

# User Guide

Lenovo  
**ThinkCentre**



ThinkCentre neo 55a 24 Gen 6

## About this documentation

This documentation applies to the Lenovo product models listed below. Illustrations in this documentation may look slightly different from your product model.

Model name	Machine types (MT)
ThinkCentre neo 55a 24 Gen 6	13F7, 13F8, 13F9, 13FA

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

- *Safety and Warranty Guide*
- *Generic Safety and Compliance Notices*
  - For computers purchased in mainland China: [https://iknow.lenovo.com.cn/detail/dc\\_191404.html](https://iknow.lenovo.com.cn/detail/dc_191404.html)
  - For computers purchased outside mainland China: [https://pcsupport.lenovo.com/docs/generic\\_notices](https://pcsupport.lenovo.com/docs/generic_notices)
- *Setup Guide (if provided with your computer)*

### Notes:

- For more compliance information on computers purchased outside mainland China, see *Regulatory Notice* at [https://support.lenovo.com/docs/common\\_commercial\\_rn](https://support.lenovo.com/docs/common_commercial_rn) or go to <https://www.lenovo.com/compliance>.
- Depending on the model, some optional accessories, features, and software programs might not be available on your computer.
- Depending on the version of the operating systems and programs, some user interface instructions might not be applicable to your computer.
- Documentation content is subject to change without notice. Lenovo makes constant improvements to the documentation of your computer, including this *User Guide*. To get the latest documentation, go to:
  - For computers purchased in mainland China: <https://newsupport.lenovo.com.cn>
  - For computers purchased outside mainland China: <https://pcsupport.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 As a result, some information in this documentation might become outdated.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.

### First Edition (May 2025)

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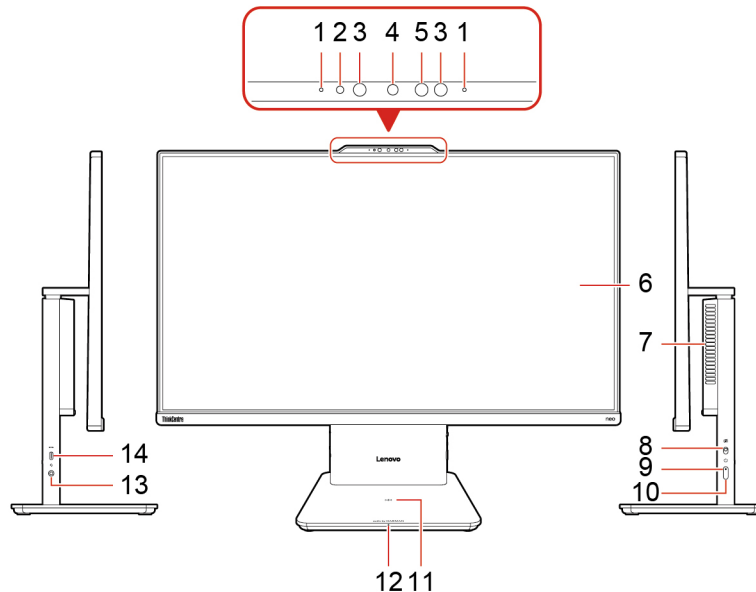
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# Chapter 1. Meet your computer

## Overview



Item	Description	Item	Description
1	Microphones	2	Integrated camera activity indicator
3	Infrared LED*	4	Integrated camera
5	Infrared camera*	6	Screen (touch-enabled for selected models)
7	Air vent	8	Camera switch
9	Power indicator	10	Power button
11	Wireless charging pad*	12	Wireless charging indicator*
13	Combo audio jack	14	USB-C® connector (USB 10Gbps)

\* for selected models

**Note:** For more information about the USB connector name update, see Appendix A “Supplementary information” on page 29.

### Power indicator

Show the system status of your computer.

- **On:** The computer is on.
- **Off:** The computer is off or in hibernation mode.
- **Blinking slowly:** The computer is in sleep mode.

### Wireless charging pad

Place the phone horizontally on the center of the wireless charging pad to activate wireless charging.

## Statement on USB transfer rate

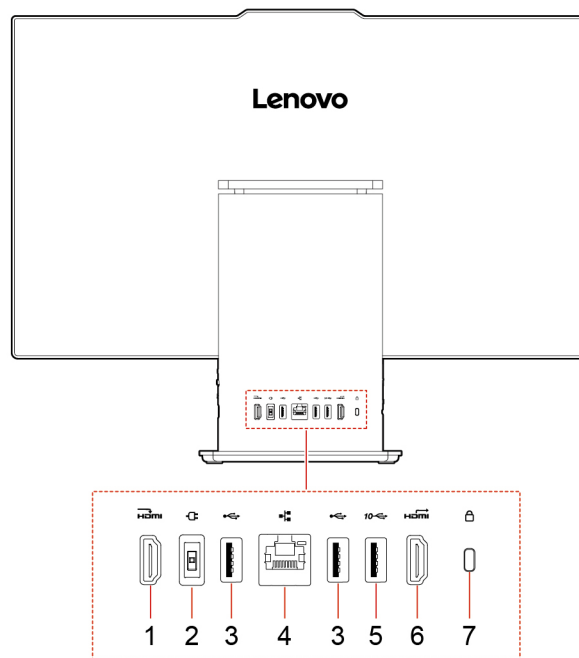
Depending on many factors such as the processing capability of the host and peripheral devices, file attributes, and other factors related to system configuration and operating environments, the actual transfer rate using the various USB connectors on this device will vary and will be slower than the data rate listed in the connector name or below for each corresponding device.

USB device	Data rate (Gbit/s)
Thunderbolt 3	40
Thunderbolt 4	40

## Related topics

- “Use the touch screen (for selected models)” on page 14
- “USB specifications” on page 4

## Rear



Item	Description	Item	Description
1	HDMI™ in connector	2	Power connector
3	USB-A connectors (Hi-Speed USB)	4	Ethernet connector (1G)
5	USB-A connector (USB 10Gbps)	6	HDMI 2.1 TMDS out connector
7	Security-lock slot		

## Related topics

- “USB specifications” on page 4

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## Specifications

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Specification	Description
<b>Dimensions</b>	<ul style="list-style-type: none"><li>• Width: 539.5 mm (21.2 inches)</li><li>• Height: 431.2 mm (17.0 inches)</li><li>• Depth: 192.1 mm (7.6 inches)</li></ul>
<b>Weight (without packaging)</b>	Maximum configuration as shipped: 6 kg (13.2 lb)
<b>Hardware configuration</b>	Type Device Manager in the Windows search box and then press Enter. Type the administrator password or provide confirmation, if prompted.
<b>Power supply</b>	<ul style="list-style-type: none"><li>• 90-watt automatic voltage-sensing power supply*</li><li>• 135-watt automatic voltage-sensing power supply*</li></ul>
<b>Electrical input</b>	<ul style="list-style-type: none"><li>• Input voltage: From 100 V ac to 240 V ac</li><li>• Input frequency: 50/60 Hz</li></ul>
<b>Memory</b>	Double data rate 5 (DDR5) small outline dual in-line memory module (SODIMM)
<b>Storage device</b>	<ul style="list-style-type: none"><li>• M.2 solid-state drive (SSD)</li></ul> <p>To view the storage drive capacity of your computer, type Disk Management in the Windows search box and then press Enter.</p> <p><b>Note:</b> The storage drive capacity indicated by the system is less than the nominal capacity.</p>
<b>Video features</b>	Maximum resolution: <ul style="list-style-type: none"><li>• HDMI out connector: 4096 × 2160 pixels, 60 Hz</li><li>• HDMI in connector: 1920 × 1080 pixels, 100 Hz</li></ul>
<b>Expansion</b>	M.2 slot × 3 (1 for Wireless LAN card, 2 for SSD)
<b>Network features</b>	<ul style="list-style-type: none"><li>• Bluetooth*</li><li>• Ethernet LAN</li><li>• Wireless LAN*</li></ul>

\* for selected models

### Operating environment

#### Maximum altitude (without pressurization)

- Operating: From 0 m (0 ft) to 3048 m (10 000 ft)
- Storage: From 0 m (0 ft) to 12192 m (40 000 ft)

#### Temperature

- Operating: From 5°C (41°F) to 35°C (95°F)
- Storage:
  - For common desktop computers: From -40°C (-40°F) to 60°C (140°F)
  - For all-in-one desktop computers: From -20°C (-4°F) to 60°C (140°F)

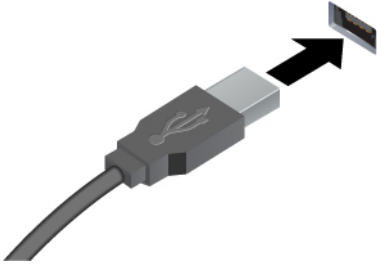


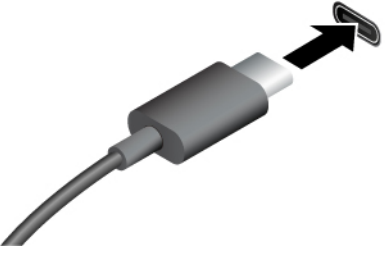

## Relative humidity

- Operating: 20%-80% (non-condensing)
- Storage: 10%-90% (non-condensing)

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## USB specifications

**Note:** Depending on the model, some USB connectors might not be available on your computer.

Connector name	Description
 <ul style="list-style-type: none"><li>•  USB-A connector (Hi-Speed USB)</li><li>•  USB-A connector (USB 10Gbps)</li></ul>	<p>Connect USB-A compatible devices, such as a USB-A keyboard, USB-A mouse, USB-A storage device, or USB-A printer.</p> <ul style="list-style-type: none"><li>• Charge USB-C compatible devices with the output voltage and current of 5 V and 3 A.</li><li>• 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>.</li></ul>
 <ul style="list-style-type: none"><li>•  USB-C connector (USB 10Gbps)</li></ul>	

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## The Vantage app

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

To access the Vantage app, type **Vantage** in the Windows search box.

### Notes:

- The available features vary depending on the computer model.
- The Vantage app makes periodic updates of the features to keep improving your experience with your computer. The description of features might be different from that on your actual user interface. You can download the latest version of Vantage app from Microsoft Store.

The Vantage app enables you to:

- Know the device status easily and customize device settings.
- Download and install UEFI BIOS, firmware, and driver to keep your computer up-to-date.



- Monitor your computer health, and secure your computer against outside threats.
- Scan your computer hardware and diagnose hardware problems.
- Look up warranty status (online).
- Access *User Guide* and helpful articles.

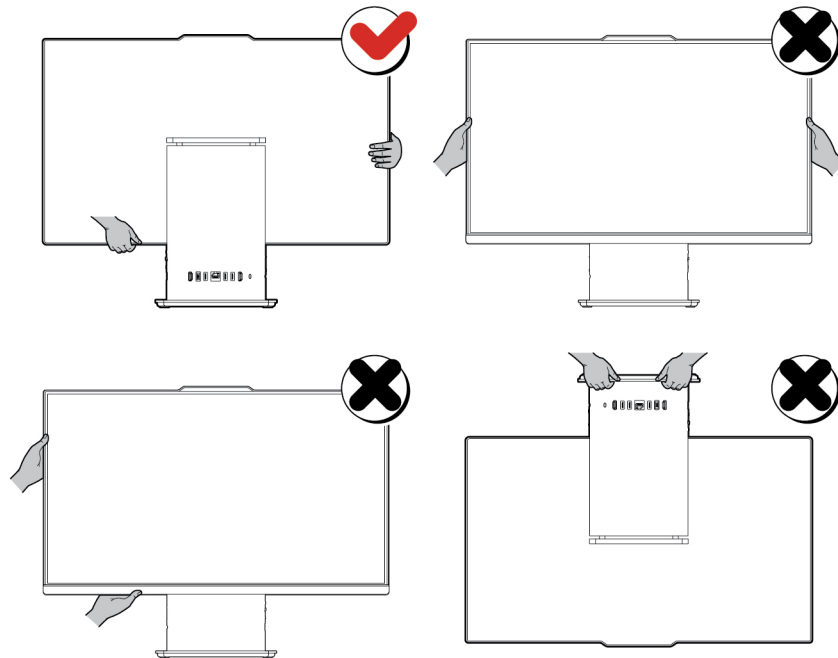


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## Chapter 2. Get started with your computer

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### Carry the computer

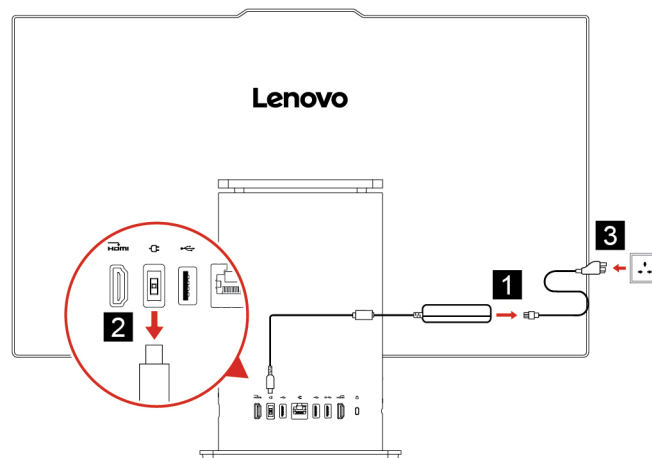


#### Notes:

- Hold the computer firmly while carrying it.
- Keep the computer upright.

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### Start up the computer



Step 1. Connect the power cord and the ac power adapter.

Step 2. Connect the power cord to the power connector on the back of the computer.

- Step 3. Insert the power plug into a properly grounded electrical outlet.
- Step 4. Press the power button on the computer's lower right to start up the computer.




**Notes:**

- If your computer has a wireless keyboard and mouse, connect them following the relevant instructions.
- You must use the power adapter provided by Lenovo. The use of another power adapter may cause combustion or explosion.

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## Shut down the computer

To prevent damage to hardware/software systems or loss of data, do not arbitrarily use the power button to shut down the computer. Instead, shut down the computer as follows.

Step 1. Click  →  →  **Shut down.**

Step 2. Wait for the computer to shut down and then turn off the monitor and other peripheral devices.


**Note:** After you turn off the system, please wait at least 20 seconds before turning the computer back on to avoid hardware faults.

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## Access networks

This section helps you connect to a wireless or wired network.

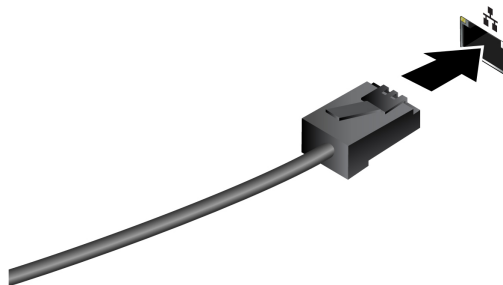
### Connect to Wi-Fi networks (for selected models)

Click the network icon  on the bottom right of your display to connect to an available network. Provide required information, if needed.

**Note:** The wireless LAN module on your computer may support different standards. For some countries or regions, use of 802.11ax may be disabled according to local regulations.

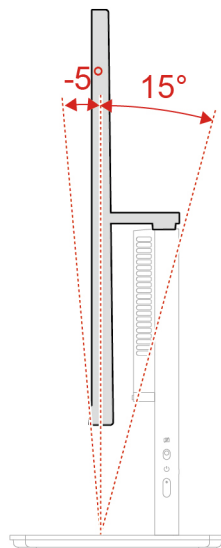
### Connect to the wired Ethernet

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



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## Adjust the computer stand



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## 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 and change display settings of your preference.

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## Connect to a Bluetooth device (for selected models)

You can connect all types of Bluetooth-enabled devices to your computer, such as a keyboard, a mouse, a smartphone, or speakers. To ensure successful connection, place the devices at most 10 meters (33 feet) from the computer.

### Conventional pair

This topic helps you connect to a Bluetooth device by conventional pair.

- Step 1. Type **Bluetooth** in the Windows search box and then press Enter.
- Step 2. Turn on both the Bluetooth on your computer and the Bluetooth device. Make sure the device is discoverable.
- Step 3. Select the device when it is displayed on the **Add a device** list, and then follow the on-screen instructions.

**Notes:** If the Bluetooth connection failed, do the following:

1. Type **Device Manager** in the Windows search box and then press Enter.
2. Locate the Bluetooth adapter. Right-click and select **Update driver**.
3. Select **Search automatically for drivers**, and then follow the on-screen instructions.

### Swift pair

This topic helps you connect to a Bluetooth device by swift pair.

If your Bluetooth device supports swift pair, do the following:

- Step 1. Enable swift pair notification on Bluetooth settings page.
- Step 2. Turn on both the Bluetooth on your computer and the Bluetooth device. Make sure the device is discoverable.
- Step 3. Click **Connect** when a swift pair notification appears on your computer.

**Notes:** If the Bluetooth connection failed, do the following:

1. Type **Device Manager** in the Windows search box and then press Enter.
2. Locate the Bluetooth adapter. Right-click and select **Update driver**.
3. Select **Search automatically for drivers**, and then follow the on-screen instructions.

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## Chapter 3. Explore your computer

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### Intelligent features

Lenovo PCs are continuously developing convenient and intelligent features to enhance users' computing experiences. This section explores the intelligent features and software that may be available on your computer.

### Lenovo AI Now or Lenovo Xiaotian (for selected models)

Lenovo AI Now or Lenovo Xiaotian is a personal and private AI assistant to help with inspiration, writing, summarizing, and quick settings for your computer. Depending on the country or region, either of them might be available.

#### Access the apps

- Use the Lenovo AI Now icon  or Lenovo Xiaotian icon  if present on the taskbar.
- Or type the app name in the Windows search box and press Enter.

#### Explore key features

- Import files to create your personal knowledge base and start searching, Q&A, summarization, and generation based on it.
- Set up your computer or find service information. For example, you can ask it to help turn on the Eye Care mode or find the nearest service center.


#### Notes:

- For more information about Lenovo AI Now or Lenovo Xiaotian, see the User Guide in the apps' Help Center.
- Software features may vary by computer model and be subject to change. Explore the apps based on your actual user interface.

### Lenovo AI Turbo Engine (for selected models)

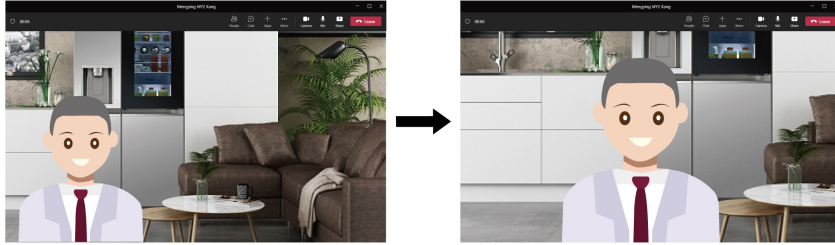
Lenovo AI Turbo Engine is a smart audio and video enhancement software. Powered by plentiful sensing and computing adaption technologies, it can optimize your experience in video and audio capture and playback.

#### Access the app

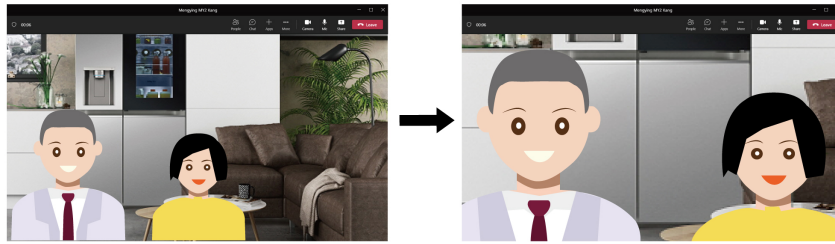
- Use the Lenovo AI Turbo Engine icon  if present on the taskbar.
- Or type the app name in the Windows search box and press Enter.

#### Explore key features

- **Video enhancement**
  - **Auto framing mode** (for a single person): Automatically track and keep your face centered in the video.



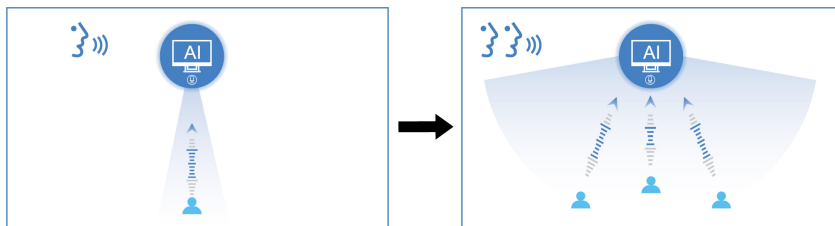
- **Auto framing mode** (for multiple persons): Automatically crop the video to capture all persons' faces.



- **Single-person tracking mode:** You can manually select this mode to track only one person's face even if others are present.

- **Audio enhancement**

- **Microphone capture effect auto adaption:** The microphone capture scope can change based on the number of persons captured by the camera.



**Note:** You can also manually switch between personal, shared, or music modes based on your needs.

- **Speaker playback effect auto adaption:** The speaker playback effect can change depending on the audio type.



**Notes:**

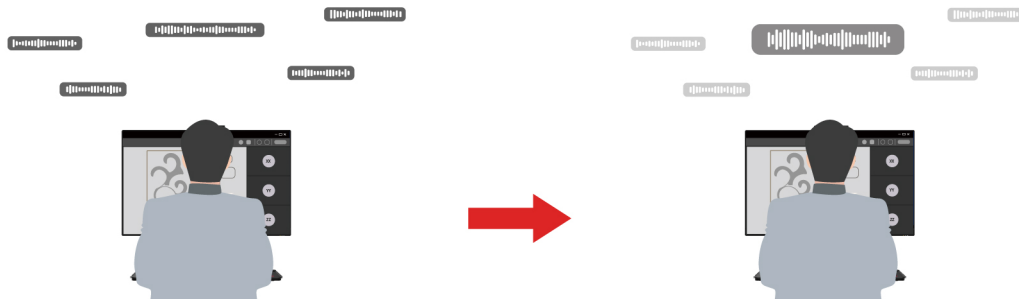
- The available features vary depending on computer models.



- This app might not be available in your country or region.
- This app makes periodic updates of the features. Explore this app on your actual user interface.

## Smart noise cancellation (for selected models)

Smart noise cancellation is a noise reduction feature available in the Lenovo Smart Noise Cancellation. By filtering out input and output noises, it enhances your audio experience.



Function	Description
Microphone noise cancellation	<ul style="list-style-type: none"> <li>• <b>Private mode:</b> Your computer only captures the speaker's voice at a certain angle and eliminates ambient noises and speakers' voices at other angles.</li> <li>• <b>Shared mode:</b> Your computer captures all speakers' voices and eliminates ambient noises.</li> <li>• <b>Off:</b> Your computer captures all the sounds in the environment.</li> <li>• <b>Echo cancellation:</b> Your computer cancels the acoustic echo that occurs when sound from the speakers travels through the air and is picked up by the microphones.</li> </ul>
Speaker noise cancellation	<ul style="list-style-type: none"> <li>• <b>On:</b> Your computer filters out other sounds to play only human voices in a voice call.</li> <li>• <b>Off:</b> Your computer keeps all the sounds from the call participants.</li> </ul>

**Note:** If you don't need any microphone or speaker noise cancellation feature, you can turn off the global switch under the title bar.

## Lenovo Smart Meeting (for selected models)

Lenovo Smart Meeting is a video conferencing app for working scenarios. It integrates multiple features to help enhance your professional image, protect your privacy, and reduce power consumption.

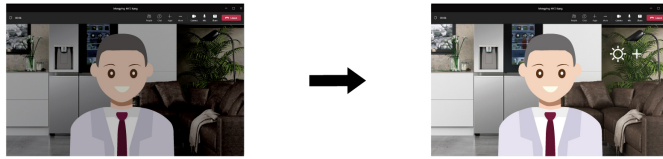
If you want your configurations of the app to also take effect on other mainstream video call apps, such as Microsoft Teams and Zoom, ensure that you select Lenovo Virtual Camera in the app.

### Access the app

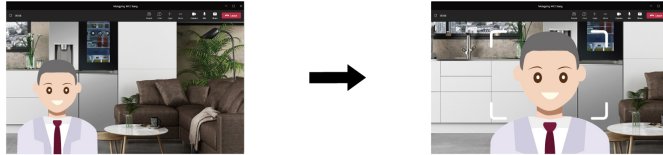
Type the app name in the Windows search box and press Enter.

### Explore key features

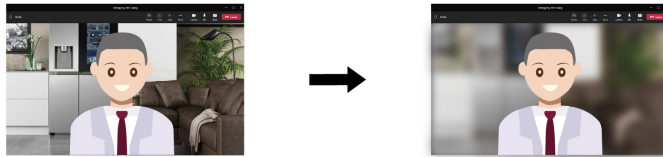
- **Video enhancer:** Adjust the brightness automatically for better image quality in the video call.



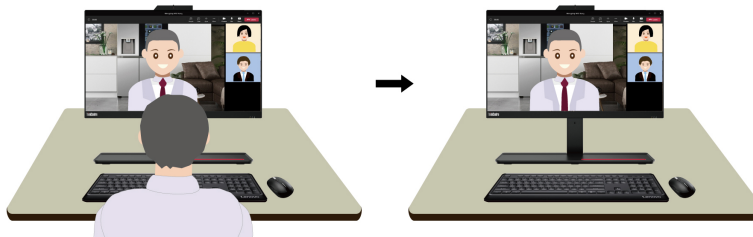
- **Face framing:** Keep your face centered in the video call automatically when you move around.



- **Customized background:** Blur or customize your background in the video call to protect your privacy.



- **Temporary Avatar:** Create and display a temporary portrait of you as if you are still on the video conference when you are temporarily away.



**Notes:**

- Lenovo does not collect any personal data from this app.
- The available features vary depending on the computer model.
- Lenovo Smart Meeting makes periodic feature updates to keep improving your experience with your computer. The description described here might be different from that on your actual user interface.

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## Use the touch screen (for selected models)


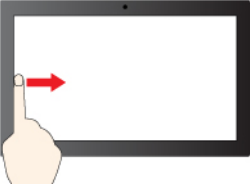

For computers with a touch-enabled screen, you can touch the screen directly with your fingers and interact with computer in a simple way. The following sections introduce frequently used touch gestures.

**Notes:**


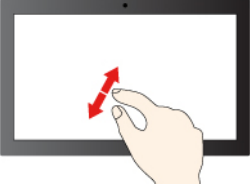
- Some gestures might not be available when you are using certain apps.
- Do not use gloved fingers or incompatible pens for input on the screen. Otherwise, the touch screen might be not sensitive or does not respond.

- The touch screen is delicate. Do not apply pressure on the screen or touch the screen with anything hard or sharp. Otherwise, the touch panel might malfunction or get damaged.

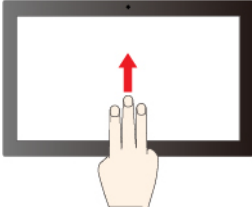
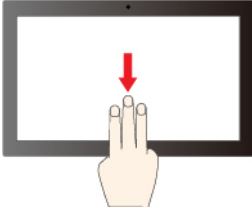
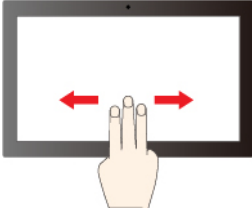
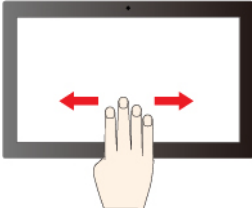
### One finger touch gesture

To do this	Gesture
Open a shortcut menu.	Tap and hold. 
Open the widget panel.	Swipe from the left. 
Open notification center.	Swipe from the right. 

### Two-finger touch gesture

To do this	Gesture
Zoom out.	Move two fingers towards. 
Zoom in.	Spread two fingers apart. 

### Three- and four-finger touch gesture

To do this	Gesture
Show all open windows.	<p data-bbox="808 226 1101 247">Swipe with three fingers up.</p> 
Show the desktop.	<p data-bbox="808 512 1133 533">Swipe with three fingers down.</p> 
Switch apps.	<p data-bbox="808 798 1256 819">Swipe with three fingers to the left or right.</p> 
Switch desktops.	<p data-bbox="808 1083 1243 1104">Swipe with four fingers to the left or right.</p> 

To enable three- and four-finger touch gestures, do the following:

Step 1. Type **touch gesture** in the Windows search box and then press Enter.

Step 2. Turn on the **Three- and four-finger touch gestures** switch.

**Notes:** If the touch screen is not sensitive or does not respond, do the following:

1. Turn off the computer.
2. Use a dry, soft, and lint-free cloth or a piece of absorbent cotton to remove fingerprints or dust from the touch screen. Do not apply solvents to the cloth.
3. Restart the computer and check if the touch screen works normally.
4. If the touch screen cannot work normally, type **Windows Update** in the Windows search box and then press Enter.
5. Follow the on-screen instructions to update Windows.
6. After updating Windows, check if the touch screen works normally.

7. If the touch screen still cannot work normally, the touch screen might get damaged. You can call Lenovo Customer Support Center to get further help.

---

## Face authentication (for selected models)

Create your face ID and unlock your computer by scanning your face:

1. Type **Sign-in options** in the Windows search box and then press Enter.
2. Select the face ID setting and then follow the on-screen instruction to create your face ID.

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## 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:

- Turn off the display: After 10 minutes
- Put the computer to sleep: After 10 minutes

To awaken the computer from Sleep mode, press any key on your keyboard.

To reset the power plan:

1. Type **Power Options** in the Windows search box and then press Enter.
2. Choose or customize a power plan of your preference.

---

## ICE performance mode

The ICE performance mode helps you adjust the acoustic and thermal performance of your computer. Three options are available:

- **Balance mode:** The computer works at the balance mode with balanced noise and better performance.
- **Performance mode** (default setting): The computer works at the best performance with normal acoustic level.

**Note:** The term “best” only refers to the best effect among different settings of the product itself.

- **Full Speed:** All fans in the computer will run at full speed.

### Change the ICE performance mode

To change the ICE performance mode:

- Step 1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.
- Step 2. Select **Power → Intelligent Cooling** and press Enter.
- Step 3. Select **Performance Mode** and press Enter.
- Step 4. Set the performance mode as desired.
- Step 5. Press F10 or Fn+F10 to save the changes and exit.

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## Security

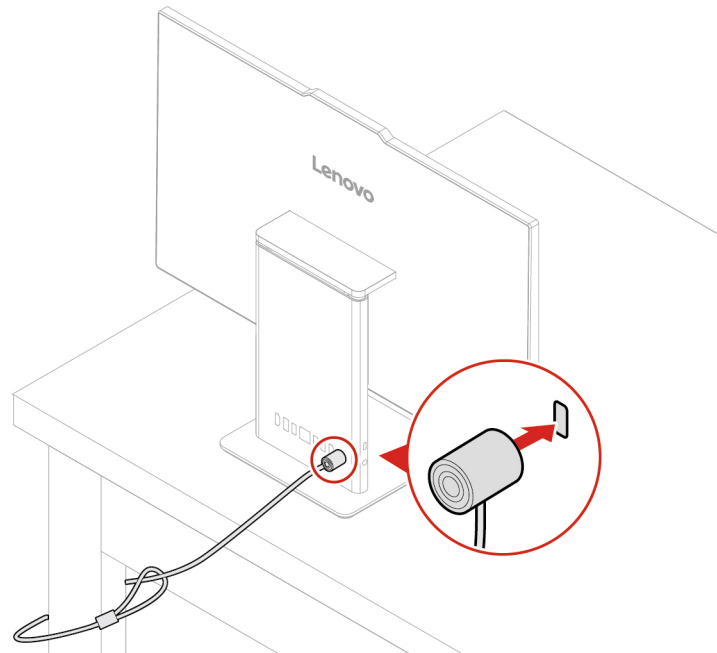
This computer offers a wealth of security measures to protect both the device and data safety.

## Use physical locks

**Note:** Lenovo makes no comments, judgments, or warranties about the function, quality, or performance of the locking device and security feature. You can purchase computer locks from Lenovo.

### Security lock

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



## Use software security solutions

The following software solutions help secure your computer and information.

- **Windows Security**

Windows Security is a software built-in to the operating system. It continually scans for malicious software, viruses, and other security threats. Besides, Windows updates are downloaded automatically to help keep your computer safe. Windows Security also enables you to manage tools including firewall, account protection, application and browser control, and so on.

- **Antivirus programs**

Lenovo preinstalls a full-version antivirus software on selected models of computer. It helps defend the computer against viruses, safeguard your identity, and keep your personal information secured.

**Note:** For more information about how to use these software solutions, refer to their help systems respectively.

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## Chapter 4. UEFI BIOS

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### Enter the UEFI BIOS menu

Turn on or restart the computer. When the logo screen is displayed, press F1 or Fn+F1 to enter the UEFI BIOS menu.

**Note:** If you have set UEFI BIOS passwords, enter the correct passwords when prompted. You also can select **No** or press Esc to skip the password prompt and enter the UEFI BIOS menu. However, you cannot change the system configurations that are protected by passwords.

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### Navigate the UEFI BIOS menu

Follow the on-screen instructions to navigate in the UEFI BIOS menu.

The table below introduces the available settings of the UEFI BIOS menu. You can follow the on-screen instruction to navigate in the UEFI BIOS menu.

**Note:** The UEFI BIOS menu might vary depending on system configurations.

Menu	Introduction
<b>Main</b>	This category provides the general product-related and firmware information including system summary, machine type, product serial number, UUID number, etc.
<b>Devices</b>	This category introduces how to configure various devices such as USB ports and audio controllers.
<b>Advanced</b>	This category provides advanced information about the computer such as the CPU features.
<b>Power</b>	This category introduces power and thermal management solutions.
<b>Security</b>	This category introduces various passwords, locks, and software to protect your computer.
<b>Startup</b>	This category introduces how to set the boot priority order.
<b>Exit</b>	This category introduces how to exit as you prefer.

To explore the detailed settings:

- For computers purchased in mainland China  
You can contact Lenovo Customer Support Center as shown at <https://newsupport.lenovo.com.cn/contacts.html>.
- For computers purchased outside mainland China  
You can go to Lenovo BIOS Simulator Center <https://download.lenovo.com/bsco/index.html> to explore the detailed settings by your product name.

**Note:** The Lenovo BIOS Simulator Center makes periodic updates of the settings. The UEFI BIOS simulator interface and description of settings might be different from that on your actual user interface.

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### Enable or disable the ErP LPS compliance mode

Lenovo computers meet the eco-design requirements of the ErP Lot 3 regulation. Follow the instruction to enable or disable the ErP LPS compliance mode.

For more information about the eco-design requirements, go to: <https://www.lenovo.com/us/en/compliance/eco-declaration>.

You can enable the ErP LPS compliance mode to reduce the consumption of electricity when the computer is off. To enable or disable the ErP LPS compliance mode:

Step 1. Restart the computer. When the logo screen is displayed, press F1 or Fn+F1.

Step 2. Select **Power** → **Enhanced Power Saving Mode** and press Enter.

Step 3. Enable or disable the feature as desired.

**Note:** Please note that when the Enhanced Power Saving Mode is disabled, the power consumption might be increased when the computer is off.

Step 4. Press F10 or Fn+F10 to save the changes and exit.

When the ErP LPS compliance mode is enabled, you can wake up the computer by doing one of the following:

- Press the power button.
- Enable the Wake Up on Alarm feature to make the computer wake up at a set time.

To meet the off mode requirement of ErP compliance, you need to disable the Fast Startup function.

1. Go to **Control Panel** and view by large icons or small icons.
2. Click **Power Options** → **Choose what the power buttons do** → **Change settings that are currently unavailable**.
3. Clear the **Turn on fast startup (recommended)** option from the **Shutdown settings** list.

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## Update the UEFI BIOS

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

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

### From the Vantage app

Follow the instructions to update the UEFI BIOS from the Vantage app.

Step 1. Open the Vantage app, and then click **System Update**.

Step 2. If the latest UEFI BIOS update package is available, follow the on-screen instructions to download and install the package.

### From the Lenovo Support Web site

Follow the instructions to update the UEFI BIOS from the Lenovo Support Web site.

#### For computers purchased in mainland China

1. Go to <https://newsupport.lenovo.com.cn>.
2. Click **Download drivers and software**, and select or search product.
3. Follow the on-screen instructions to download and install the latest UEFI BIOS update package.

#### For computers purchased outside mainland China

1. Go to <https://pcsupport.lenovo.com> and select the entry for your computer.



2. Click **Drivers & Software** → **Manual Update** → **BIOS/UEFI**.
3. Follow the on-screen instructions to download and install the latest UEFI BIOS update package.

## From the Windows Update

Follow the instructions to update the UEFI BIOS from the Windows Update.

- Step 1. Type **Settings** in the Windows search box and press Enter.
- Step 2. Click **Windows Update** → **Check for Updates**.
- Step 3. If a BIOS update package appears in your update list, click **Download or Install** to initiate the update.



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## Chapter 5. CRU replacement

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### What is CRU

**Important:** For users in mainland China, the information provided in this chapter is for reference by professional maintenance service providers or technicians authorized by Lenovo only. Users shall not perform maintenance on their own. Any faults or damage due to improper operation, modification, or failure to use parts provided by Lenovo are not covered by the warranty for this product. For product warranty information, refer to the warranty document provided with the product or go to the official Lenovo website at <https://newsupport.lenovo.com.cn>.

Customer Replaceable Units (CRUs) are parts that can be replaced by the customer. Lenovo computers contain the following types of CRUs:

- **Self-service CRUs:** Refer to parts that can be replaced easily by customer themselves or by trained service technicians at an additional cost.
- **Optional-service CRUs:** Refer to parts that can be replaced by customers with a greater skill level. Trained service technicians can also provide service to replace the parts under the type of warranty designated for the customer's machine.

If you intend on installing the CRU, Lenovo will ship the CRU to you. CRU information and replacement instructions are shipped with your product and are available from Lenovo at any time upon request. You might be required to return the defective part that is replaced by the CRU. When return is required: (1) return instructions, a prepaid shipping label, and a container will be included with the replacement CRU; and (2) you might be charged for the replacement CRU if Lenovo does not receive the defective CRU within thirty (30) days of your receipt of the replacement CRU. For full details, see the Lenovo Limited Warranty documentation at:

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

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### CRU list

The following is the CRU list of your computer.

#### Self-service CRUs

- ac power adapter
- Keyboard\*
- Mouse\*
- Power cord

\* for selected models



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## Chapter 6. Help and support

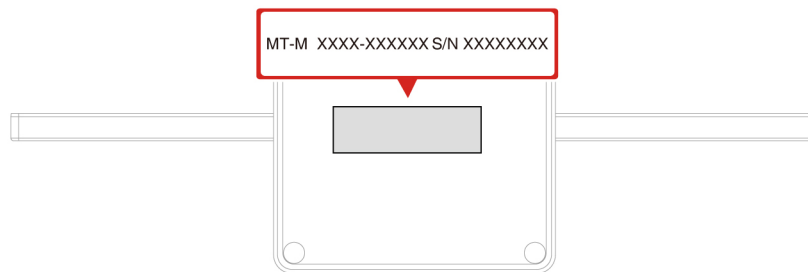
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### Find your serial number

This topic helps you find computer serial number.

You can find your serial number via:

- **Dashboard** or **Device** in the **Vantage** app
- Serial number and machine type label of your computer (shown as below illustration)



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### Diagnose and troubleshoot your computer

This section provides introduction to a set of diagnostics and troubleshooting tools at Lenovo Support Web site and the Vantage app. They can help you diagnose common software and hardware issues.

The following table lists these diagnostics tools and the recommended conditions for each tool.

Diagnostics tool	Recommended scenario
Troubleshoot and diagnose at Lenovo Support Web site	You want to have an online troubleshooting or scan of hardware and drivers on your computer.
Hardware scan	<ul style="list-style-type: none"><li>• Your computer is installed with the Vantage app.</li><li>• You want to perform basic examinations of the hardware components.</li></ul>

### Troubleshoot and diagnose at Lenovo Support Web site

Lenovo provides two different diagnosing solutions to help you identify and resolve problems on your computer.

#### For computers purchased in mainland China

1. Go to <https://newsupport.lenovo.com.cn/>.
2. Enter the troubleshooting section and find the question you are encountering.

#### For computers purchased outside mainland China

1. Go to <https://www.pcsupport.lenovo.com/> and enter your product name in the search box.

2. Click **Troubleshoot & Diagnose** and select the option that fits your need.

**Notes:**

- Before launching any automatic diagnosing process, a pop-up window will be prompted to install Lenovo Service Bridge. Lenovo Service Bridge helps to connect your computer with Lenovo diagnosing tools.
- Lenovo Support Web site makes periodic updates of the sections to keep improving your experience with your computer. The Web site interface and descriptions of sections might be different from that on your actual interface.
- If you are unaware of what problem your computer goes with, it is recommended that you select **Easy** and follow on-screen instructions to get your firmware updated and obtain the hardware status.
- If you have identified the problem on your computer, you can select **Custom** and follow on-screen instructions to resolve the problem.

If solutions can not resolve problems on your computer, you can follow on-screen instructions to submit an e-ticket or contact Lenovo for professional assistance.

## Hardware scan

Hardware scan is an effective hardware testing tool to help you identify existing hardware issues.

To run the Hardware scan:

- Step 1. Type **Vantage** in the Windows search box and then press Enter.
- Step 2. Click **Hardware scan** or **Support → Hardware scan**.
- Step 3. Select **QUICK SCAN** or **CUSTOMIZE** and then follow the on-screen instructions to run the hardware scan.

**Notes:**

- The Quick Scan tool contains a pre-selected suite of tests that performs basic examinations of the hardware components found in the system. The Customize tool enables you to select one or several hardware components to perform the examinations.
- Before selecting **QUICK SCAN**, click **Refresh Modules** to ensure that the list of hardware components is the components currently available for the computer.

- Step 4. If any hardware failure is detected, the result varies depending on the warranty status and varies by country or region. Follow the on-screen instructions to resolve the issue.

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## Recover your Windows operating system

When you encounter some unexpected issues with your operating system, you can choose to recover your operating system by yourself or call Lenovo Customer Support Center.

**Note:** Microsoft constantly makes updates to the Windows operating system. Before installing a particular Windows version, check the compatibility list for the Windows version. For details, go to <https://support.lenovo.com/us/en/solutions/ht512575>.

### For computers purchased in mainland China

Go to [https://iknow.lenovo.com.cn/detail/199198\\_1.html](https://iknow.lenovo.com.cn/detail/199198_1.html).

## For computers purchased outside mainland China

To recover your operating system to...	See.
Factory defaults	Refer to the instructions in <a href="https://support.lenovo.com/HowToCreateLenovoRecovery">https://support.lenovo.com/HowToCreateLenovoRecovery</a>
A previous system point	Refer to the instructions in Popular Topics: <a href="https://support.lenovo.com/solutions/ht118590">https://support.lenovo.com/solutions/ht118590</a>

## 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 needed information 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.

## Self-help resources

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

Resources	How to access?
Lenovo Support Web Site	<ul style="list-style-type: none"><li>• For computers purchased in mainland China <a href="https://www.lenovo.com.cn">https://www.lenovo.com.cn</a></li><li>• For computers purchased outside mainland China <a href="https://pcsupport.lenovo.com">https://pcsupport.lenovo.com</a></li></ul>
Tips	<ul style="list-style-type: none"><li>• For computers purchased in mainland China <a href="https://iknow.lenovo.com.cn">https://iknow.lenovo.com.cn</a></li><li>• For computers purchased outside mainland China <a href="https://www.lenovo.com/tips">https://www.lenovo.com/tips</a></li></ul>
Lenovo Community	<ul style="list-style-type: none"><li>• For computers purchased in mainland China <a href="https://iknow.lenovo.com.cn">https://iknow.lenovo.com.cn</a></li><li>• For computers purchased outside mainland China <a href="https://forums.lenovo.com">https://forums.lenovo.com</a></li></ul>

Resources	How to access?
Accessibility information (for computers purchased outside China)	<a href="https://www.lenovo.com/accessibility">https://www.lenovo.com/accessibility</a>
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.</li> <li>• Microsoft support Web site: <a href="https://support.microsoft.com">https://support.microsoft.com</a></li> </ul>

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## Purchase accessories or additional services

This topic provides instructions on how to purchase accessories or additional services.

### Accessories

Lenovo has a number of hardware accessories and upgrades to help expand the functionalities of your computer. Accessories include memory modules, storage devices, network cards, power adapters, keyboards, mice, and so on.

To shop at Lenovo, go to:

- For computers purchased in mainland China  
<https://www.lenovo.com.cn>
- For computers purchased outside mainland China  
<https://www.lenovo.com/accessories>

### Additional services

During and after the warranty period, you can purchase additional services from Lenovo at:

- For computers purchased in mainland China  
<https://newsupport.lenovo.com.cn>
- For computers purchased outside mainland China  
<https://pcsupport.lenovo.com/warrantyupgrade>

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

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## Accessibility features

Lenovo is committed to making information technology accessible to everyone, including individuals with hearing, vision, mobility, cognitive, or speech disabilities. To get the most up-to-date and detailed accessibility features information for the product, go to [https://support.lenovo.com/docs/product\\_accessibility\\_features](https://support.lenovo.com/docs/product_accessibility_features).



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## Appendix A. Supplementary information

This section contains the notice for USB connector name update. The USB Implementers Forum published a revision of the guideline for USB connector names in September, 2022. Lenovo follows the revised guideline and updates USB connector names accordingly. You can refer to the table below for naming update details.

### Notice for USB connector name update

Current name	Previous name
USB-A connector (Hi-Speed USB)	USB-A 2.0 connector
USB-A connector (USB 5Gbps)	USB-A 3.2 Gen 1 connector
USB-A connector (USB 10Gbps)	USB-A 3.2 Gen 2 connector
USB-A connector (USB 5Gbps, Always On USB)	Always on USB-A 3.2 Gen 1 connector
USB-A connector (USB 10Gbps, Always On USB)	Always on USB-A 3.2 Gen 2 connector
USB-C connector (USB 5Gbps)	USB-C (3.2 Gen 1) connector
USB-C connector (USB 10Gbps)	USB-C (3.2 Gen 2) connector
USB-C connector (USB 20Gbps)	USB 3.2 Gen 2x2
USB-C connector (USB4 20Gbps)	USB 4 Gen 2x2
USB-C connector (USB4 40Gbps)	USB-C (USB 4) connector
USB-C connector (Thunderbolt 3)	USB-C (Thunderbolt 3) connector
USB-C connector (Thunderbolt 4)	USB-C (Thunderbolt 4) connector



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## Appendix B. Notices and trademarks

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<https://pcsupport.lenovo.com>

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