Inspiron 16 Plus 7630

Owner's Manual - NVIDIA GeForce RTX 3050/4050 and Intel Graphics

DELLTechnologies

Notes, cautions, and warnings

(i) **NOTE:** A NOTE indicates important information that helps you make better use of your product.

⚠ **CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.**

⚠ **WARNING: A WARNING indicates a potential for property damage, personal injury, or death.**

Contents

Views of Inspiron 16 Plus 7630
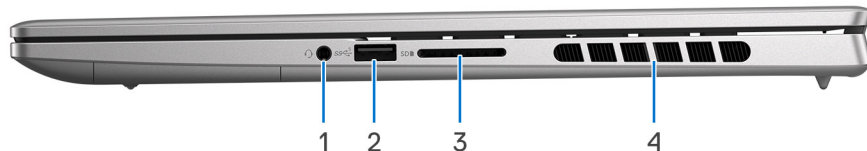
Right

Figure 1. For systems shipped with LPDDR5/LDPPR5x memory

1. **Universal audio jack**

   Connect headphones or a headset (headphone and microphone combo).

2. **USB 3.2 Gen 1 port**

   Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

3. **SD-card slot**

   Reads from and writes to the SD card. The computer supports the following card types:

   ● Secure Digital (SD)
   ● Secure Digital High Capacity (SDHC)
   ● Secure Digital Extended Capacity (SDXC)

4. **Air vents**

   Air vents provide ventilation for your computer. Clogged air vents can cause overheating and can affect your computer's performance and potentially cause hardware issues. Keep the air vents clear of obstructions and clean them regularly to prevent build-up of dust and dirt. For more information about cleaning air vents, search for articles in Knowledge Base Resource at www.dell.com/support.
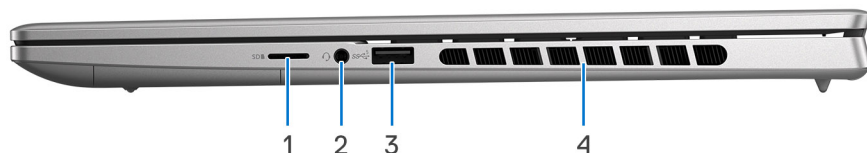
Figure 2. For systems shipped with DDR5 memory

1. 1. **microSD-card slot**

   Reads from and writes to the microSD-card. The computer supports the following card types:
   ● Micro Secure Digital (mSD)
   ● Micro Secure Digital High Capacity (mSDHC)
   ● Micro Secure Digital Extended Capacity (mSDXC)

2. **Universal audio jack**

Connect headphones or a headset (headphone and microphone combo).

3. **USB 3.2 Gen 1 port**

   Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

4. **Air vents**

   Air vents provide ventilation for your computer. Clogged air vents can cause overheating and can affect your computer's performance and potentially cause hardware issues. Keep the air vents clear of obstructions and clean them regularly to prevent build-up of dust and dirt. For more information about cleaning air vents, search for articles in Knowledge Base Resource at www.dell.com/support.

Left

1. **Power-adapter port**

   Connect a power adapter to provide power to your computer and charge the battery.

2. **Air vents**

   Air vents provide ventilation for your computer. Clogged air vents can cause overheating and can affect your computer's performance and potentially cause hardware issues. Keep the air vents clear of obstructions and clean them regularly to prevent build-up of dust and dirt. For more information about cleaning air vents, search for articles in Knowledge Base Resource at www.dell.com/support.
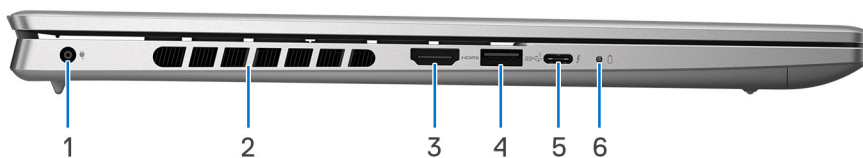
3. **HDMI port**

   Connect to a TV, external display or another HDMI-in enabled device. Provides video and audio output.

4. **USB 3.2 Gen 1 port**

   Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

5. **Thunderbolt 4.0 port with Power Delivery and DisplayPort**

   Supports USB4, DisplayPort 1.4, Thunderbolt 4 and also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for USB4 and Thunderbolt 4.

   (i) **NOTE:** You can connect a Dell Docking Station to the Thunderbolt 4 ports. For more information, search in the Knowledge Base Resource at www.dell.com/support.

   (i) **NOTE:** A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

   (i) **NOTE:** USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

   (i) **NOTE:** Thunderbolt 4 supports two 4K displays or one 8K display.

6. **Power and battery-status light**

   Indicates the power state and battery state of the computer.

   Solid white—Power adapter is connected and the battery is charging.

   Solid amber—Battery charge is low or critical.

   Off—Battery is fully charged.

   (i) **NOTE:** On certain computer models, the power and battery-status light are also used for diagnostics. For more information, see the *Troubleshooting* section in your computer's *Service Manual*.

Top
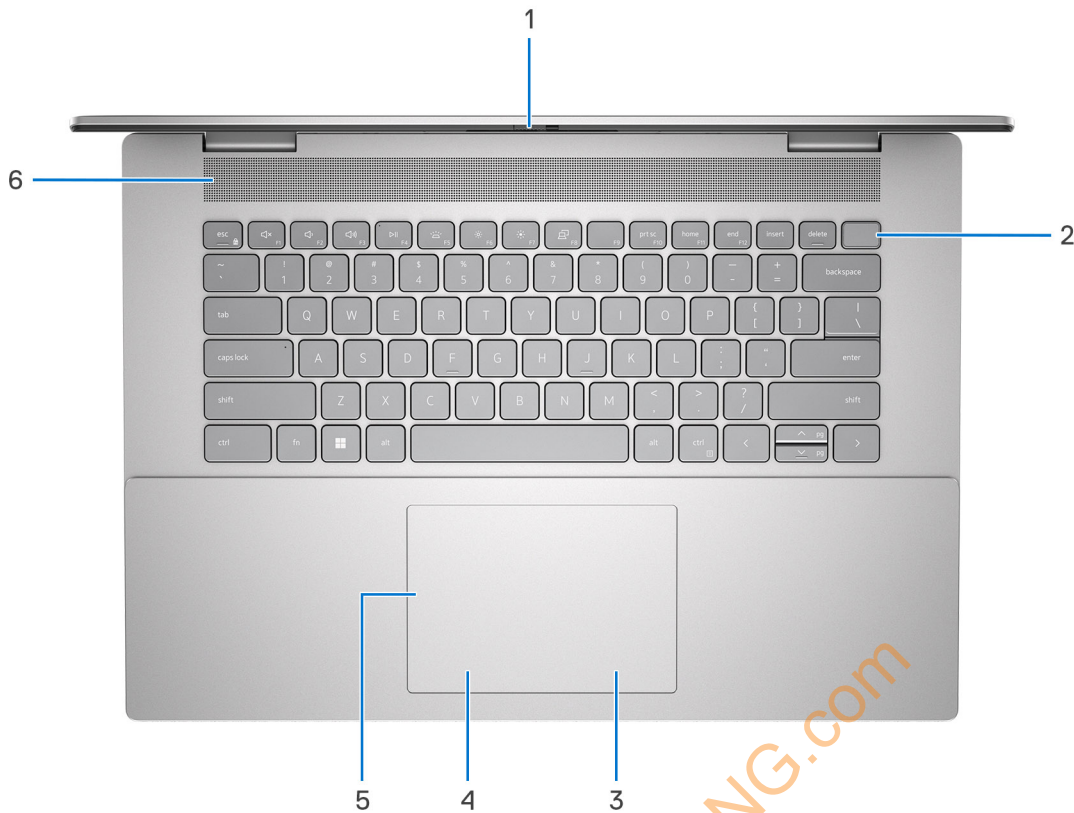
1. **Privacy shutter**

   Slide the privacy shutter to cover the camera lens and protect your privacy when the camera is not in use.

2. **Power button with optional fingerprint reader**

   Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

   When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for four seconds to force shut-down the computer.

   If the power button has a fingerprint reader, place your finger on the power button to log in.

   (i) **NOTE:** The highlighted area indicates the actual active fingerprint reader area and the image is for illustration purposes only.

   (i) **NOTE:** You can customize power-button behavior in Windows. For more information, see *Me and My Dell* at www.dell.com/support/manuals.

3. **Right-click area**

   Press to right-click.

   (i) **NOTE:** The right-click area is enabled when you touch the touchpad.

4. **Left-click area**

Press to left-click.

(i) **NOTE:** The left-click area is enabled when you touch the touchpad.

5. **Precision touchpad**

Move your finger on the touchpad to move the mouse pointer. Tap to left-click and two fingers tap to right-click.

6. **Speaker (tweeter)**

Provides audio output.

Front

Figure 3. Front view with FHD camera

1. **Left microphone**

Provides digital sound input for audio recording and voice calls.

2. **Privacy shutter**

Slide the privacy shutter to cover the camera lens and protect your privacy when the camera is not in use.

3. **Camera**

Enables you to video chat, capture photos, and record videos.

4. **Camera-status light**

Turns on when the camera is in use.

5. **Right microphone**

Provides digital sound input for audio recording and voice calls.

6. **Display panel**

Provides visual output to the user.
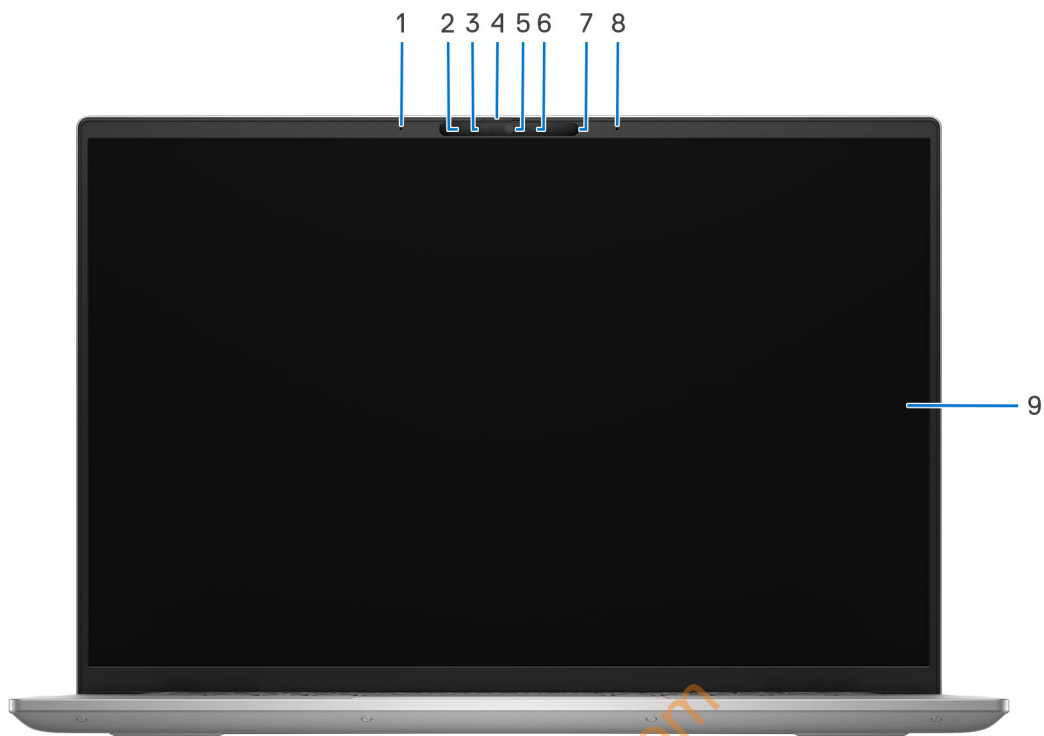
Figure 4. Front view with FHD RGB+IR camera

1. **Left microphone**

   Provides digital sound input for audio recording and voice calls.

2. **Infrared emitter**

   Emits infrared light, which enables the infrared camera to sense and track motion.

3. **Infrared camera**

   Enhances security when paired with Windows Hello face authentication.

4. **Privacy shutter**

   Slide the privacy shutter to cover the camera lens and protect your privacy when the camera is not in use.

5. **Camera**

   Enables you to video chat, capture photos, and record videos.

6. **Camera-status light**

   Turns on when the camera is in use.

7. **Ambient-light sensor**

   The sensor detects the ambient light and automatically adjusts the keyboard backlight and display brightness.

8. **Right microphone**

   Provides digital sound input for audio recording and voice calls.

9. **Display panel**

   Provides visual output to the user.

Bottom

1. **Right speaker (woofer)**

   Enhances low-frequency audio output.

2. **Service Tag and regulatory labels**

   The Service Tag is a unique alphanumeric identifier that enables Dell service technicians to identify the hardware components in your computer and access warranty information. The regulatory label contains regulatory information of your computer.

3. **Air vents**

   Air vents provide ventilation for your computer. Clogged air vents can cause overheating and can affect your computer's performance and potentially cause hardware issues. Keep the air vents clear of obstructions and clean them regularly to prevent build-up of dust and dirt. For more information about cleaning air vents, search for articles in Knowledge Base Resource at www.dell.com/support.

4. **Left speaker (woofer)**

   Enhances low-frequency audio output.

Service Tag

The service tag is a unique alphanumeric identifier that allows Dell service technicians to identify the hardware components in your computer and access warranty information.
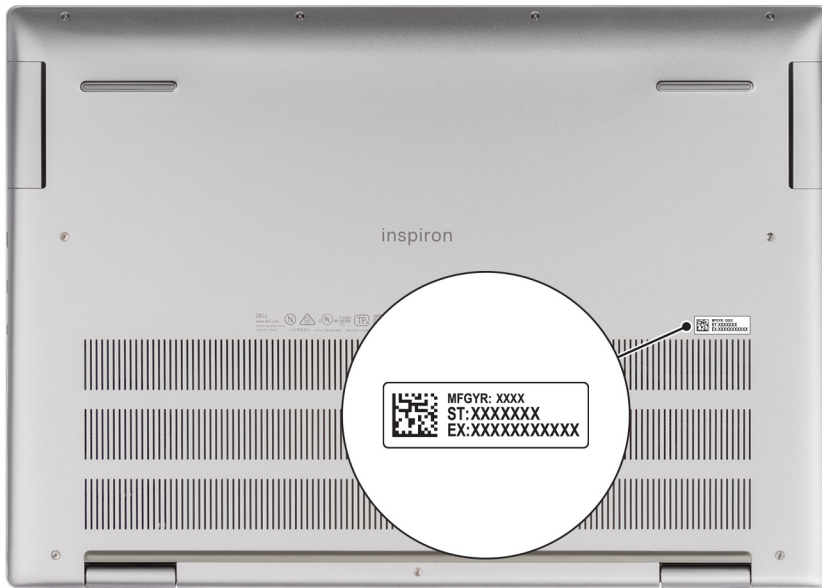
Battery charge and status light

The following table lists the battery charge and status light behavior of your Inspiron 16 Plus 7630.

Table 1. Battery charge and status light behavior

Power Source	LED Behavior	System Power State	Battery Charge Level
AC Adapter	Off	S0 - S5	Fully Charged
AC Adapter	Solid White	S0 - S5	< Fully Charged
Battery	Off	S0 - S5	11-100%
Battery	Solid Amber (590+/-3 nm)	S0 - S5	< 10%

- S0 (ON) - System is turned on.
- S4 (Hibernate) - The system consumes the least power compared to all other sleep states. The system is almost at an OFF state, expect for a trickle power. The context data is written to hard drive.
- S5 (OFF) - The system is in a shutdown state.

Set up your Inspiron 16 Plus 7630

About this task

ⓘ **NOTE:** The images in this document may differ from your computer depending on the configuration you ordered.

Steps

1. Connect the power adapter and press the power button.
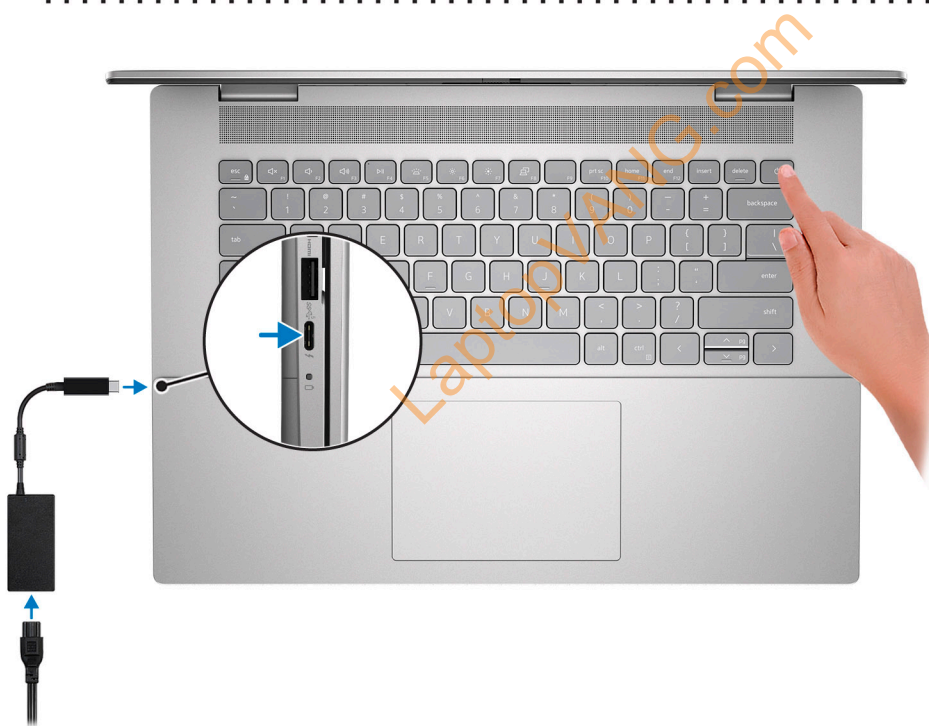
> ⓘ **NOTE:** The battery may go into power-saving mode during shipment to conserve charge on the battery. Ensure that the power adapter is connected to your computer when it is turned on for the first time.

2. Finish Windows setup.

   Follow the on-screen instructions to complete the setup. When setting up, Dell recommends that you:
   - Connect to a network for Windows updates.
     > ⓘ **NOTE:** If connecting to a secured wireless network, enter the password for the wireless network access when prompted.
   - If connected to the Internet, sign in with or create a Microsoft account. If not connected to the Internet, create an offline account.

- On the **Support and Protection** screen, enter your contact details.

3. Locate and use Dell apps from the Windows Start menu—Recommended.

Table 2. Locate Dell apps

Resources	Description
	My Dell Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.
	SupportAssist SupportAssist proactively and predictively identifies hardware and software issues on your computer and automates the engagement process with Dell Technical support. It addresses performance and stabilization issues, prevents security threats, monitors, and detects hardware failures. For more information, see *SupportAssist for Home PCs User's Guide* at www.dell.com/serviceabilitytools. Click **SupportAssist** and then, click **SupportAssist for Home PCs**. ⓘ **NOTE:** In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.
	Dell Update Updates your computer with critical fixes and latest device drivers as they become available. For more information on using Dell Update, search in the Knowledge Base Resource at www.dell.com/support.
	Dell Digital Delivery Download software applications, which are purchased but not preinstalled on your computer. For more information on using Dell Digital Delivery, search in the Knowledge Base Resource at www.dell.com/support.

Specifications of Inspiron 16 Plus 7630

Dimensions and weight

The following table lists the height, width, depth, and weight of your Inspiron 16 Plus 7630.

Table 3. Dimensions and weight

Description		Values
Height:		
	Front height	17.11 mm (0.67 in.)
	Rear height	17.91 mm (0.70 in.)
Width		356.78 mm (14.05 in.)
Depth		251.70 mm (9.90 in.)
Weight (maximum)		2.13 kg (4.69 lb) only applicable for computers shipped with LPDDR5/LPDDR5x memory 2.22 kg (4.89 lb)only applicable for computers shipped with DDR5 memory (i) **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.

Processor

The following table lists the details of the processors supported by your Inspiron 16 Plus 7630.

Table 4. Processor

Description	Option one	Option two	Option three	Option four
Processor type	13 th Generation Intel Core i7-13700H	13 th Generation Intel Core i7-13620H	13th Generation Intel Core i5-13500H	13th Generation Intel Core i5-13420H
Processor wattage	45 W	45 W	45 W	45 W
Processor total core count	14	10	12	8
Performance-cores	6	6	4	4
Efficient-cores	8	4	8	4
Processor total thread counts (i) **NOTE:** Intel® Hyper-Threading Technology is only available on Performance-cores.	20	16	16	12

Table 4. Processor (continued)

Description		Option one	Option two	Option three	Option four
Processor speed		Up to 5 GHz	Up to 4.90 GHz	Up to 4.70 GHz	Up to 4.60 GHz
Performance-cores frequency					
	Processor base frequency	2.40 GHz	2.40 GHz	2.60 GHz	2.10 GHz
	Maximum turbo frequency	5 GHz	4.90 GHz	4.70 GHz	4.60 GHZ
Efficient-cores frequency					
	Processor base frequency	1.80 GHz	1.80 GHz	1.90 GHz	1.50 GHz
	Maximum turbo frequency	3.70 GHz	3.60 GHz	3.50 GHz	3.40 GHz
Processor cache		24 MB	24 MB	18 MB	12 MB
Integrated graphics		- Intel UHD Graphics (only applicable for computers shipped with a single-channel memory configuration) - Intel Iris Xe Graphics (only applicable for computers shipped with a dual-channel memory configuration)	Intel UHD Graphics	- Intel UHD Graphics (only applicable only applicable for computers shipped with a single-channel memory configuration) - Intel Iris Xe Graphics (only applicable only applicable for computers shipped with a dual-channel memory configuration)	Intel UHD Graphics

Chipset

The following table lists the details of the chipset supported by your Inspiron 16 Plus 7630.

Table 5. Chipset

Description	Values
Chipset	Integrated in the processor
Processor	13th Generation Intel Core i5/i7
DRAM bus width	128-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Inspiron 16 Plus 7630 supports the following operating systems:

- Windows 11 Pro
- Windows 11 Pro National Academic

- Windows 11 Home

Memory

The following table lists the memory specifications of your Inspiron 16 Plus 7630.

Table 6. Memory specifications

Description	Values
Memory slots	- Two DIMM slots (only applicable for computers shipped with DDR5 memory) - Integrated on the system board. (only applicable for computers shipped with LPDDR5/LPDDR5x)
Memory type	- DDR5 - LPDDR5x - LPDDR5
Memory speed	4800 MHz
Maximum memory configuration	64 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB and 32 GB
Memory configurations supported	8 GB, 1 x 8 GB, DDR5, 4800 MHz 16 GB, 2 x 8 GB, DDR5, 4800 MHz, dual-channel 24 GB, 1 x 16 GB + 1 x 8 GB, DDR5, 4800 MHz, dual-channel 32 GB, 2 x 16 GB, DDR5, 4800 MHz, dual-channel 64 GB, 2 x 32 GB, DDR5, 4800 MHz, dual-channel 16 GB, 2 x 8 GB, LPDDR5x, 4800 MHz, integrated, dual-channel 32 GB, 2 x 16 GB, LPDDR5x, 4800 MHz, integrated, dual-channel 16 GB, 2 x 8 GB, LPDDR5, 4800 MHz, integrated, dual-channel 32 GB, 2 x 16 GB, LPDDR5, 4800 MHz, integrated, dual-channel

External ports

The following table lists the external ports on your Inspiron 16 Plus 7630.

Table 7. External ports

Description	Values
USB ports	- Two USB 3.2 Gen 1 ports - One Thunderbolt 4 port with DisplayPort and Power Delivery
Audio port	One universal headset jack
Video port/ports	One HDMI 2.0 port

Table 7. External ports (continued)

Description	Values
	One Thunderbolt 4 port with DisplayPort and Power Delivery ⓘ **NOTE:** A USB Type-C to DisplayPort adapter (sold separately) is required to connect to a DisplayPort device.
Media-card reader	- One SD-card 3.0 slot (only applicable for computers shippedwith LPDDR5/LPDDR5x memory) - One microSD-card slot (only applicable for computers shippedwith DDR5 memory)
Power-adapter port	- One 4.50 mm x 2.90 mm DC-in port - One Thunderbolt 4 port with DisplayPort and Power Delivery
Security-cable slot	Not supported

Internal slots

The following table lists the internal slots of your Inspiron 16 Plus 7630.

Table 8. Internal slots

Description	Values
M.2	- One M.2 2230 / 2280 slot for PCIe solid-state drive - One M.2 2230 slot for WiFi and Bluetooth combo card ⓘ **NOTE:** To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at www.dell.com/support.

Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules supported on your Inspiron 16 Plus 7630.

Table 9. Wireless module specifications

Description	Option one	Option two
Model number	Intel AX201	Intel AX211
Transfer rate	Up to 2400 Mbps	Up to 2400 Mbps
Frequency bands supported	2.40 GHz/5 GHz	2.40 GHz/5 GHz/6 GHz
Wireless standards	- WiFi 802.11a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac) - Wi-Fi 6 (WiFi 802.11ax)	- WiFi 802.11a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac) - Wi-Fi 6E (WiFi 802.11ax)
Encryption	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP

Table 9. Wireless module specifications (continued)

Description	Option one	Option two
Bluetooth wireless card	Bluetooth 5.2 wireless card (i) **NOTE:** Particular versions of Microsoft Windows may not support the full Bluetooth wireless card functionality.	Bluetooth 5.3 wireless card (i) **NOTE:** Particular versions of Microsoft Windows may not support the full Bluetooth wireless card functionality.

Audio

The following table lists the audio specifications of your Inspiron 16 Plus 7630.

Table 10. Audio specifications

Description		Values
Audio controller		Waves MaxxAudio Pro and Dolby Atmos Core
Stereo conversion		Supported
Internal audio interface		High definition audio interface
External audio interface		● One universal Audio Jack ● One HDMI 2.0 port
Number of speakers		4
Internal-speaker amplifier		Supported
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W x 4 = 8
	Peak speaker output	2.5 W x 4 = 10
Subwoofer output		Supported
Microphone		Digital-array microphones in camera assembly

Storage

This section lists the storage options on your Inspiron 16 Plus 7630.

Your Inspiron 16 Plus 7630 supports
● One M.2 2230/2280 solid-state drive
The M.2 2230/2280 solid-state drive is the primary drive of your computer.

Table 11. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 QLC, solid-state drive	PCIe NVMe Gen4 x4, up to 64 Gbps	Up to 1 TB
M.2 2230, solid-state drive	PCIe NVMe Gen3 x4, up to 32 Gbps	Up to 1 TB
M.2 2230, solid state drive	PCIe NVMe Gen4 x4, up to 64 Gbps	Up to 1 TB

Table 11. Storage specifications (continued)

Storage type	Interface type	Capacity
M.2 2280, solid-state drive	PCIe NVMe Gen4 x4, up to 64 Gbps	Up to 2 TB

Media-card reader

The following table lists the media cards supported by your Inspiron 16 Plus 7630.

Table 12. Media-card reader specifications

Description	Values
Media-card type	● One SD-card 3.0 slot (only applicable for computers shipped with LPDDR5/LPDDR5x memory) ● One microSD-card slot (only applicable for computers shipped with DDR5 memory)
Media-cards supported	**For computers with LPDDR5/LPDDR5x:** ● Secure Digital (SD) ● Secure Digital High Capacity (SDHC) ● Secure Digital Extended Capacity (SDXC) **For computers with DDR5:** ● Micro Secure Digital (mSD) ● Micro Secure Digital High Capacity (mSDHC) ● Micro Secure Digital Extended Capacity (mSDXC)

(i) **NOTE:** The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.

Keyboard shortcuts of Inspiron 16 Plus 7630

(i) **NOTE:** Keyboard characters may differ depending on the keyboard language configuration. Keys used for shortcuts remain the same across all language configurations.

Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. The symbol shown on the lower part of the key refers to the character that is typed out when the key is pressed. If you press shift and the key, the symbol shown on the upper part of the key is typed out. For example, if you press **2**, **2** is typed out; if you press **Shift** + **2**, @ is typed out.

The keys F1-F12 at the top row of the keyboard are function keys for multi-media control, as indicated by the icon at the bottom of the key. Press the function key to invoke the task represented by the icon. For example, pressing F1 mutes the audio (refer to the table below).

However, if the function keys F1-F12 are needed for specific software applications, multi-media functionality can be disabled by pressing **Fn** + **Esc**. Subsequently, multi-media control can be invoked by pressing **Fn** and the respective function key. For example, mute audio by pressing **Fn** + **F1**.

(i) **NOTE:** You can also define the primary behavior of the function keys (F1–F12) by changing **Function Key Behavior** in BIOS setup program.

Table 13. List of keyboard shortcuts

Function key	Primary behavior
F1	Mute audio
F2	Decrease volume
F3	Increase volume

Table 13. List of keyboard shortcuts (continued)

Function key	Primary behavior
F4	Play/Pause
F5	Keyboard-backlight ⓘ **NOTE:** Toggle to cycle the keyboard backlight status through off, low-backlight, and high-backlight
F6	Decrease brightness
F7	Increase brightness
F8	Switch to external display
F10	Print screen
F11	Home
F12	End

The **Fn** key is also used with selected keys on the keyboard to invoke other secondary functions.

Table 14. Secondary behavior

Function key	Behavior
Fn + B	Pause/Break
Fn + S	Toggle scroll lock
Fn + R	System request
Fn + T	Toggle Ultra performance mode
Fn + Right Ctrl	Open application menu
Fn + / ⓘ **NOTE:** Brazilian keyboard only	Open application menu
Fn + Space bar	Open Emoji menu
Fn + esc	Toggle fn-key lock
Fn + Left arrow	Home
Fn + Right arrow	End

Camera

The following table lists the camera specifications of your Inspiron 16 Plus 7630.

Table 15. Camera specifications

Description	Option one	Option two
Number of cameras	One	Two
Camera type	FHD camera	● FHD RGB camera ● IR camera
Camera location	Front camera	Front camera
Camera sensor type	CMOS sensor technology	CMOS sensor technology
Camera resolution:		

Table 15. Camera specifications (continued)

Description		Option one	Option two
	Still image	2.07 megapixel	2.07 megapixel
	Video	1920 x 1080 (FHD) at 30 fps	1920 x 1080 (FHD) at 30 fps
Infrared camera resolution:			
	Still image	Not supported	0.23 megapixel
	Video	Not supported	640 x 360 at 15 fps
Diagonal viewing angle:			
	Camera	82.0 degrees	80 degrees
	Infrared camera	Not supported	86.60 degrees

Touchpad

The following table lists the touchpad specifications of your Inspiron 16 Plus 7630.

Table 16. Touchpad specifications

Description		Values
Touchpad resolution:		>300 dpi
Touchpad dimensions:		
	Horizontal	115 mm (4.53 in.)
	Vertical	80 mm (3.15 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows, see the Microsoft knowledge base article at support.microsoft.com.

Power adapter

The following table lists the power adapter specifications of your Inspiron 16 Plus 7630.

Table 17. Power adapter specifications

Description		Option one	Option two	Option three
Type		90 W AC	130 W AC, ExpressCharge Boost	130 W AC (typical), ExpressCharge Boost
Connector dimensions:				
	External diameter	4.50 mm (0.17 in.)	4.50 mm (0.17 in.)	Not applicable
	Internal diameter	2.90 mm (0.11 in.)	2.90 mm (0.11 in.)	Not applicable
Power-adapter dimensions:				
	Height	32 mm (1.25 in.)	25.40 mm (1 in.)	22 mm (0.86 in.)
	Width	52 mm (2.04 in.)	76.20 mm (3 in.)	66 mm (2.59 in.)

Table 17. Power adapter specifications (continued)

Description		Option one	Option two	Option three
	Depth	128 mm (5.03 in.)	154.70 mm (6.09 in.)	143 mm (5.62 in.)
Input voltage		100 VAC–240 VAC	100 VAC–240 VAC	100 VAC–240 VAC
Input frequency		50 Hz–60 Hz	50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)		1.50 A	1.80 A	1.80 A
Output current (continuous)		4.62 A (continuous)	6.67 A (continuous)	6.50 A (continuous)
Rated output voltage		19.5 VDC	19.5 VDC	20 VDC
Temperature range:				
	Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
	Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

⚠ **CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.**

Battery

The following table lists the battery specifications of your Inspiron 16 Plus 7630.

Table 18. Battery specifications

Description		Values
Battery type		6-cell, 86 Wh polymer
Battery voltage		11.40 VDC
Battery weight (maximum)		0.34 kg (0.75 lb)
Battery dimensions:		
	Height	7.56 mm (0.30 in.)
	Width	294.90 mm (11.31 in.)
	Depth	77.50 (3.05 in.)
Temperature range:		
	Operating	• Charge: 0°C to 45°C (32°F to 113°F) • Discharge: 0°C to 70°C (32°F to 158°F)
	Storage	-20°C to 60°C (-4°F to 140°F)
Battery operating time		Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Battery charging time (approximate) ⓘ **NOTE:** Control the charging time, duration, start and end time, and so on using the Dell Power Manager		• 0°C to 15°C: 4 hours • 16°C to 50°C: 3 hours (when the system is turned off)

Table 18. Battery specifications (continued)

Description	Values
application. For more information about Dell Power Manager, search in the Knowledge Base Resource at www.dell.com/support.	
Coin-cell battery	N/A

> ⚠️ **CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.**

> ⚠️ **CAUTION: Dell recommends that you charge the battery regularly for optimal power consumption. If your battery charge is completely depleted, connect the power adapter, turn on your computer, and then restart your computer to reduce the power consumption.**

Display

The following table lists the display specifications of your Inspiron 16 Plus 7630.

Table 19. Display specifications

Description		Option one	Option two
Display type		16-inch, 2.5K with Dolby Vision	16-inch, Full High Definition Plus (FHD+)
Touch options		Not supported	Not supported
Display-panel technology		Wide View Angle (WVA)	Wide view Angle (WVA)
Display-panel dimensions (active area):			
	Height	344.68 mm (13.57 in.)	344.68 mm (13.57 in.)
	Width	215.42 mm (8.48 in.)	215.42 mm (8.48 in.)
	Diagonal	406.46 mm (16 in.)	406.46 mm (16 in.)
Display-panel native resolution		2560 x 1600	1920 x 1200
Luminance (typical)		300 nits	300 nits
Megapixels		4.09 M	2.30 M
Color gamut		100% sRGB typical	100% sRGB typical
Pixels Per Inch (PPI)		189	141
Contrast ratio (min.)		1000:1 minimum (1200:1 typical)	1000:1 minimum (1200:1 typical)
Response time (max.)		35 ms	35 ms
Refresh rate		120 Hz	60 Hz
Horizontal view angle		● +/- 80 degrees (minimum) ● +/- 85 degrees (typical)	● +/- 80 degrees (minimum) ● +/- 85 degrees (typical)
Vertical view angle		● +/- 80 degrees (minimum) ● +/- 85 degrees (typical)	● +/- 80 degrees (minimum) ● +/- 85 degrees (typical)

Table 19. Display specifications (continued)

Description	Option one	Option two
Pixel pitch	0.134 mm	0.18 mm
Power consumption (maximum)	4 W	4.40 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare

Fingerprint reader (optional)

The following table lists the specifications of the optional fingerprint reader of your Inspiron 16 Plus 7630.

ⓘ **NOTE:** The fingerprint reader is located on the power button.

Table 20. Fingerprint reader specifications

Description	Values
Fingerprint-reader sensor technology	Trans-capacitive sensing
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	108 x 88 pixel

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Inspiron 16 Plus 7630.

Table 21. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics	Shares system memory	13th Generation Intel Core i5/i7
Intel Iris Xe Graphics	Shares system memory	13th Generation Intel Core i5/i7

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Inspiron 16 Plus 7630.

Table 22. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce RTX 3050 (only applicable for computers shipped with LPDDR5/LPDDR5x memory)	6 GB	GDDR6
NVIDIA GeForce RTX 4050 (only applicable for computers shipped with LPDDR5/LPDDR5x memory)	6 GB	GDDR6

Table 22. GPU—Discrete (continued)

Controller	Memory size	Memory type
NVIDIA GeForce RTX 4060 (only applicable for computers shipped with DDR5 memory)	8 GB	GDDR6

Multiple display support matrix

The following table lists the multiple display support matrix for your Inspiron 16 Plus 7630.

Table 23. Multiple display support matrix

Graphics Card	Direct Graphics Controller Direct Output Mode	Supported external displays with computer internal display on	Supported external displays with computer internal display off
Intel UHD Graphics (only applicable for computers shipped with a single-channel memory configuration)	Not supported	3	3
Intel Iris Xe Graphics (only applicable for computers shipped with a dual-channel memory configuration)	Not supported	3	3
NVIDIA GeForce RTX 3050 (only applicable for computers shipped with LPDDR5 memory)	Supported by HDMI port	3	3
NVIDIA GeForce RTX 4050 (only applicable for computers shipped with LPDDR5 memory)	Supported by HDMI port	3	3
NVIDIA GeForce RTX 4060 (only applicable for computers shipped with DDR5 memory)	Supported by HDMI port and Type-C	3	3

Operating and storage environment

This table lists the operating and storage specifications of your Inspiron 16 Plus 7630.

Airborne contaminant level: G1 as defined by ISA-S71.04-1985

Table 24. Computer environment

Description	Operating	Storage
Temperature range	0°C to 35°C (32°F to 95°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)[*]	0.66 GRMS	1.30 GRMS

Table 24. Computer environment (continued)

Description	Operating	Storage
Shock (maximum)	110 G†	160 G†
Altitude range	0 m to 3048 m (0 ft to 10000 ft)	0 m to 10668 m (0 ft to 35000 ft)
⚠ **CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.**		

* Measured using a random vibration spectrum that simulates user environment.

† Measured using a 2 ms half-sine pulse.

Dell Support policy

For information on Dell support policy, search in the Knowledge Base Resource at www.dell.com/support.

ComfortView Plus

⚠ **WARNING: Prolonged exposure to blue light from the display may lead to long-term effects such as eye strain, eye fatigue, or damage to the eyes.**

Blue light is a color in the light spectrum which has a short wavelength and high energy. Chronic exposure to blue light, particularly from digital sources, may disrupt sleep patterns and cause long-term effects such as eye strain, eye fatigue, or damage to the eyes.

The display on this computer is designed to minimize blue light and complies with TÜV Rheinland's requirement for low blue light displays.

Low blue light mode is enabled at the factory, so no further configuration is necessary.

To reduce the risk of eye strain, it is also recommended that you:

● Position the display at a comfortable viewing distance between 20 and 28 inches (50 and 70 cm) from your eyes.
● Blink frequently to moisten your eyes, wet your eyes with water, or apply suitable eye drops.
● Look away from your display, and gaze at a distant object at 20 ft (609.60 cm) away for at least 20 seconds during each break.
● Take an extended break for 20 minutes every two hours.