822BE (Model: RTL8822BE)
- FCC ID: PD99260NG (Model: 9260NGW)
- FCC ID: PD99560NG (Model: 9560NGW)
- FCC ID: PD99462NG (Model: 9462NGW)

#### Notes:

- The wireless LAN, the Bluetooth, and the WiGig features operate at different frequencies exclusively, and transmit radio frequencies simultaneously.
- The following wireless LAN modules marketed in the USA and Canada do not support or function in the extended channels (12ch, 13ch):
  - Model: QCNFA344A
  - Model: QCNFA435
  - Model: QCNFA364
  - Model: RTL8821CE
  - Model: RTL8822BE

---

## Preinstalled wireless LAN module

The wireless LAN module in your computer is preinstalled by Lenovo®, and you are prohibited to replace with other wireless adapter or remove it. If the device requires replacement due to some problem during warranty, it must be serviced by a Lenovo authorized servicer.

### 1. FCC ID location

The FCC ID for the preinstalled wireless LAN module is shown on the enclosure of your computer. For the location of the FCC ID indicator and the slot, see “FCC ID and IC Certification number label” in *User Guide*.

### 2. FCC RF exposure compliance

The radiated output power of the wireless LAN module authorized to use for your computer is far below the FCC radio frequency exposure limits. Nevertheless, it shall be used in such a manner that the potential for human contact during normal operation is minimized as follows:

#### **CAUTION:**

**The total radiated energy from the antennas connected to the installed wireless LAN module, conforms to the FCC limit of the SAR (Specific Absorption Rate) requirement, regarding 47 CFR Part 2 section 1093, when the computer was tested in either conventional notebook or tablet computer orientations.**

The transmission antennas for the wireless LAN module are located in the LCD cover. See “Locating the UltraConnect™ wireless antennas” in *User Guide*.

### 3. Radio Frequency interference requirements

Each device has been tested and found to comply with the limits for a Class B digital device pursuant to FCC Part 15 Subpart B. Refer to "Electronic emission notices" on page 6.

When you use a wireless LAN module in the 802.11 a/n transmission mode, note that high power radars are allocated as primary users of the 5250 to 5350 MHz and 5650 to 5850 MHz bands. These radar stations can cause interference with and/or damage this device.

---

## Simultaneous use of RF transmitters

Your computer is approved for simultaneous use of one of the approved wireless LAN modules, the approved wireless WAN module, and the approved NFC module.

Make sure of the following conditions when you use any other external RF option device:

- When you use any other RF option device, you are requested to confirm that the device conforms to the RF Safety requirement and is approved to use for your computer.
- You must follow the RF Safety instructions of the RF option device that are included in the user manual of the RF option device.
- If the RF option device is prohibited to use in conjunction with another transmitters, you must turn off all other wireless features in your computer.

---

## Canada – Industry Canada (IC)

### Approved wireless devices

This system contains the following wireless devices and the IC certification number is as below. The IC certification number is indicated on the bottom cover of your system.

### Preinstalled wireless LAN modules with Bluetooth function

- IC: 1000M-7265NG (Model: 7265NGW)
- IC: 1000M-3165NG (Model: 3165NGW)
- IC: 1000M-8265NG (Model: 8265NGW)
- IC: 4104A-QCNFA435 (Model: QCNFA435)
- IC: 4104A-QCNFA364A (Model: QCNFA364)
- IC: 4104A-QCNFA344A (Model: QCNFA344A)
- IC: 6317A-RTL8821CE (Model: RTL8821CE)
- IC: 6317A-RTL8822BE (Model: RTL8822BE)
- IC: 1000M-9260NG (Model: 9260NGW)
- IC: 1000M-9560NG (Model: 9560NGW)
- IC: 1000M-9462NG (Model: 9462NGW)

#### Notes:

- The wireless LAN, the Bluetooth, and the WiGig features operate at different frequencies exclusively, and transmit radio frequencies simultaneously.
- The following wireless LAN modules marketed in the USA and Canada do not support or function in the extended channels (12ch, 13ch):
  - Model: QCNFA344A
  - Model: QCNFA435
  - Model: QCNFA364
  - Model: RTL8821CE
  - Model: RTL8822BE

### Preinstalled wireless LAN module

The IC Certification number for the wireless LAN module is shown on the enclosure of your computer. For the location of the IC Certification number, see “FCC ID and IC Certification information” in *User Guide* .

**Attention:** The wireless LAN module in your computer is preinstalled by Lenovo, and you are prohibited to replace with other wireless adapter nor remove it. If the device requires replacement due to some problem during warranty, it must be serviced by a Lenovo authorized servicer.

### Low power license-exempt radiocommunication devices (RSS-210, RSS-247)

Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

When you use a wireless LAN module in the 802.11 a/n transmission mode, note the following:

- The devices for the band 5150–5350 MHz are only for indoor usage to reduce potential for harmful interference to co-channel Mobile Satellite systems
- The devices for the band 5150–5350 MHz are only for indoor usage to reduce potential for harmful interference to co-channel Mobile Satellite systems

- High power radars are allocated as primary users (meaning they have priority) of 5250–5350 MHz and 5650–5850 MHz and these radars could cause interference and/or damage to LE-LAN (Licence-Exempt Local Area Network) devices.
- The maximum antenna gain permitted for devices in the 5250-5350 MHz, 5470-5725 MHz, and 5725-5825 MHz bands complies with the e.i.r.p. limit.

## Exposure of humans to RF fields (RSS-102)

The computers employ low gain integral antennas that do not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site at <http://www.hc-sc.gc.ca/>.

The radiated energy from the antennas connected to the wireless modules conforms to the Canada Portable RF exposure limit regarding IC RSS-102, Issue 5, Section 4, set forth for an uncontrolled environment, and are safe for intended operation in the conventional setting. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

---

## Canada – Industrie Canada (IC)

### Périphériques sans fil homologués

Ce système contient les périphériques sans fil suivants et le numéro d'homologation IC indiqué ci-dessous. Le numéro d'homologation IC figure sur la partie inférieure de votre système.

#### Modules de réseau local sans fil avec fonction Bluetooth préinstallés

- IC: 1000M-7265NG (modèle: 7265NGW)
- IC: 1000M-3165NG (modèle: 3165NGW)
- IC: 1000M-8265NG (modèle: 8265NGW)
- IC: 4104A-QCNFA435 (modèle: QCNFA435)
- IC: 4104A-QCNFA364A (modèle: QCNFA364)
- IC: 4104A-QCNFA344A (modèle: QCNFA344A)
- IC: 6317A-RTL8821CE (modèle: RTL8821CE)
- IC: 6317A-RTL8822BE (modèle: RTL8822BE)
- IC: 1000M-9260NG (modèle: 9260NGW)
- IC: 1000M-9560NG (modèle: 9560NGW)
- IC: 1000M-9462NG (modèle: 9462NGW)

#### Notes:

- Les fonctions de réseau local sans fil, Bluetooth et WiGig sont opérationnelles à des fréquences différentes exclusivement et émettent des fréquences radio simultanément.
- Les modules de réseau local sans fil suivants commercialisés aux États-Unis et au Canada ne prennent pas en charge les canaux étendus (12ch, 13ch):
  - Modèle: QCNFA344A
  - Modèle: QCNFA435
  - Modèle: QCNFA435
  - Modèle: QCNFA364

- Modèle: RTL8821CE
- Modèle: RTL8822BE

## Module réseau local sans fil préinstallé

Le numéro de certification IC correspondant au module de réseau local sans fil figure sur le boîtier de votre ordinateur. Pour connaître l'emplacement du numéro de certification IC, reportez-vous à la section Informations sur l'identification FCC et la certification IC du *guide d'utilisation*.

**Attention:** Le module réseau local sans fil est préinstallé sur votre ordinateur par Lenovo et il est interdit au client de le remplacer par un autre adaptateur sans fil ou de le supprimer. Si le périphérique doit être remplacé à cause d'un problème survenu pendant la période de garantie, l'opération doit être effectuée par un technicien agréé Lenovo.

## Appareils de radio-communication basse tension sans licence d'utilisation (CNR-210, CNR-247)

Le fonctionnement de ce type d'appareil est soumis aux deux conditions suivantes:

1. Cet appareil ne peut pas causer de perturbations électromagnétiques.
2. Cet appareil doit accepter toutes les perturbations reçues, y compris celles susceptibles d'occasionner un fonctionnement indésirable.

Lorsque vous utilisez un module de réseau local sans fil dans le mode de transmission 802.11 a/n, tenez compte des remarques suivantes:

- Les appareils destinés à la bande 5150–5350 MHz devront être exclusivement utilisés en intérieur afin de réduire les risques de perturbations électromagnétiques gênantes sur les systèmes de satellite mobile dans un même canal. otential for harmful interference to co-channel Mobile Satellite systems
- Les radars à forte puissance sont désignés comme les utilisateurs principaux (c'est-à-dire qu'ils sont prioritaires) des bandes 5250-5350 MHz et 5650-5850 MHz. Ils peuvent provoquer des perturbations électromagnétiques sur les appareils de type LE-LAN (réseau de communication local sans licence) ou les endommager.
- Le gain d'antenne maximal autorisé pour les appareils dans les bandes de fréquence 5250-5350 MHz, 5470-5725 MHz et 5725-5825 MHz est conforme à la limite p.i.r.e (puissance isotrope rayonnée équivalente).

## Conformité des appareils de radiocommunication aux limites d'exposition humaine aux radiofréquences (CNR-102)

Les ordinateurs utilisent des antennes intégrales à faible gain qui n'émettent pas un champ électromagnétique supérieur aux normes imposées par Santé Canada pour la population. Consultez le Code de sécurité 6 sur le site Web de Santé Canada à l'adresse <http://www.hc-sc.gc.ca/>.

L'énergie émise par les antennes reliées aux modules sans fil respecte la limite d'exposition aux radiofréquences émises par les appareils portables au Canada telle que définie par Industrie Canada dans la section 4 du document CNR-102, version 5 pour un environnement non contrôlé et permet d'affecter sans danger le produit à l'usage auquel il est destiné. La réduction de l'exposition aux radiofréquences est possible si le produit peut être conservé aussi loin que possible du corps de l'utilisateur ou en définissant une puissance de sortie plus faible si une telle fonction est disponible.

---

## Electronic emission notices

### Federal Communications Commission (FCC) Declaration of Conformity

**Models:** QCNFA344A, QCNFA435, QCNFA364, 7265NGW, 8265NGW, 3165NGW, RTL8821CE, RTL8822BE, 9260NGW, 9560NGW, 9462NGW

This equipment has been tested and found to comply with the limits 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 equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with 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 equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment 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 equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an authorized dealer or service representative for help.

Lenovo is not responsible for any radio or television interference caused by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

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

Responsible Party:

Lenovo (United States) Incorporated  
1009 Think Place-Building One  
Morrisville, NC 27560  
Telephone: 1-919-294-5900



### Usage environment and your health

The wireless device installed in the computer operates within the guidelines identified by radio frequency (RF) safety standards and recommendations; therefore, Lenovo believes this product is safe for use by consumers. These standards and recommendations reflect the consensus of the worldwide scientific community, and result from deliberations of panels and committees of scientists, who continually review and interpret the extensive research literature.

In some situations or environments, the use of wireless devices might be restricted by the proprietor of a building or responsible representatives of an organization. For example, these situations and areas might include the following:

- On board of airplanes, in hospitals, or near petrol stations, blasting areas (with electro-explosive devices), medical implants, or body-worn electronic medical devices, such as pace makers.

- In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies to the use of wireless devices in a specific area (such as an airport or hospital), you are encouraged to ask for authorization to use a wireless device prior to turning on the computer.



## Chapter 2. Europe – EU Declaration of Conformity (wireless module)



	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES
	FI	FR	HR	HU	IE	IS	IT	LI	LT	LU	LV
	MT	NL	NO	PL	PT	RO	SE	SI	SK	TR	UK

Table 1. EU Directive 2014/53/EU

Technology	Frequency band [MHz]	Maximum transmit power [dBm] (less than)
WLAN 802.11b/g/n	2400 - 2483.5	20
WLAN 802.11a/n/ac	5150 - 5725	23
WLAN 802.11a/n/ac	5725 - 5875	13.98
WiGig 802.11ad	58210 - 62640	25
Bluetooth BR/EDR/LE	2400 - 2483.5	20
WWAN UMTS	1/3/8	24.5
WWAN LTE	1/3/7/8/20/28	24
NFC	13.56	-38.11

### English

Hereby, Lenovo® (Singapore) Pte. Ltd., declares that the wireless equipment listed in this section is in compliance with the Radio Equipment Directive 2014/53/EU.

The full text of the system EU declaration of conformity and the EU wireless module declarations are available at the following Internet addresses:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

#### EU Frequency band restriction for a wireless LAN

Usage of this device is limited to indoor in the band 5150 MHz to 5350 MHz (channels 36, 40, 44, 48, 52, 56, 60, 64).

### RF exposure information

This device meets the EU requirements and the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines for general public's exposure to electromagnetic fields. To comply with the RF exposure requirements, refer to the *Setup Guide* for your product for the minimum safe-operating separation distance and SAR values.

---

## Bulgarian

С настоящото Lenovo (Singapore) Pte. Ltd. декларира, че безжичното оборудване, споменато в този раздел, съответства на Директивата за радиооборудване 2014/53/ЕС.

Пълният текст на декларацията за съответствие на ЕС относно системата и декларациите за безжичните модули на ЕС е наличен на следния адрес в интернет:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### Ограничение в ЕС за честотни ленти за безжичен LAN

Употребата на това устройство е ограничена само на закрито в диапазона 5150 MHz до 5350 MHz (каналы 36, 40, 44, 48, 52, 56, 60, 64).

## Информация за излагане на радиочестоти

Това устройство отговаря на изискванията на ЕС и насоките на международната комисия за защита от нейонизираща радиация (ICNIRP) за общо обществено излагане на електромагнитни полета. За съответствие с изискванията за излагане на радиочестоти вижте *Ръководство за настройка* на продукта си за минимално разделно разстояние за безопасна употреба и стойности за SAR.

---

## Croatian

Lenovo (Singapore) Pte. Ltd. ovime izjavljuje da je bežična oprema navedena u ovom odjeljku usklađena s Direktivom o radijskoj opremi 2014/53/EU.

Cjeloviti tekst EU izjave o sukladnosti sustava i EU izjave o bežičnim modulima dostupne su na sljedećoj web-adresi:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### Ograničenje frekvencijskog pojasa za bežični LAN u EU-u

Upotreba uređaja ograničena je na zatvorene prostore unutar pojasa od 5150 MHz do 5350 MHz (kanali 36, 40, 44, 48, 52, 56, 60, 64).

## Informacije o izlaganju radijskoj frekvenciji

Ovaj uređaj zadovoljava zahtjeve EU-a i smjernice Međunarodne komisije za zaštitu od neionizirajućeg zračenja o izlaganju javnosti elektromagnetskim poljima. Da bi oprema bila usklađena sa zahtjevima o izlaganju radijskoj frekvenciji, u *priručniku za postavljanje* proizvoda potražite vrijednosti minimalne sigurne udaljenosti i specifične brzine apsorpcije.

---

## Czech

Společnost Lenovo (Singapore) Pte. Ltd. tímto prohlašuje, že bezdrátová zařízení uvedená v této části dokumentu splňují základní i další relevantní požadavky směrnice o rádiových zařízeních 2014/53/EU.

Celé znění EU prohlášení o shodě systému a EU prohlášení o bezdrátových modulech je k dispozici na této internetové adrese:

- <https://www.lenovo.com/eu-doc-notebooks>

- <https://www.lenovo.com/eu-doc-tables>

### **Omezení EU pro frekvenční pásma bezdrátové sítě LAN**

Použití tohoto zařízení je omezeno na vnitřní prostory a frekvenční pásma 5150 až 5350 MHz (kanály 36, 40, 44, 48, 52, 56, 60, 64).

## **Informace o vystavení radiofrekvenčnímu záření**

Toto zařízení splňuje požadavky EU a pokyny ICNIRP (International Commission on Non-Ionizing Radiation Protection – Mezinárodní komise pro ochranu před neionizujícím zářením) týkající se vystavení obecné veřejnosti elektromagnetickým polím. Informace o minimální bezpečné provozní vzdálenosti a hodnotách SAR pro váš produkt, které jsou v souladu s požadavky na ochranu před radiofrekvenčním zářením, najdete v *Návodu k nastavení*.

---

## **Danish**

Lenovo (Singapore) Pte. Ltd. erklærer hermed, at det trådløse udstyr, der er angivet i dette afsnit, overholder direktivet om radioudstyr 2014/53/EU.

Den fulde erklæring vedrørende systemets overholdelse af EU-krav og erklæringerne om de trådløse modulers overholdelse af EU-krav (hvis relevante) er tilgængelige via følgende internetadresse:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### **Restriktioner for frekvensbånd i EU for et trådløst LAN**

Brug af denne enhed er begrænset til indendørs brug i frekvensbåndet 5150 MHz til 5350 MHz (kanal 36, 40, 44, 48, 52, 56, 60, 64).

## **Oplysninger om radiobølgeeksponering**

Denne enhed opfylder EU-kravene og ICNIRP-retningslinjerne (International Commission on Non-Ionizing Radiation Protection) for eksponering for elektromagnetiske felter. For at overholde RF-eksponeringskravene, kan du se *Brugervejledningen* for dit produkt for den minimale sikkerhedsafstandsafstand og SAR-værdier.

---

## **Dutch**

Hierbij verklaart Lenovo (Singapore) Pte. Ltd. dat de draadloze apparatuur die in dit artikel is aangegeven voldoet aan de richtlijn 2014/53/EU voor radioapparatuur.

De volledige tekst van de EU-conformiteitsverklaring betreffende systemen en van de EU-verklaringen betreffende draadloze modules is beschikbaar op het volgende internetadres:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### **EU-beperving van frequentieband voor een draadloos LAN**

Gebruik van dit apparaat is beperkt tot gebruik binnenshuis in de band van 5150 MHz tot 5350 MHz (kanalen 36, 40, 44, 48, 52, 56, 60, 64).

## Informatie over blootstelling aan radiogolven

Dit apparaat voldoet aan de vereisten van de EU en de richtlijnen van de ICNIRP (International Commission on Non-Ionizing Radiation Protection) voor blootstelling van het algemene publiek aan elektromagnetische velden. Om te voldoen aan de vereisten voor blootstelling aan radiogolven, raadpleegt u de *Installatiehandleiding* voor uw product voor de minimale veilige afstand en de SAR-waarden.

---

## Estonian

Lenovo (Singapore) Pte. Ltd. kinnitab käesolevaga, et selles jaotises esitatud traadita side seadmed vastavad raadioseadmete direktiivile 2014/53/EL.

Süsteemi EL-i vastavusdeklaratsiooni ja EL-i traadita side mooduli deklaratsioonide täielikud tekstid on saadaval järgmisel Interneti-aadressil:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### EL-i sagedusvahemiku piirang traadita side LAN-ile

Seda seadet võib kasutada siseruumides sagedusvahemikus 5150–5350 MHz (kanalid 36, 40, 44, 48, 52, 56, 60, 64).

## Raadiosagedusliku kiirguse teave

Seade vastab EL-i nõuetele ja Rahvusvahelise mitteioniseeriva kiirguse eest kaitsmise komisjoni (ICNIRP) juhiste elanikkonna elektromagnetiliste väljadega kokkupuute kohta. Raadiosageduslikule kiirgusele sätestatud nõuetele vastamiseks vt oma toote kohta käivat vähimat ohutut töötamiskaugust ja SAR-i väärtuseid *seadistusjuhendist*.

---

## Finnish

Lenovo (Singapore) Pte. Ltd. ilmoittaa täten, että tässä jaksossa mainitut langattomat laitteet ovat radiolaitedirektiivin 2014/53/EU mukaisia.

Lausuma järjestelmän EU-säännöstenmukaisuudesta ja lausumat langattomien moduulien EU-säännöstenmukaisuudesta ovat saatavilla kokonaisuudessaan seuraavassa Internet-osoitteessa:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### Langattoman lähiverkon taajuusalueen rajoitus EU:n alueella

Tämä laite on tarkoitettu käytettäväksi sisätiloissa taajuusalueella 5 150–5 350 MHz (kanavat 36, 40, 44, 48, 52, 56, 60 ja 64).

## Tietoja radiotaajuiselle säteilylle altistumisesta

Tämä laite täyttää Euroopan unionin vaatimukset ja kansainvälisen ionisoimattoman säteilyn toimikunnan (ICNIRP, International Commission on Non-Ionizing Radiation Protection) suositukset, jotka koskevat väestön altistumista sähkömagneettisille kentille. Saat lisätietoja radiotaajuiselle säteilylle altistumista koskevien vaatimusten noudattamisesta tutustumalla tuotteen *asennusoppaassa* ilmoitettuihin SAR-arvoihin ja turvallisen käytön edellyttämään vähimmäisetäisyyteen.

---

## French

Par la présente, Lenovo (Singapore) Pte. Ltd., déclare que les équipements sans fil listés dans cette section sont conformes à la directive 2014/53/EU sur les équipements radio.

Le texte complet de la déclaration européenne de conformité et des déclarations européennes concernant les modules sans fil, s'il y a lieu, sont disponibles à l'adresse Internet suivante:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### Restriction liée à une bande de fréquence pour un réseau local sans fil au sein de l'Union européenne

Ce périphérique doit être utilisé exclusivement à l'intérieur, dans la bande de fréquence de 5150 à 5350 MHz (canaux 36, 40, 44, 48, 52, 56, 60, 64).

## Informations sur l'exposition aux RF

Ce périphérique respecte les directives de l'UE et de la Commission internationale pour la protection contre les radiations non-ionisantes (ICNIRP) concernant l'exposition du public à des champs électromagnétiques. Pour répondre aux exigences en matière d'exposition aux RF, reportez-vous au *Guide de configuration* de votre produit afin de connaître la distance de séparation minimale pour une utilisation en toute sécurité, ainsi que les valeurs de débit d'absorption spécifique.

---

## German

Hiermit erklärt Lenovo (Singapore) Pte. Ltd., dass das in diesem Abschnitt aufgelistete drahtlose Gerät die Funkanlagen-Richtlinie 2014/53/EU erfüllt.

Der vollständige Text der EU-Konformitätserklärung für das System und der EU-Deklarationen zu drahtlosen Modulen kann unter der folgenden Internetadresse eingesehen werden:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### EU-Frequenzbandeinschränkung für drahtloses LAN

Die Verwendung dieses Gerätes ist im Frequenzband zwischen 5.150 und 5.350 MHz (Kanäle 36, 40, 44, 48, 52, 56, 60, 64) auf die Verwendung im Innenbereich beschränkt.

## Informationen zur HF-Exposition

Dieses Gerät erfüllt die EU-Anforderungen sowie die Richtlinien der International Commission on Non-Ionizing Radiation Protection (ICNIRP) hinsichtlich der Exposition der Bevölkerung gegenüber elektromagnetischen Feldern. Um die Anforderungen bezüglich der HF-Exposition zu erfüllen, lesen Sie die *Einrichtungsanleitung* zu Ihrem Produkt im Hinblick auf den Mindestabstand für einen sicheren Betrieb und die SAR-Werte.

---

## Greek

Με την παρούσα, η Lenovo (Singapore) Pte. Ltd., δηλώνει ότι ο ασύρματος εξοπλισμός που αναφέρεται σε αυτήν την ενότητα συμμορφώνεται με την Οδηγία περί Ραδιοεξοπλισμού 2014/53/ΕΕ.

Το πλήρες κείμενο της δήλωσης συμμόρφωσης της ΕΕ για το σύστημα και των δηλώσεων της ΕΕ για τις ασύρματες μονάδες είναι διαθέσιμο στην ακόλουθη διεύθυνση στο Internet:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### **Περιορισμός ζώνης συχνοτήτων στην ΕΕ για ασύρματο LAN**

Η χρήση αυτής της συσκευής περιορίζεται σε εσωτερικούς χώρους στη ζώνη συχνοτήτων 5150 MHz έως 5350 MHz (κανάλια 36, 40, 44, 48, 52, 56, 60, 64).

## **Πληροφορίες σχετικά με την έκθεση στις ραδιοσυχνότητες (RF)**

Η συγκεκριμένη συσκευή πληροί τις απαιτήσεις της ΕΕ και τις οδηγίες της Διεθνούς Επιτροπής για την Προστασία από τις Μη Ιοντίζουσες Ακτινοβολίες (ICNIRP) σχετικά με την έκθεση του ευρύτερου κοινού στα ηλεκτρομαγνητικά πεδία. Για την πλήρη συμμόρφωση με τις απαιτήσεις περί έκθεσης στις ραδιοσυχνότητες (RF), ανατρέξτε στον *Οδηγό εγκατάστασης* του προϊόντος σας για πληροφορίες σχετικά με την ελάχιστη απόσταση διαχωρισμού για ασφαλή λειτουργία και τις τιμές SAR.

---

## **Hungarian**

A Lenovo (Singapore) Pte. Ltd. ezennel kijelenti, hogy a fejezetben említett vezeték nélküli készülék megfelel az 2014/53/EU számú, Rádióberendezésekről szóló direktívában foglaltaknak.

A berendezés Európai Unió-beli megfelelőségi nyilatkozata és a vezeték nélküli eszközökkel kapcsolatos európai nyilatkozat (ha elérhető) a következő weboldalon tekinthető meg:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### **Frekvenciatartományra vonatkozó európai uniós korlátozás vezeték nélküli LAN-hálózatokhoz**

Az eszköz használata beltérre korlátozódik az 5150–5350 MHz tartományban (csatornák: 36, 40, 44, 48, 52, 56, 60, 64).

## **RF-kitettségre vonatkozó információk**

Ez az eszköz megfelel a személyek elektromágneses mezőknek való kitettségére vonatkozó, az EU és az International Commission on Non-Ionizing Radiation Protection (ICNIRP – Nemzetközi Bizottság a Nem-ionizáló Sugárzással Szembeni Védelemről) által előírt követelményeknek. Az RF-kitettségre vonatkozó követelményeknek való megfelelésről (többek között a biztonságos használat minimális távolságáról és a SAR-értékekről) az *Üzembe helyezési útmutatóban* talál további információt.

---

## **Italian**

Con la presente documentazione, Lenovo (Singapore) Pte. Ltd. dichiara che l'apparecchiatura wireless indicata in questa sezione è conforme alla direttiva 2014/53/EU sulle apparecchiature radio.

Il testo integrale della dichiarazione di conformità europea del sistema e le dichiarazioni UE dei moduli wireless, se applicabili, sono disponibili al seguente indirizzo Internet:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### **Restrizioni UE sulla banda di frequenza per una WLAN (wireless LAN)**

L'utilizzo di questo dispositivo è limitato ad ambienti chiusi in banda compresa tra 5150 MHz e 5350 MHz (canali 36, 40, 44, 48, 52, 56, 60, 64).

## Informazioni sull'esposizione RF

Questo dispositivo rispetta i requisiti EU e le linee guida ICNIRP (International Commission on Non-Ionizing Radiation Protection) per l'esposizione generale ai campi elettromagnetici. Per rispettare i requisiti di conformità dell'esposizione RF, consultare la *Guida di configurazione* del prodotto per conoscere la distanza di sicurezza operativa minima e i valori SAR.

---

### Latvian

Ar šo uzņēmums Lenovo (Singapore) Pte. Ltd. paziņo, ka šajā sadaļā norādītais bezvadu aprīkojums atbilst radioiekārtu Direktīvai 2014/53/EK.

Pilnais teksts par sistēmas piemērotību ES atbilstības deklarācijai un ES bezvadu moduļu deklarācijām ir pieejams šādā interneta adresē:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

#### ES frekvenču joslu ierobežojums bezvadu LAN adapterim

Šī ierīce ir paredzēta izmantošanai iekšējās joslās no 5150 MHz līdz 5350 MHz (kanālos 36, 40, 44, 48, 52, 56, 60, 64).

## Informācija par pakļaušanu RF starojumam

Šī ierīce atbilst ES prasībām un vadlīnijām, ko publicējusi Starptautiskā komisija aizsardzībai pret nejonizējošo starojumu (International Commission on Non-Ionizing Radiation Protection — ICNIRP), attiecībā uz vispārīgu sabiedrības pakļaušanu elektromagnētiskajam laukam. Lai nodrošinātu prasības par pakļaušanu RF starojumam, sk. jūsu produkta *Iestatīšanas pamācību* un meklējiet informāciju par minimālo drošo lietošanas attālumu un SAR vērtības.

---

### Lithuanian

Šiame dokumente „Lenovo (Singapore) Pte. Ltd.“ pareiškia, kad belaidė įranga, nurodyta šiame skyriuje, atitinka Radijo įrangos direktyvos 2014/53/ES reikalavimus.

Visą sistemą ES atitiktis deklaracijos ir ES belaidžio ryšio modulio deklaracijų tekstą galite rasti apsilankę adresu internete:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

#### Belaidžio LAN ES dažnių diapazono apribojimas

Šį įrenginį patalpose galima naudoti 5 150–5 350 MHz dažnių diapazonu (kanalai: 36, 40, 44, 48, 52, 56, 60, 64).

## Informacija apie radijo dažnių poveikį

Šis įrenginys atitinka ES reikalavimus ir Tarptautinės apsaugos nuo nejonizuojančiosios spinduliuotės komisijos (ICNIRP) gaires dėl elektromagnetinių laukų poveikio plačiajai visuomenei. Kad laikytumėtės radijo dažnių poveikio apribojimo reikalavimų, savo produkto *Sąrankos vadove* ieškokite informacijos apie minimalų saugų naudojimo atstumą ir SAR (savitosios sugerties sparta, angl. „Specific Absorption Rate“) vertes.

---

## Norwegian

Lenovo (Singapore) Pte. Ltd. erklærer herved at det trådløse utstyret som er oppført i dette kapittelet, er i samsvar med direktiv 2014/53/EU om radioutstyr.

Den fullstendige teksten i EUs samsvarserklæring for systemet og EUs samsvarserklæringer for trådløse moduler, hvis aktuelt, er tilgjengelig på følgende Internett-adresser:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### Begrensinger for frekvensbånd i EU for trådløst LAN

Denne enheten er begrenset til innendørs bruk i frekvensbåndet 5150 til 5350 MHz (kanal 36, 40, 44, 48, 52, 56, 60, 64).

## Informasjon om RF-eksponering

Denne enheten oppfyller EU-kravene og ICNIRP-retningslinjene (International Commission on Non-Ionizing Radiation) for eksponering for elektromagnetiske felter ved generell bruk. Se produktets *installasjonsveiledning* for informasjon om minimumsavstand for trygg bruk og SAR-verdiene som overholder RF-eksponeringskravene.

---

## Polish

Lenovo (Singapore) Pte. Ltd., niniejszym oświadcza, że urządzenie bezprzewodowe wymienione w tej sekcji spełnia wymagania dyrektywy w sprawie sprzętu radiowego 2014/53/UE.

Pełny tekst deklaracji zgodności systemów i modułów łączności bezprzewodowej z przepisami UE można znaleźć na następującej stronie internetowej:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### Ograniczenia dotyczące pasm częstotliwości w UE dla połączeń bezprzewodowych LAN

Urządzenie jest przeznaczone do używania wewnątrz budynków, w pasmach częstotliwości 5150 do 5350 MHz (kanały 36, 40, 44, 48, 52, 56, 60 i 64).

## Informacje o ekspozycji na częstotliwości radiowe

To urządzenie spełnia wymagania UE i wytyczne Międzynarodowej Komisji ds. Ochrony przed Promieniowaniem Niejonizującym (ICNIRP) dotyczące wystawienia ludzi na działanie pól elektromagnetycznych. W celu spełnienia wymagań dotyczących wystawienia na działanie częstotliwości radiowych zobacz *Podręcznik konfiguracji* do swojego produktu, aby sprawdzić minimalną bezpieczną odległość podczas obsługi i wartości SAR.

---

## Portuguese

A Lenovo (Singapore) Pte. Ltd., declara por este meio que o equipamento sem fios listado nesta secção está em conformidade com a Diretiva de Equipamento de Rádio 2014/53/UE.

O texto completo da declaração de conformidade da UE e das declarações de módulos sem fios da UE para o sistema encontram-se disponíveis no seguinte endereço da Internet:

- <https://www.lenovo.com/eu-doc-notebooks>

- <https://www.lenovo.com/eu-doc-tables>

### **Restrição da banda de frequências na UE para uma LAN sem fios**

A utilização deste dispositivo está limitada à utilização no interior, na banda 5150 a 5350 MHz (canais 36, 40, 44, 48, 52, 56, 60, 64).

## **Informações sobre exposição a RF**

Este dispositivo cumpre os requisitos da UE e as diretrizes da International Commission on Non-Ionizing Radiation Protection (ICNIRP) para exposição do público geral a campos eletromagnéticos. Para estar em conformidade com os requisitos de exposição a RF, consulte o *Manual de Configuração* do produto para ficar a saber a distância mínima de separação para uma operação segura e os valores SAR.

---

## **Romanian**

Prin aceasta, Lenovo (Singapore) Pte. Ltd. declară că echipamentul fără fir prezentat în această secțiune este în conformitate cu Directiva privitoare la echipamentele radio 2014/53/UE.

Textul complet al sistemului de declarații de conformitate și declarațiile privind modulele fără fir UE sunt disponibile la următoarele adrese:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### **Restricția UE privind banda de frecvență a unei rețele LAN fără fir**

Utilizarea acestui dispozitiv este limitată la spațiile interioare, în banda de 5.150 – 5.350 MHz (canalele 36, 40, 44, 48, 52, 56, 60, 64).

## **Informații privind expunerea la frecvențele radio**

Acest dispozitiv îndeplinește cerințele UE și instrucțiunile Comisiei internaționale pentru protecția împotriva radiațiilor neionizante (ICNIRP) referitoare la expunerea persoanelor la câmpuri electromagnetice. Pentru a respecta cerințele privind expunerea la frecvențele radio, consultați *Ghid de configurare* al produsului, pentru distanța minimă de utilizare în siguranță și pentru valorile SAR.

---

## **Slovenian**

Lenovo (Singapore) Pte. Ltd. s tem izjavlja, da je brezžična oprema, navedena v tem razdelku, v skladu z direktivo o radijski opremi 2014/53/EU.

Celotno besedilo izjave EU o skladnosti za sistem in morebitnih deklaracij EU za brezžični modul je na voljo na tem spletnem naslovu:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### **Omejitve Evropske unije glede frekvenčnega pasu za brezžična krajevna omrežja**

Ta naprava je omejena na notranjo uporabo v pasu od 5150 do 5350 MHz (kanali 36, 40, 44, 48, 52, 56, 60, 64).

## **Informacije o izpostavljenosti RF-sevanju**

Ta naprava izpolnjuje zahteve EU in smernice Mednarodne komisije za varstvo pred neionizirnimi sevanji (International Commission on Non-Ionizing Radiation Protection – ICNIRP) za izpostavljenost splošne

javnosti elektromagnetnim poljem. Informacije za izpolnjevanje zahtev glede izpostavljenosti RF-sevanju so v *navodilih za uporabo* za ustrezen izdelek, v katerih so navedene najmanjše ločitvene razdalje za varno uporabo in vrednosti SAR.

---

## Slovakian

Spoločnosť Lenovo (Singapore) Pte. Ltd. týmto vyhlasuje, že bezdrôtové zariadenie uvedené v tejto časti je v súlade so smernicou o rádiových zariadeniach 2014/53/EÚ.

Úplné texty vyhlásenia EÚ o zhode pre systém a vyhlásení EÚ pre bezdrôtové moduly sú dostupné na nasledujúcej internetovej adrese:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### Obmedzenie frekvenčného pásma EÚ pre bezdrôtovú sieť LAN

Používanie tohto zariadenia je obmedzené na interiér vo frekvenčnom pásme 5 150 až 5 350 MHz (kanály 36, 40, 44, 48, 52, 56, 60, 64).

## Informácie o vystavení rádiovým frekvenčným žiarením

Toto zariadenie vyhovuje požiadavkám EÚ a smerniciam Medzinárodnej komisie pre ochranu pred neionizujúcim žiarením (ICNIRP), ktoré upravujú vystavenie širokej verejnosti elektromagnetickým poliám. Na zaistenie súladu s požiadavkami v oblasti vystavenia rádiovým frekvenčným žiarením sa oboznámte s *Príručkou o nastavení*, ktorá obsahuje informácie o minimálnej vzdialenosti vyžadovanej na bezpečné používanie a o hodnotách SAR.

---

## Spanish

Mediante el presente documento, Lenovo (Singapore) Pte. Ltd., declara que el equipo inalámbrico indicado en esta sección cumple con la Directiva de Equipos de Radio 2014/53/UE.

El texto completo del sistema Declaración de conformidad UE y las declaraciones de los módulos inalámbricos de la UE, si corresponde, están disponibles en la siguiente dirección de Internet:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### Restricción de banda de frecuencia de la UE para LAN inalámbrica

La utilización de este dispositivo está limitada a interiores en la banda de 5150 MHz a 5350 MHz (canales 36, 40, 44, 48, 52, 56, 60, 64).

## Información de exposición a RF

Este dispositivo satisface los requisitos de la UE y las directrices de la International Commission on Non-Ionizing Radiation Protection (ICNIRP) sobre la exposición del público general a campos electromagnéticos. Para cumplir los requisitos de exposición a RF, consulte la *Guía de instalación* del producto, donde encontrará la información acerca de la distancia de separación mínima segura y los valores de SAR.

---

## Swedish

Härmed intygar Lenovo (Singapore) Pte. Ltd. att den trådlösa utrustningen i det här avsnittet överensstämmer med direktivet för radioutrustning 2014/53/EU.

Den fullständiga texten i EU-deklarationen om överensstämmelse och EU-deklarationen om trådlösa moduler för systemet finns, om tillämpligt, på följande webbadress:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### **Frekvensområdesbegränsning inom EU för trådlöst nätverk**

Enheten får bara användas inomhus i frekvensområdet 5150–5350 MHz (kanal 36, 40, 44, 48, 52, 56, 60, 64).

## **Information om exponering för radiovågor**

Denna enhet överensstämmer med EU:s krav och ICNIRP:s (International Commission on Non-Ionizing Radiation Protection) riktlinjer avseende allmänhetens exponering för elektromagnetiska fält. För att uppfylla kraven på exponering för radiovågor, se information om minsta avstånd för säker användning samt SAR-värden i *installationshandboken*.

---

## **Turkish**

Lenovo (Singapore) Pte. Ltd., bu bölümde listelenen kablosuz cihazların temel gereksinimler ve Radyo Ekipmanları Yönetmeliği 2014/53/EC ile uyumlu olduğunu beyan eder.

Sisteme ait AB uyumluluk bildirim ve ABD kablosuz modülü bildirimlerinin tam metni şu İnternet adresinde sunulmaktadır:

- <https://www.lenovo.com/eu-doc-notebooks>
- <https://www.lenovo.com/eu-doc-tables>

### **Kablosuz LAN için AB Frekans bandı kısıtlaması**

Bu cihazın kullanımı iç mekanlarda, 5150 - 5350 MHz bant aralığı (36, 40, 44, 48, 52, 56, 60, 64 kanalları) ile sınırlıdır.

## **RF maruz kalma bilgileri**

Bu cihaz, kamunun elektromanyetik alanlara maruz kalmasına ilişkin AB gereksinimlerine ve Uluslararası Non-İyonizan Radyasyondan Korunma Komitesi (International Commission on Non-Ionizing Radiation Protection-ICNIRP) yönergelerine uygundur. RF maruz kalma gereksinimlerine uyum gereği, minimum güvenli çalışma mesafesi ve SAR değerleri için ürününüzün *Kurulum Kılavuzu*'na bakın.



---

## Chapter 3. Regulatory notices for other countries

This chapter provides wireless information about the following countries.

---

### Notice for users in Argentina (Nota para uso en Argentina)



#### **Modelo: Intel 3165NGW**

Equipo: Acceso Inalambrico De Red

CNC: C-14446

#### **Modelo: Intel 7265NGW**

Equipo: Acceso Inalambrico De Red

CNC: C-13275

#### **Modelo: Intel 8265NGW**

Equipo: Transceptor

CNC: C-16376

#### **Modelo: Qualcomm QCNFA344A**

Equipo: Transceptor

CNC: C-14869

#### **Modelo: Qualcomm QCNFA364**

Equipo: Acceso Inalambrico De Red

CNC: C-14866

#### **Modelo: Qualcomm QCNFA435**

Equipo: Transceptor

CNC: C-14476

#### **Modelo: Realtek RTL8821CE**

Equipo: Transceptor

CNC: C-17250

## Modelo: Realtek RTL8822BE

Equipo: Transceptor

CNC: C-16809

## Modelo: Intel 9260NGW

CNC: C-20821

## Modelo: Intel 9560NGW

CNC: C-20824

## Modelo: Intel 9462NGW

CNC: C-20987

---

### Notice for users in Brazil (Aviso para usuarios no Brasil)

**For models:** QCNFA344A, QCNFA435, QCNFA364, 7265NGW, 8265NGW, 3165NGW, RTL8821CE, RTL8822BE, 9260NGW, 9560NGW, 9462NGW

Portuguese	Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário
English	This equipment is a secondary type device, that is, it is not protected against harmful interference, even if the interference is caused by a device of the same type, and it also cannot cause any interference to primary type devices.
Portuguese	Este produto está homologado pela Anatel, de acordo com os procedimentos regulamentados pela Resolução nº 242/2000 e atende aos requisitos técnicos aplicados, incluindo os limites de exposição da Taxa de Absorção Específica referente a campos elétricos, magnéticos e eletromagnéticos de radiofrequência, de acordo com as Resoluções nº 303/2002
English	This product meets the applicable technical requirements, including exposure limits on Specific Absorption Rate related to electric, magnetic and electromagnetic radiofrequency, in accordance with Resolutions No. 303/2002.

### For model: 3165NGW



### For model: 7265NGW



**For model: 8265NGW**



**For model: QCNFA344A**



**For model: QCNFA364**



**For model: QCNFA435**



**For model: RTL8821CE**



**For model: RTL8822BE**



**For model: 9260NGW**



**For model: 9560NGW**



**For model: 9462NGW**



---

**Notice for users in India**

**Modelo: 3165NGW**

NR-EAT/1623

**Modelo: 7265NGW**

ETA-1075/2014

**Modelo: 8265NGW**

NR-ETA-14791

**Modelo: QCNFA344A**

ETA-032/2015-RLO(SR)/2120r

ETA-033/2015-RLO(SR)/2121

**Modelo: QCNFA364**

ETA-034/2015-RLO

ETA-035/2015-RLO

**Modelo: QCNFA435**

ETA-010/2015-RLO

**Modelo: RTL8821CE**

NR-ETA/5229-RLO

NR-ETA/5230-RLO

**Modelo: RTL8822BE**

NR-ETA-/4671

NR-ETA-/4670

**Modelo: 9260NGW**

NR-EAT/6865-RLO

**Modelo: 9560NGW**

NR-EAT/6863-RLO

**Modelo: 9462NGW**

NR-ETA/7902-RLO(NR)

---

**Notice for users in Mexico (Nota para uso en Mexico)**

En Mexico la operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada

**Modelo: 3165NGW**

Adaptador Intel ® Dual Band Wireless –AC 3165

IFT RCPIN3115-0385

**Modelo: 7265NGW**

Adaptador Intel ®7265NGW

IFT RCPIN7214-0488

**Modelo: 8265NGW**

Adaptador Intel ® Dual Band Wireless –AC 8265

IFT RCPIN8216-0896

**Modelo: QCNFA344A**

TARJETA TIPO M.2 2230

802.11a/b/g/n/ac+BT 4.1

IFT RCPQUQC15-0890

**Modelo: QCNFA364**

TARJETA TIPO M.2230 802.11a/b/g/n/ac+BT 4.1

IFT RCPQUQC15-0928

**Modelo: QCNFA435**

802.11a/b/g/n/ac+BT 4.1 M.2

IFT RCPQUQC15-0323

**Modelo: RTL8821CE**

Modulo combo 802.11 a/b/g/n/ac

IFT RCPREERT17-0354

**Modelo: RTL8822BE**

Modulo WI-FI

RCPREERT16-1591

**Modelo: 9260NGW**

Adaptador Intel ® Wireless –AC 9260

IFT RCPIN9217-1585

**Modelo: 9560NGW**

Adaptador Intel ® Wireless –AC 9560

IFT RCPIN9517-1584

**Modelo: 9462NGW**

Adaptador Intel ® Wireless AC 9462

IFT RCPIN9417-2005

---

**Notice for users in Morocco**

**Model: is approved for Morocco by ANRT.**

In addition, the following wireless modules used in this product are all approved for Morocco by ANRT:

QCNFA344A, QCNFA435, QCNFA364, 7265NGW, 8265NGW, 3165NGW, RTL8821CE, RTL8822BE, 9260NGW, 9560NGW, 9462NGW

**Notes:**

- The operation of this product in the radio channel 2 (2417 MHz) is not authorized in the following cities: Agadir, Assa-Zag, Cabo Negro, Chaouen, Goulmima, Oujda, Tan Tan, Taourirt, Taroudant, and Taza.
- The operation of this product in the radio channels 4, 5, 6 and 7 (2425 - 2442 MHz) is not authorized in the following cities: Aéroport Mohamed V, Agadir, Aguelmous, Anza, Benslimane, Béni Hafida, Cabo Negro, Casablanca, Fès, Lakkab, Marrakech, Merchich, Mohammédia, Rabat, Salé, Tanger, Tan Tan, Taounate, Tit Mellil, and Zag.
- Due to the channel restrictions above, the operation of this product using the fat channel mode (40 MHz of channel bandwidth) is not allowed at the 2.4 GHz frequency band.

---

## Notice for users in Nigeria

**For models:** QCNFA344A, QCNFA435, QCNFA364, 7265NGW, 8265NGW, 3165NGW, RTL8821CE, RTL8822BE, 9260NGW, 9560NGW, 9462NGW

Connection and use of this  
communications equipment  
is permitted by the Nigerian  
Communications Commission

# Notice for users in Saudi Arabia

## For model: 3165NGW



هيئة الاتصالات وتقنية المعلومات  
Communications and Information Technology Commission

**شهادة مطابقة**  
**Conformity Certificate**

Certificate No: TA 14022017-12022019-19328 رقم الشهادة :

معلومات مقدم الطلب		
Applicant Information	Intel Mobile Communications SAS	اسم الجهة :
بيانات الشهادة		
Issue Date:	12/02/2017	1438/05/15 تاريخ الاصدار :
Validity Period:	12/02/2019	1440/06/07 تاريخ الانتهاء :
بيانات الجهاز		
Product Name:	Intel Dual Band Wireless-AC 3165	اسم المنتج :
Product Model:	Intel 3165NGW	موديل المنتج :
Manufacturer:	INTEL MOBILE COMMUNICATIONS	المصنع :
معلومات إضافية		
Operating Frequency :	2400-2483.5 MHz:100 mW	الترددات المستخدمة : و طاقة
Maximum Output Power allowed (EIRP) :	5150-5350 MHz:300 mW 5470-5825 MHz:200 mW	الخرج القوي المسموح
Device comply with CITC technical Specification No.:	RI045	الجهاز مطابق لمواصفات الهيئة رقم :
Additional Requirement	الاتصال بغيرواي فاي اسمحتر للشبكات اللاسلكية المحلية ( WLAN / WiFi )	متطلبات إضافية



يمكن التحقق من صحة وصحة هذه الشهادة من خلال زيارة الرابط اثناء في الموقع الإلكتروني لهيئة الاتصالات وتقنية المعلومات  
عن طريق استخدام أو الرمز التالي : <http://ers.citc.gov.sa>



**اعتماد الشهادة**

بناءً على نظام الاتصالات الصادر بالمرسوم الملكي ذي الرقم (12/م) والتاريخ 1422/03/12 هـ، ولائحته التنفيذية، وبحسب تنظيم هيئة الاتصالات وتقنية المعلومات بقرار مجلس الوزراء رقم (74) والتاريخ 1422/03/05 هـ، فقد أصدرت الهيئة هذه الوثيقة بحسب من مطابقة الجهاز المشار إليه أعلاه، وفقاً بأن هذه الوثيقة لا تعتبر بمرافقة على منح الأجهزة المشار إليها أعلاه أو الترخيص من مستخدميها، بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة، كما أن هذه الشهادة قد صدرت عن الهيئة بناءً على المعلومات المتاحة لها والتي فورها الجهة المستوردة والمصنعة وقت صدور هذه الشهادة، ولا يجوز استخدام أو حيزها الأجهزة أو المتاجر بها بصورة تخالف أحكام وأنظمة هيئة الاتصالات وتقنية المعلومات والأنظمة الأخرى ذات العلاقة المعمول بها في المملكة، وتحتل الجهة المستوردة أو المصنعة وحدها المسؤولية عن أية أضرار أو خسائر أو إصابات قد تنشأ عن حيزها أو استخدام هذه الأجهزة أو المتاجر بها، وفي حال كون الأجهزة مصنعة خارج المملكة فإنه يجب التزم إلى الهيئة من قبل المستوردة بطلب سحب الأجهزة قبل اوقات وصولها إلى أحد المنافذ العمركية.

# For model: 7265NGW



شهادة مطابقة  
Conformity Certificate

Certificate No: TA 23032017-23032019-19844 رقم الشهادة :

معلومات مقدم الطلب		
Applicant:	Intel Mobile Communications SAS	اسم الجهة :
بيانات الشهادة		
Issue Date:	23/03/2017 1438/06/24	تاريخ الاصدار :
Validity Period:	23/03/2019 1440/07/16	تاريخ الانتهاء :
بيانات الجهاز		
Product Name:	INTEL WIRELESS 7265	اسم المنتج :
Product Model:	7265NGW	موديل المنتج :
Manufacturer:	INTEL MOBILE COMMUNICATIONS	المصنع :
معلومات إضافية		
Operating Frequency : Maximum Output Power allowed (EIRP) :	2400-2483 MHz:100 mW 5150-5250 MHz:200 mW 5250-5350 MHz:200 mW 5470-5725 MHz:200 mW	الترددات المستخدمة : وطاقة الخرج القصوى المسموحة
Device comply with CITC technical Specification No.:	RI103 , RI045	الجهاز مطبق لمواصفات الهيئة رقم :
Additional Requirement	الالتزام بشروط اعتماد الشبكات اللاسلكية المحلية (WLAN - WiFi)	متطلبات إضافية



يمكن التحقق من صحة وصحة هذه الشهادة من خلال زيارة الرابط اثناء في  
الموقع الإلكتروني لهيئة الاتصالات وتقنية المعلومات  
عن طريق استخدام  
الرمز التالي : <http://ers.citc.gov.sa>



اعتماد الشهادة

بناءً على نظام الاتصالات الصادر بالمرسوم الملكي رقم (12) والتاريخ 1422/03/12هـ، ولائحته التنفيذية، وبموجب تطور هيئة الاتصالات وتقنية المعلومات بتسيير مجلس الوزراء رقم (74) والتاريخ 1422/03/05هـ فقد أصدرت الهيئة هذه الوثيقة بخصوص مطابقة الجهاز المشار اليها اعلاه، على ان هذه الوثيقة لا تعتبر موافقة على جميع الاجهزة المشار اليها اعلاه أو التسجيل باستخدامها بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة، كما ان هذه الشهادة قد صدرت عن الهيئة بناءً على المعلومات المتاحة لها والتي وفرها الجهة المستوردة والمصنعة وقت صدور هذه الشهادة، ولا يجوز استخدام أو تجارة الاجهزة أو المتاجرة بها بصورة تخالف أحكام أنظمة هيئة الاتصالات وتقنية المعلومات و الأنظمة الأخرى ذات العلاقة المعمول بها في المملكة، وتتخلف الجهة المستوردة أو المصنعة وجدها المسؤولية عن أية أضرار أو خسائر أو عيوب قد تنشأ عن تجارة أو استخدام هذه الاجهزة أو المتاجرة بها، وفي حال كون الاجهزة مصنعة خارج المملكة فله يجب التقدم إلى الهيئة من قبل المستورد بطلب فحص الاجهزة قبل ارات ومواصلها إلى أحد المنافذ المزمجة

# For model: 8265NGW

## شهادة مطابقة Conformity Certificate

رقم الشهادة : TA 04082016-04082018-17006 Certificate No:

معلومات مقدم الطلب	
Applicant:	Intel Mobile Communications SAS
اسم الجهة :	
بيانات الشهادة	
Issue Date:	04/08/2016 1437/11/01
تاريخ الاصدار :	
Validity Period:	04/08/2018 1439/11/22
تاريخ الانتهاء :	
بيانات الجهاز	
Product Name:	INTEL 8265NGW
اسم المنتج :	
Product Model:	8265NGW
موديل المنتج :	
Manufacturer:	INTEL MOBILE COMMUNICATIONS
المصنع :	
معلومات إضافية	
Operating Frequency : Maximum Output Power allowed (EIRP) :	2400-2483.5 MHz:19.6 dBm 5150-5250 MHz:22.3 dBm 5470-5725 MHz:22.4 dBm 2400-2483.5 MHz:20.5 dBm 2400-2483.5 MHz:24.9 dBm 5250-5350 MHz:22.2 dBm 5725-5850 MHz:13.98 dBm
الترددات المستخدمة : و طاقة الفرخ القضيء المسموحة	
Device comply with CITC technical Specification No.:	RD45, RI103
الجهاز مطبق لمواصفات الهيئة رقم :	
Additional Requirement	
متطلبات إضافية	



يمكن التحقق من صحة ومطابقة هذه الشهادة من خلال زيارة الرابط اثناء في الموقع الإلكتروني لهيئة الاتصالات وتقنية المعلومات  
عن طريق استخدام أو الرمز التالي :

<http://ers.citc.gov.sa>



### اعتماد الشهادة

بناء على نظام الاتصالات الصادر بالمرسوم الملكي ذي الرقم (12/ر) والتاريخ 1422/03/12 هـ، ولائحة التنفيذية، وبحسب تنظيم هيئة الاتصالات وتقنية المعلومات بقسور مجلس الوزراء رقم (74) والتاريخ 1422/03/05 هـ، فقد صدرت الهيئة هذه الوثيقة بخصوص مطابقة الجهاز المشار إليه اعلاه، علماً بان هذه الوثيقة لا تعني موافقة على فتح الأجهزة المشار إليها اعلاه أو الترخيس باستخدامها، بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة، كما أن هذه الشهادة قد صدرت عن الهيئة بناء على المعلومات المتاحة لها والتي وفرها الجهة المستوردة/المصنعة وقت صدور هذه الشهادة، ولا يجوز استخدام أو حيازة الأجهزة أو المتاجرة بها بصورة تخالف أحكام النظمه هيئة الاتصالات وتقنية المعلومات والأنظمة الأخرى ذات العلاقة المعمول بها في المملكة، وتشتمل الجهة المستوردة أو المصنعة وهذا المستوردة عن أية أضرار أو خسائر أو عيوب قد تنشأ عن حيازة أو استخدام هذه الأجهزة أو المتاجرة بها، وفي حال كثر الأجهزة مضمنة خارج المملكة فله يجب التقدم إلى الهيئة من قبل المستوردة بطلب فحص الأجهزة قبل ايرتق وصونها إلى أحد المنافذ الجمركية

# For model: Qualcomm QCNFA344A



## شهادة مطابقة Conformity Certificate

Certificate No: TA 07122016-14042018-18493 رقم الشهادة :

معلومات مقدم الطلب		Applicant Information	
اسم الجهة :	HUAT SING (S) PTE LTD	Applicant:	HUAT SING (S) PTE LTD
بيانات الشهادة		Certificate Details	
تاريخ الاصدار :	07/09/1437	Issue Date:	14/04/2016
تاريخ الانتهاء :	1439/07/28	Validity Period:	14/04/2018
بيانات الجهاز		Device Details	
اسم المنتج :	802.11a/b/g/n/ac+BT 4.1 M.2 2230 Type Card	Product Name:	802.11a/b/g/n/ac+BT 4.1 M.2 2230 Type Card
موديل المنتج :	QCNFA344A	Product Model:	QCNFA344A
المصنع :	Qualcomm Atheros, Inc.	Manufacturer:	Qualcomm Atheros, Inc.
معلومات اضافية		Additional Details	
الترددات المستخدمة : الفرج القسوى المسموح	2400-2483.5 MHz:19.67 dBm 5150-5250 MHz:22.83 dBm 5250-5350 MHz:22.83 dBm 5470-5725 MHz:22.83 dBm 5725-5825 MHz:22.83 dBm	Operating Frequency : Maximum Output Power allowed (EIRP) :	2400-2483.5 MHz:19.67 dBm 5150-5250 MHz:22.83 dBm 5250-5350 MHz:22.83 dBm 5470-5725 MHz:22.83 dBm 5725-5825 MHz:22.83 dBm
الجهاز مطابق لمواصفات الهيئة رقم :	R1045 , R1103	Device comply with CITC technical Specification No.:	R1045 , R1103
متطلبات اضافية	الالتزام بظوابط استخدام الشبكات اللاسلكية المحلية (WLAN - WiFi)	Additional Requirement	الالتزام بظوابط استخدام الشبكات اللاسلكية المحلية (WLAN - WiFi)

يمكن التحقق من صحة وصلاحيه هذه الشهادة من خلال زيارة الرابط اثناء في الموقع الإلكتروني لهيئة الاتصالات وتقنية المعلومات  
عن طريق استخدام الرمز التالي : <http://ers.citc.gov.sa>



### اعتماد الشهادة

بناء على نظام الاتصالات الصادر بالمرسوم الملكي ذي الرقم 4/12 (والتاريخ 1422/03/12 هـ) ولائحته التنفيذية، وبموجب تنظيم هيئة الاتصالات وتقنية المعلومات بقرار مجلس الوزراء رقم 74 (والتاريخ 1422/03/05 هـ) فقد صدرت لهيئة هذه الهيئة بصفة خاصة من مطابقة الجهاز المشار اليه اعلاه، علماً بأن هذه الهيئة لا تعتبر موافقة على نسخ الاجهزة المشار اليها اعلاه أو الترخيص باستخدامها بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة كما أن هذه الشهادة قد صدرت عن الهيئة بناء على المعلومات المتاحة لها والتي وفرها الجهة المستوردة والمصنعة وقت صدور هذه الشهادة، ولا يجوز استخدام أو حيازة الاجهزة أو المتاجرة بها بصورة تخالف أحكام النظام هيئة الاتصالات وتقنية المعلومات والأنظمة الأخرى ذات العلاقة المعمول بها في المملكة وتشمل الجهة المستوردة أو المصنعة وهذا الصنف من أية أجهزة أو مستلزمات أو امبيات قد نشأت عن حيازة أو استخدام هذه الاجهزة أو المتاجرة بها في حال كون الاجهزة مصنعة خارج المملكة فإنه يجب التزم إلى الهيئة من قبل المستورد بطلب نسخ الاجهزة للاراقط وموسمها إلى أحد المكاتب المركزية

# For model: Qualcomm QCNFA364



## شهادة مطابقة Conformity Certificate

Certificate No:	TA 07122016-14042018-18494	رقم الشهادة :
<b>Applicant Information</b> معلومات مقدم الطلب		
Applicant:	HUAT SING (S) PTE LTD	اسم الجهة :
<b>Certificate Details</b> بيانات الشهادة		
Issue Date:	14/04/2016	تاريخ الإصدار :
		07/07/1437
Validity Period:	14/04/2018	تاريخ الانتهاء :
		1439/07/28
<b>Device Details</b> بيانات الجهاز		
Product Name:	802.11a/b/g/n/ac+BT 4.1 M.2 2230 Type Card	اسم المنتج :
Product Model:	QCNFA364A	موديل المنتج :
Manufacturer:	Qualcomm Atheros, Inc.	المصنع :
<b>Additional Details</b> معلومات إضافية		
Operating Frequency : Maximum Output Power allowed (EIRP) :	2400-2483.5 MHz:19.67 dBm 5150-5250 MHz:22.83 dBm 5250-5350 MHz:22.83 dBm 5470-5725 MHz:22.83 dBm 5725-5825 MHz:22.83 dBm	الترددات المستخدمة : وطاقة الخرج القصوى المسموحة
Device comply with CITC technical Specification No.:	RI103 , RI045	الجهاز مطابق لمواصفات الهيئة رقم :
Additional Requirement	الالتزام بظوابط استخدام الشبكات اللاسلكية المحلية (WLAN - WIFI)	متطلبات إضافية

يمكن التحقق من صحة وصلاحيه هذه الشهادة من خلال زيارة الرابط التالي في  
عن طريق استخدام  
الرمز التالي :  
الموقع الإلكتروني لجهة الاتصالات وتقنية المعلومات  
<http://ers.citc.gov.sa>



### اعتماد الشهادة

بناء على نظام الاتصالات الصادر بالمرسوم الملكي رقم (م/12) في التاريخ 1422/03/12 هـ واللائحة التنفيذية وبموجب تنظيم هيئة الاتصالات وتقنية المعلومات بقرار  
مجلس الوزراء رقم (74) في التاريخ 1422/03/05 هـ فقد صدرت الهيئة هذه الرخصة بخصوص مطابقة الجهاز المشار اليه أعلاه وفقاً لما في هذه الرخصة ولا تعتبر موافقة على طرح  
الأجهزة المشار اليها أعلاه أو الترخيص باستخدامها بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة كما أن هذه الشهادة قد صدرت عن الهيئة بناء على المعلومات  
المتاحة لها والتي وفرها الجهة المستوردة للمستوردة وقت صدور هذه الشهادة ولا يجوز استخدام أو جزارة الأجهزة أو المتاجرة بها بصورة تعاقب أحكام أنظمة هيئة الاتصالات  
وتقنية المعلومات والأنظمة الأخرى ذات العلاقة المعمول بها في المملكة، وتتضمن الجهة المستوردة أو المصنعة وحدها المسؤولية عن أية أضرار أو خسائر أو أضرار قد تنشأ عن  
جزارة أو استخدام هذه الأجهزة أو المتاجرة بها، وفي حال كون الأجهزة مصنعة خارج المملكة فبجيب التعم إلى الهيئة من قبل المستوردة بطلب فتح الأجهزة قبل وقت وصولها  
إلى أحد المنافذ الجمركية.

# For model: Qualcomm QCNFA435



## شهادة مطابقة Conformity Certificate

Certificate No: TA 07122016-28012018-18495 رقم الشهادة :

Applicant Information		معلومات مقدم الطلب
Applicant:	HUAT SING (S) PTE LTD	اسم الجهة :
Certificate Details		بيانات الشهادة
Issue Date:	28/01/2016	18/04/1437 تاريخ الاصدار :
Validity Period:	28/01/2018	1439/05/11 تاريخ الانتهاء :
Device Details		بيانات الجهاز
Product Name:	Single Stream 802.11a/b/g/n/ac+BT 4.1 M.2	اسم المنتج :
Product Model:	QCNFA435	موديل المنتج :
Manufacturer:	Qualcomm Atheros, Inc.	المصنع :
Additional Details		معلومات اضافية
Operating Frequency : Maximum Output Power allowed (EIRP) :	2400-2483.5 MHz:19.85 dBm 5150-5350 MHz:22.21 dBm 2402-2480 MHz:8.34 dBm 5350-5825 MHz:22.21 dBm	الترددات المستخدمة : الفرق القصوى المسموحة
Device comply with CITC technical Specification No.:	RI045 , RI103 , IT005	الجهاز مطابق لمواصفات الهيئة رقم :
Additional Requirement	الالتزام بظوابط استخدام الشبكات اللاسلكية المحلية (WLAN - WIFI)	متطلبات اضافية



يمكن التحقق من صحة وصلاحيه هذه الشهادة من خلال زيارة الرابط اثناء في  
عن طريق استخدام  
الرابط الإلكتروني لهيئة الاتصالات وتقنية المعلومات  
في  
الوقت التالي :  
<http://ers.citc.gov.sa>



### اعتماد الشهادة

بناء على نظام الاتصالات الصادر بالمرسوم الملكي رقم (12) / (التاريخ 1422/03/12 هـ) ولائحته التنفيذية، وبموجب تنظيم هيئة الاتصالات وتقنية المعلومات بقصر  
مجلس الوزراء رقم 74) (التاريخ 1422/03/05 هـ) فقد أصدرت الهيئة هذه الوثيقة بخصوص مطابقة الجهاز المشار اليه اعلاه وفقاً لاین هذه الوثيقة لا تعتبر موافقة على بيع  
الأجهزة المشار اليها اعلاه أو الترخيس باستخدامها بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة كما أن هذه الشهادة قد صدرت عن الهيئة بناء على المعلومات  
المتاحة لها والتي وفرتها الجهة المستوردة. المستعمدة وقت صدور هذه الشهادة ولا يجوز استخدام أو حيازة الأجهزة أو المتاجرة بها بصورة تعاقب أحكام ونظم هيئة الاتصالات  
وتقنية المعلومات أو الأنظمة الأخرى ذات العلاقة المعمول بها في المملكة، وتتحمل الجهة المستوردة أو المصنعة وحدها المسؤولية عن أية أضرار أو خسائر أو إصابات قد تنشا عن  
حيازة أو استخدام هذه الأجهزة أو المتاجرة بها، وفي حال كون الأجهزة مصممة خارج المملكة فإنه يجب التظلم إلى الهيئة من قبل المستوردة بطلب مسح الأجهزة قبل وقت وصولها  
إلى أحد المنافذ الجمركية.

# For model: RTL8821CE

## شهادة مطابقة Conformity Certificate

رقم الشهادة : TA 22012017-22012019-18919 Certificate No:

معلومات مقدم الطلب	
Applicant Information	اسم الجهة : Aman for Modern Technologies
بيانات الشهادة	
Issue Date:	تاريخ الاصدار : 22/01/2017 1438/04/24
Validity Period:	تاريخ الانتهاء : 22/01/2019 1440/05/16
بيانات الجهاز	
Product Name:	اسم المنتج : RTL8821CE
Product Model:	موديل المنتج : RTL8821CE
Manufacturer:	المصنع : Realtek Semiconductor Corp.
معلومات اضافية	
Operating Frequency : Maximum Output Power allowed (EIRP) :	الترددات المستخدمة : وطاقة الخرج القصوى المسموحة 2400-2483.5 MHz:19.99 dBm 5150-5725 MHz:22.73 dBm
Device comply with CITC technical Specification No.:	الجهاز مطابق لمواصفات الهيئة رقم : R1045 , R1103 , GEN001
Additional Requirement	متطلبات اضافية (WLAN / WiFi) الأثر أو بخصائص استخدام الشبكات اللاسلكية العنق (WLAN / WiFi)

يمكن التحقق من صحة وصلاحيه هذه الشهادة من خلال زيارة اليراع اناهه في  
المواقع الإلكترونية لهيئة الاتصالات وتقنية المعلومات  
عن طريق استخدام  
أو الرمز التالي :  
<http://ers.citc.gov.sa>



### اعتماد الشهادة

بناء على نظام الاتصالات الصادر بالمرسوم الملكي ذي الرقم (12) والتاريخ 1422/03/12 هـ، ولاتاحة التنفيذية، وبموجب تنظيم هيئة الاتصالات وتقنية المعلومات بمسورار  
مجلس الوزراء رقم (74) والتاريخ 1422/03/05 هـ، فقد اصدرت الهيئة هذه الوثيقة بخصوص مطابقة الجهاز المشار اليه اعلان، علماً بان هذه الوثيقة لا تعتبر موافقة على فحص  
الأجهزة المشار اليها اعلان أو الترخيص باستخدامها، بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة، كما أن هذه الشهادة قد صدرت عن الهيئة بناء على المعلومات  
المقدمة لها والتي وثقتها الهيئة المستوردة والمصنعة وقت صدور هذه الشهادة، ولا يجوز استخدام أو حيازة الأجهزة أو حيازة الأجزاء أو المتاجرة بها بصورة تخالف أحكام أنظمة هيئة الاتصالات  
وتقنية المعلومات، والأنظمة الأخرى ذات العلاقة المعمول بها في المملكة، وتحتل الهيئة المستوردة أو المصنعة وحدها المسؤولية عن أية أضرار أو خسائر أو تعويضات قد نشأت عن  
حيازة أو استخدام هذه الأجهزة أو المتاجرة بها، وفي حال كون الأجهزة مصنعة خارج المملكة فإنه يجب التقدم إلى الهيئة من قبل المستوردة بطلب فحص الأجهزة قبل اوقت وصولها  
إلى أحد المنافذ الممرجة

# For model: RTL8822BE

## شهادة مطابقة Conformity Certificate

Certificate No: TA 11102016-11102018-17824 رقم الشهادة :

معلومات مقدم الطلب		
Applicant Information	SGS Taiwan Ltd.	
Applicant:	اسم الجهة :	
بيانات الشهادة		
Issue Date:	11/10/2016	1438/01/10 تاريخ الاصدار :
Validity Period:	11/10/2018	1440/02/02 تاريخ الانتهاء :
بيانات الجهاز		
Product Name:	802.11 a/b/g/n/ac RTL8822BE Combo module	اسم المنتج :
Product Model:	RTL8822BE	موديل المنتج :
Manufacturer:	Realtek Semiconductor Corp.	المصنع :
معلومات اضافية		
Operating Frequency : Maximum Output Power allowed (EIRP) :	2400-2483.5 MHz:19.98 dBm 5150-5250 MHz:22.93 dBm 5250-5350 MHz:22.97 dBm 5470-5725 MHz:22.97 dBm 5725-5825 MHz:29.11 dBm	الترددات المستخدمة : واطقة الخرج القصوى المسموحة
Device comply with CITC technical Specification No.:	R1045 , R1103	الجهاز مطابق لمواصفات الهيئة رقم :
Additional Requirement	الالتزام بمتطلبات استخدام الشبكات اللاسلكية المحلية (WLAN - WiFi)	
متطلبات اضافية		



يمكن التحقق من صحة وصلاحيه هذه الشهادة من خلال زيارة الرابط التالي في  
الموقع الإلكتروني لهيئة الاتصالات وتقنية المعلومات

<http://ers.citc.gov.sa>



### اعتماد الشهادة

بناءً على نظام الاتصالات الصادر بالمرسوم الملكي ذي الرقم (12/م) والتاريخ 1422/03/12 هـ، واتخذه التنفيذية وبموجب تنظيم هيئة الاتصالات وتقنية المعلومات بمسور  
مجلس الوزراء رقم (74) والتاريخ 1422/03/05 هـ، فقد اصدرت الهيئة هذه الوثيقة بخصوص مطابقة الجهاز المشار اليه اعلاه، علماً بان هذه الوثيقة لا تعتبر موافقة على طرح  
الأجهزة المشار اليها اعلاه أو الترخيص باستخدامها، بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة، كما أن هذه الشهادة قد صدرت عن الهيئة بناءً على المعلومات  
التامة لها والتي وفرتها الجهة المستوردة للمنتج، ولا يجوز استخدام أو حيازة الأجهزة أو المتاعمة بها بصورة تعكف أحكام السلطة المختصة هيئة الاتصالات  
وتقنية المعلومات، والأنظمة الأخرى ذات العلاقة المعمول بها في المملكة، وتتخذ الجهة المستوردة أو المصنعة وحدها المسؤولية عن أية أضرار أو خسائر أو أضرار قد نشأت عن  
حيازة أو استخدام هذه الأجهزة أو المتاعمة بها، وفي حال كون الأجهزة مصنعة خارج المملكة فله يجب التقدم إلى الهيئة من قبل المستورد بطلب فحص الأجهزة قبل اولاقت وصولها  
إلى أحد المنافذ الجمركية.



شهادة مطابقة  
Conformity Certificate

Certificate No: 07082017-07082019-20916 رقم الشهادة :

معلومات مقدم الطلب		
Applicant:	Intel Mobile Communications SAS	اسم الجهة :
بيانات الشهادة		
Issue Date:	07/08/2017	1438/11/15 تاريخ الاصدار :
Validity Period:	07/08/2019	1440/12/06 تاريخ الانتهاء :
بيانات الجهاز		
Product Name:	9260NGW	اسم المنتج :
Product Model:	9260NGW	موديل المنتج :
Manufacturer:	INTEL MOBILE COMMUNICATIONS	المصنع :
معلومات اضافية		
Operating Frequency : Maximum Output Power allowed (EIRP) :	2400-2483.5 MHz:19.9 dBm 5150-5250 MHz:22.8 dBm 5250-5350 MHz:22.8 dBm 5470-5725 MHz:22.7 dBm 5725-5850 MHz:13.76 dBm 2400-2483.5 MHz:12.9 dBm 2400-5825 MHz:9.8 dBm	الترددات المستخدمة : وطاقة الخرج القصوى المسموحة
Device comply with CITC technical Specification No.:	RI045 , RI103	الجهاز مطابق لمواصفات الهيئة رقم :
Additional Requirement	(WLAN / WiFi)	متطلبات اضافية



يمكن التحقق من صحة وصلاحيه هذه الشهادة من خلال زيارة الرابط ادناه في  
الموقع الإلكتروني لهيئة الاتصالات وتقنية المعلومات  
عن طريق استخدام  
الرمز التالي :

<http://ers.citc.gov.sa>



اعتماد الشهادة

بناءً على نظام الاتصالات الصادر بالمرسوم الملكي ذي الرقم (12/م) والتاريخ 1422/03/12هـ ولائحته التنفيذية، وبموجب تنظيم هيئة الاتصالات وتقنية المعلومات بقسراً مجلس الوزراء رقم (74) والتاريخ 1422/03/05هـ، فقد أصدرت الهيئة هذه الوثيقة بخصوص مطابقة الجهاز المشار إليه أعلاه، علماً بأن هذه الوثيقة لا تعتبر موافقة على فسخ الأجهزة المشار إليها أعلاه أو الترخيس من استخدامها، بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة. كما أن هذه الشهادة قد صدرت عن الهيئة بناءً على المعلومات المتأخذة لها والتي وفرتها الجهة المستوردة أو المصنعة وقت صدور هذه الشهادة، ولا يجوز استخدام أو حيازة الأجهزة أو المتاجرة بها بصورة تخالف أحكام وأنظمة هيئة الاتصالات وتقنية المعلومات والأنظمة الأخرى ذات العلاقة المعمول بها في المملكة، وتحمل الجهة المستوردة أو المصنعة وحدها المسؤولية عن أية أضرار أو خسائر أو إصابات قد تنشأ عن حيازة أو استخدام هذه الأجهزة أو المتاجرة بها. وفي حال كون الأجهزة مصنعة خارج المملكة فإنه يجب التقدم إلى الهيئة من قبل المستورد بطلب فسخ الأجهزة قبل وقت وصولها إلى أحد المنافذ الجمركية.



شهادة مطابقة  
Conformity Certificate

Certificate No: TA 16082017-16082019-20980 رقم الشهادة :

Applicant Information		معلومات مقدم الطلب
Applicant:	Intel Mobile Communications SAS	اسم الجهة :
Certificate Details		بيانات الشهادة
Issue Date:	16/08/2017	1438/11/24 تاريخ الاصدار :
Validity Period:	16/08/2019	1440/12/15 تاريخ الانتهاء :
Device Details		بيانات الجهاز
Product Name:	9560NGW	اسم المنتج :
Product Model:	9560NGW	موديل المنتج :
Manufacturer:	INTEL MOBILE COMMUNICATIONS	المصنع :
Additional Details		معلومات اضافية
Operating Frequency : Maximum Output Power allowed (EIRP) :	2400-2483.5 MHz:9.8 dBm 2400-2483.5 MHz:13.5 dBm 2400-2483.5 MHz:19.7 dBm 5150-5250 MHz:22.5 dBm 5250-5350 MHz:22.5 dBm 5470-5725 MHz:20.7 dBm 5725-5825 MHz:13.65 dBm	الترددات المستخدمة : وطاقة الخرج القصوى المسموحة
Device comply with CITC technical Specification No.:	RI103	الجهاز مطابق لمواصفات الهيئة رقم :
Additional Requirement		متطلبات اضافية



يمكن التحقق من صحة وصلاحيه هذه الشهادة من خلال زيارة الرابط اثناء في  
الموقع الإلكتروني لهيئة الاتصالات وتقنية المعلومات  
عن طريق استخدام  
أو الرمز التالي :

<http://ers.citc.gov.sa>



اعتماد الشهادة

بناءً على نظام الاتصالات الصادر بالمرسوم الملكي ذي الرقم (12/أ) والتاريخ 1422/03/12هـ ولانحته التنفيذية، وبموجب تنظيم هيئة الاتصالات وتقنية المعلومات بقسرات مجلس الوزراء رقم (74) والتاريخ 1422/03/05هـ، فقد أصدرت الهيئة هذه الوثيقة بخصوص مطابقة الجهاز المشار إليه اعلام، علماً بأن هذه الوثيقة لا تعتبر موافقة على فتح الأجهزة المشار إليها اعلام أو الترخيص باستخدامها، بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة. كما أن هذه الشهادة قد صدرت عن الهيئة بناءً على المعلومات المتاحة لها والتي وفرتها الجهة المستوردة أو المصنعة وقت صدور هذه الشهادة، ولا يجوز استخدام أو حيازة الأجهزة أو المتاجرة بها بصورة تخالف أحكام وأنظمة هيئة الاتصالات وتقنية المعلومات والأنظمة الأخرى ذات العلاقة المعمول بها في المملكة، وتحمل الجهة المستوردة أو المصنعة وحدها المسؤولية عن أية أضرار أو خسائر أو إصابات قد تنشأ عن حيازة أو استخدام هذه الأجهزة أو المتاجرة بها، وفي حال كون الأجهزة مصنعة خارج المملكة فإنه يجب التقدم إلى الهيئة من قبل المستورد بطلب تصحح الأجهزة قبل وقت وصولها إلى أحد المنافذ الجمركية.



شهادة مطابقة  
Conformity Certificate

Certificate No: TA 14122017-14122019-21795 رقم الشهادة :

Applicant Information		معلومات مقدم الطلب
Applicant:	Intel Mobile Communications SAS	اسم الجهة :
Certificate Details		بيانات الشهادة
Issue Date:	14/12/2017	1439/03/26 تاريخ الاصدار :
Validity Period:	14/12/2019	1441/04/17 تاريخ الانتهاء :
Device Details		بيانات الجهاز
Product Name:	Intel Wireless-AC 9462	اسم المنتج :
Product Model:	9462NGW	موديل المنتج :
Manufacturer:	INTEL MOBILE COMMUNICATIONS	المصنع :
Additional Details		معلومات اضافية
Operating Frequency : Maximum Output Power allowed (EIRP) :	2400-2483.5 MHz:10 dBm 2400-2483.5 MHz:13.3 dBm 2400-2483.5 MHz:19.8 dBm 5150-5250 MHz:22.8 dBm 5250-5350 MHz:22.8 dBm 5470-5725 MHz:22.8 dBm 5725-5825 MHz:13.91 dBm	الترددات المستخدمة : وطاقة الخرج القصوى المسموحة
Device comply with CITC technical Specification No.:	RI045 , RI103	الجهاز مطابق لمواصفات الهيئة رقم :
Additional Requirement		متطلبات اضافية



يمكن التحقق من صحة وصلاحيه هذه الشهادة من خلال زيارة الرابط اثناء في الموقع الإلكتروني لهيئة الاتصالات وتقنية المعلومات عن طريق استخدام الرمز التالي : أو

<http://ers.citc.gov.sa>



اعتماد الشهادة

بناءً على نظام الاتصالات الصادر بالمرسوم الملكي ذي الرقم (12/م) والتاريخ 1422/03/12هـ ولاتحته التنفيذية، وبموجب تنظيم هيئة الاتصالات وتقنية المعلومات بقسرات مجلس الوزراء رقم (74) والتاريخ 1422/03/05هـ، فقد أصدرت الهيئة هذه الوثيقة بخصوص مطابقة الجهاز المشار إليه اعلام، علماً بأن هذه الوثيقة لا تعتبر موافقة على فسح الأجهزة المشار إليها اعلاه أو الترخيص باستخدامها، بل هي شهادة مطابقة للمواصفات الفنية المعمول بها بالهيئة، كما أن هذه الشهادة قد صدرت عن الهيئة بناءً على المعلومات المتاحة لها والتي وفرتها الجهة المستوردة أو المصنعة وقت صدور هذه الشهادة، ولا يجوز استخدام أو حيازة الأجهزة أو المتاجرة بها بصورة تخالف أحكام وأنظمة هيئة الاتصالات وتقنية المعلومات والأنظمة الأخرى ذات العلاقة المعمول بها في المملكة، وتتحمل الجهة المستوردة أو المصنعة وحدها المسؤولية عن أية أضرار أو خسائر أو إصابات قد تنشأ عن حيازة أو استخدام هذه الأجهزة أو المتاجرة بها، وفي حال كون الأجهزة مصنعة خارج المملكة فإنه يجب التقدم إلى الهيئة من قبل المستورد بطلب لفسح الأجهزة قبل وقت وصولها إلى أحد المنافذ الجمركية

---

## Notice for users in Serbia

The following models have been approved by Ratel: QCNFA344A, QCNFA435, QCNFA364, 7265NGW, 8265NGW, 3165NGW, RTL8821CE, RTL8822BE, 9260NGW, 9560NGW, 9462NGW.

---

## Notice for users in South Africa

### For model: 3165NGW



### For model: 7265NGW



### For model: 8265NGW



### For model: QCNFA344A



### For model: QCNFA364



### For model: QCNFA435



## For model: RTL8821CE



## For model: RTL8822BE



## For model: 9260NGW



## For model: 9560NGW



## For model: 9462NGW



---

## Notice for users in Taiwan

**For models:** QCNFA344A, QCNFA435, QCNFA364, 7265NGW, 8265NGW, 3165NGW, RTL8821CE, RTL8822BE, 9260NGW, 9560NGW, 9462NGW

### 根據NCC低功率電波輻射性電機管理辦法規定

#### 第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或者使用者均不得擅自變更頻率、加大功率或變更原始設計之特性及功能。

#### 第十四條

低功率射頻電機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，願立即停用，并改善無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電設備之干擾。

在5.25–5.35赫茲頻帶內操作之無限通訊傳輸設備，限於室內使用。

---

## Notice for users in the UAE

### For model: 3165NGW

TRA REGISTERED NO. ER37771/15 DEALER NO. 0018841/09
---

### For model: 7265NGW

TRA REGISTERED NO. ER0128120/14 DEALER NO. 0018841/09
---

### For model: 8265NGW

TRA REGISTERED NO. ER46868/16 DEALER NO. 0018841/09
---

### For model: QCNFA344A

TRA REGISTERED NO. ER38777/15 DEALER NO. DA0039119/10
---

### For model: QCNFA364

TRA REGISTERED NO. ER38759/15 DEALER NO. 0014005/08
---

### For model: QCNFA435

TRA REGISTERED NO. ER37623/15 DEALER NO. 0014005/08
---

**For model: RTL8821CE**

TRA  
REGISTERED NO.  
ER50849/16  
DEALER NO.  
0033451/10

**For model: RTL8822BE**

TRA  
REGISTERED NO.  
ER48726/16  
DEALER NO.  
0033451/10

**For model: 9260NGW**

TRA  
REGISTERED NO.  
ER57060/17  
DEALER NO.  
0018841/09

**For model: 9560NGW**

TRA  
REGISTERED NO.  
ER57050/17  
DEALER NO.  
0018841/09

**For model: 9462NGW**

TRA  
REGISTERED NO.  
ER60467/18  
DEALER NO.  
0018841/09

---

## **Trademarks**

LENOVO and the LENOVO logo are trademarks of Lenovo.

All other trademarks are the property of their respective owners. © 2018 Lenovo





