Inspiron 16 Plus 7640

Owner's Manual

DELLTechnologies

Contents

Views of Inspiron 16 Plus 7640

Right

Figure 1. Right view

1. **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)

2. **Universal audio jack**

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

3. **USB 3.2 Gen 1 (5 Gbps) port**

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

Left

Figure 2. Left view

1. **Power-adapter port**

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

2. **Battery-status light**

   Indicates the battery-charge status.
   - Solid yellow - Battery charge is low.
   - Blinking yellow - Battery charge is critical.

3. **HDMI 1.4 port**

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

4. **USB 3.2 Gen 1 (5 Gbps) 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 Thunderbolt 4 and DisplayPort 1.4 (for computers shipped with 12th Generation Intel Core i5 or 13th Generation Intel Core i5/i7 processor) and DisplayPort 2.1 (for computers shipped with Intel Core Ultra 5/7/9 processor). The port also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for 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:** Thunderbolt 4 supports two 4K displays or one 8K display.

Top

Figure 3. Top view

1. **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 a sleep state; press and hold the power button for 10 seconds to force shut-down the computer.

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

   (i) **NOTE:** The power-status light on the power button is available only on computers without the fingerprint reader. Computers that are shipped with the fingerprint reader that is integrated on the power button will not have the power-status light on the power button.

   (i) **NOTE:** You can customize the power-button behavior in Windows.

2. **Right speaker**

Provides audio output.

3. **Touchpad**

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

4. **Left speaker**

   Provides audio output.

Front

Figure 4. Front view

1. **Left microphone**

   Provides digital sound input for audio recording and voice calls.

2. **Ambient-light sensor**

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

   ⓘ **NOTE:** The ambient-light sensor is available in computers shipped with Intel Core Ultra 5/7/9 processor only.

3. **Privacy shutter**

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

4. **Camera**

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

5. **Camera-status light**

   Turns on when the camera is in use.

6. **Right microphone**

Provides digital sound input for audio recording and voice calls.

7. **Display panel**
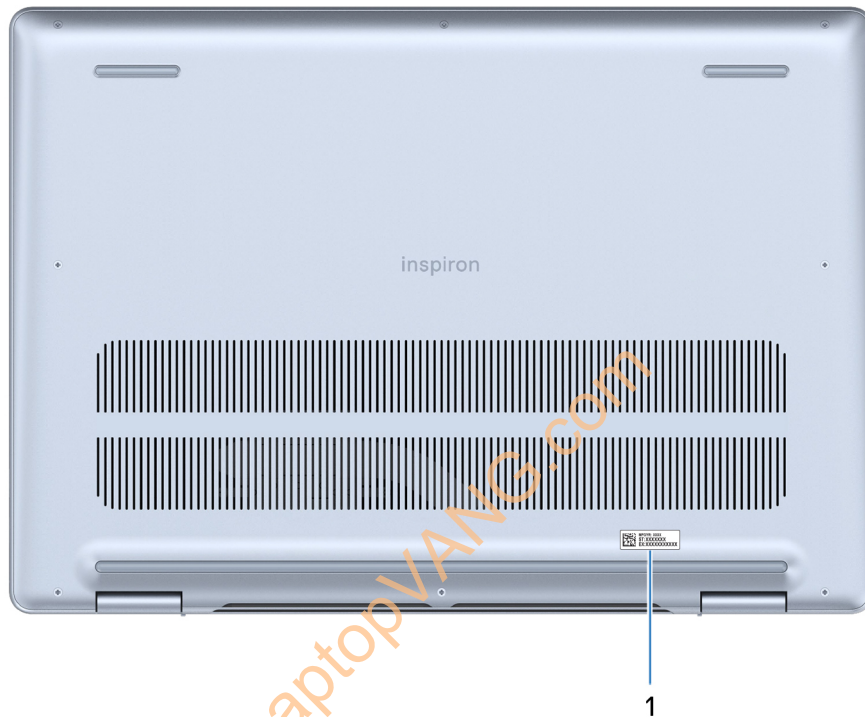
Provides visual output to the user.

Bottom

Figure 5. Bottom view

1. **Service Tag label**

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.

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.
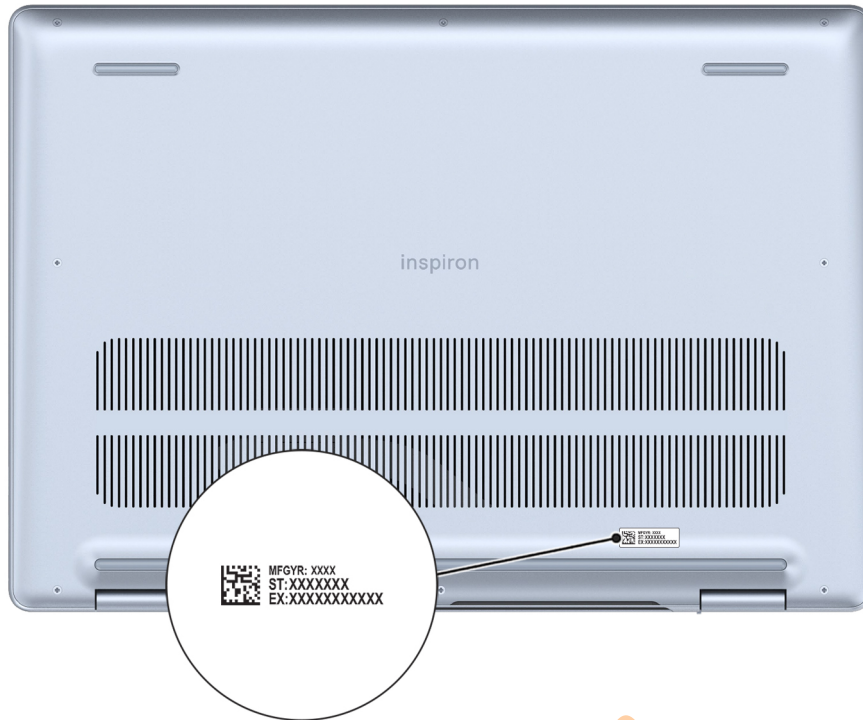
Figure 6. Service Tag location

Battery charge and status light

The following table lists the battery charge and status light behavior of your Inspiron 16 Plus 7640.

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, except for a trickle power. The context data is written to a hard drive.
- S5 (OFF) - The system is in a shutdown state.

Set up your Inspiron 16 Plus 7640

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.

Figure 7. Connect the power adapter

ⓘ **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 the Windows setup.

   Follow the on-screen instructions to complete the setup. When setting up, Dell Technologies 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 in Windows in S-mode

Resources	Description
	Dell Product Registration Register your computer with Dell.
	Dell Help & Support Access help and support for your computer.
	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/support/home/product-support/product/dell-supportassist-pcs-tablets/docs. (i) **NOTE:** In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.

Table 3. Locate Dell apps in Windows

Resources	Description
	My Dell MyDell is a software application that offers you a single streamlined engagement platform including account access, device information, and hardware settings. This software delivers intelligent features that automatically fine-tune your computer for the best possible audio, power, and performance. Get the most out of your Dell device with intelligent, personalized technology from MyDell. Following are the key features of MyDell: ● Application ● Audio ● Power ● Color and Display ● Presence detection For more information about how to use MyDell, see product guides at www.dell.com/support.
	Dell Update Updates your computer with critical fixes and latest device drivers as they become available. For more information about using Dell Update, see the product guides and third-party license documents at www.dell.com/support.
	Dell Digital Delivery Download software applications, which are purchased but not preinstalled on your computer. For more information about using Dell Digital Delivery, search in the Knowledge Base Resource at www.dell.com/support.
	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/support/home/product-support/product/dell-supportassist-pcs-tablets/docs. (i) **NOTE:** In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.

Specifications of Inspiron 16 Plus 7640

Dimensions and weight

The following table lists the height, width, depth, and weight of your Inspiron 16 Plus 7640.

Table 4. Dimensions and weight

Description	Values
Height:	
Front height	16.70 mm (0.66 in.)
Rear height	18.20 mm (0.72 in.)
Width	356.78 mm (14.05 in.)
Depth	250.60 mm (9.87 in.)
Weight ⓘ **NOTE:** The weight of your computer depends on the configuration that is ordered and manufacturing variability.	2.16 kg (4.76 lb), maximum

Processor

The following table lists the details of the processors that are supported for your Inspiron 16 Plus 7640.

Table 5. Processor

Description	Option one	Option two	Option three
Processor type	Intel Core Ultra 5 125H	Intel Core Ultra 7 155H	Intel Core Ultra 9 185H
Processor wattage	28 W	28 W	45 W
Processor total core count	14	16	16
Performance-cores	4	6	6
Efficient-cores	8	8	8
Processor total thread counts (i) **NOTE:** Intel Hyper-Threading Technology is only available on Performance-cores.	18	22	22
Processor speed	Up to 4.5 GHz	Up to 4.8 GHz	Up to 5.1 GHz
Performance-cores frequency			
Processor base frequency	1.2 GHz	1.4 GHz	2.3 GHz
Maximum turbo frequency	4.5 GHz	4.8 GHz	5.1 GHz
Efficient-cores frequency			
Processor base frequency	0.7 GHz	0.9 GHz	1.8 GHz
Maximum turbo frequency	3.6 GHz	3.8 GHz	3.8 GHz
Processor cache	18 MB	24 MB	24 MB
Integrated graphics	Intel Arc Graphics	Intel Arc Graphics	Intel Arc Graphics

Table 6. Processor

Description	Option four	Option five	Option six
Processor type	12th Generation Intel Core i5-12450H	13th Generation Intel Core i5-13420H	13th Generation Intel Core i7-13620H
Processor wattage	45 W	45 W	45 W
Processor total core count	8	8	10
Performance-cores	4	4	6
Efficient-cores	4	4	4
Processor total thread counts ⓘ **NOTE:** Intel Hyper-Threading Technology is only available on Performance-cores.	12	12	16
Processor speed	Up to 4.4 GHz	Up to 4.6 GHz	Up to 4.9 GHz
Performance-cores frequency			
Processor base frequency	2 GHz	2.1 GHz	2.4 GHz
Maximum turbo frequency	4.4 GHz	4.6 GHz	4.9 GHz
Efficient-cores frequency			
Processor base frequency	1.5 GHz	1.5 GHz	1.8 GHz
Maximum turbo frequency	3.3 GHz	3.4 GHz	3.6 GHz
Processor cache	12 MB	12 MB	24 MB
Integrated graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics

Chipset

The following table lists the details of the chipset that is supported for your Inspiron 16 Plus 7640.

Table 7. Chipset

Description	Option one	Option two
Processors	● 12th Generation Intel Core i5 ● 13th Generation Intel Core i5/i7	Intel Core Ultra Processor 5/7/9
Chipset	Integrated in the processor	Integrated in the processor
DRAM bus width	64-bit	64-bit
Flash EPROM	32 MB	32 MB + 16 MB
PCIe bus	Up to Gen4	Up to Gen4

Operating system

Your Inspiron 16 Plus 7640 supports the following operating systems:

- Windows 11 Pro, 64-bit
- Windows 11 Pro National Education, 64-bit
- Windows 11 Home, 64-bit

Memory

The following table lists the memory specifications of your Inspiron 16 Plus 7640.

Table 8. Memory specifications

Description	In computers shipped with 12th Generation Intel Core i5 or 13th Generation Intel Core i5/i7 processor	In computers shipped with Intel Core Ultra 5/7/9 processor
Memory slots	Onboard memory (no slots)	Onboard memory (no slots)
Memory type	Dual-channel LPDDR5x	Dual-channel LPDDR5x
Memory speed	4800 MT/s	6400 MT/s
Maximum memory configuration	16	16
Minimum memory configuration	16	32
Memory configurations supported	16 GB: 2 x 8 GB, LPDDR5x, dual-channel, 4800 MT/s	16 GB: 2 x 8 GB, LPDDR5x, dual-channel, 6400 MT/s 32 GB: 2 x 16 GB, LPDDR5x, dual-channel, 6400 MT/s

External ports

The following table lists the external ports on your Inspiron 16 Plus 7640.

Table 9. External ports

Description	Values
USB ports	- Two USB 3.2 Gen 1 (5 Gbps) ports - One Thunderbolt 4 port with DisplayPort Alt Mode and Power Delivery
Audio port	One universal audio jack
Video port/ports	One HDMI 1.4 port
Media-card reader	One SD-card slot
Power-adapter port	One 4.50 mm x 2.90 mm DC-in
Security-cable slot	Not supported

Internal slots

The following table lists the internal slots of your Inspiron 16 Plus 7640.

Table 10. Internal slots

Description	Values
M.2	- One M.2 2230 slot for WiFi and Bluetooth combo card - One M.2 2230/2280 slot for solid-state drive **(i) 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) module specifications of your Inspiron 16 Plus 7640.

Table 11. Wireless module specifications

Description	In computers shipped with 12th Generation Intel Core i5 or 13th Generation Intel Core i5/i7 processor	In computers shipped with Intel Core Ultra 5/7/9 processor	In computers shipped with Intel Core Ultra 5/7/9 processor
Model number	Realtek RTL8852BE	Intel AX211	Intel BE200
Transfer rate	Up to 1201 Mbps	Up to 2400 Mbps	Up to 5760 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz/6 GHz	2.4 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 6E (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)	- WiFi 802.11a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac) - Wi-Fi 6E (WiFi 802.11ax) - Wi-Fi 7 (WiFi 802.11be)
Encryption	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP
Bluetooth wireless card	Bluetooth 5.3 wireless card	Bluetooth 5.3 wireless card	Bluetooth 5.4 wireless card
	(i) NOTE: The version of the Bluetooth wireless card may vary depending on the operating system that is installed on your computer.		

Audio

The following table lists the audio specifications of your Inspiron 16 Plus 7640.

Table 12. Audio specifications

Description	Values
Audio controller	Realtek ALC3254
Stereo conversion	Supported
Internal audio interface	High-definition audio interface

Table 12. Audio specifications (continued)

Description	Values
External audio interface	One universal audio jack
Number of speakers	2
Internal-speaker amplifier	Supported
External volume controls	Keyboard shortcut controls
Speaker output:	

	Average speaker output	2 W x 2 = 4 W
	Peak speaker output	2.5 W x 2 = 5 W

Subwoofer output	Not supported
Microphone	Digital-array microphones in camera assembly

Storage

This section lists the storage options on your Inspiron 16 Plus 7640.

Your Inspiron 16 Plus 7640 supports one M.2 2230 or M.2 2280 solid-state drive. The primary drive of your Inspiron 16 Plus 7640 is the M.2 solid-state drive installed.

Table 13. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid-state drive	PCIe NVMe Gen4 x4, up to 64 Gbps	Up to 1 TB
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 that are supported on your Inspiron 16 Plus 7640.

Table 14. Media-card reader specifications

Description	Values
Media-card type	One SD-card slot
Media-cards supported	- Secure Digital (SD) - Secure Digital High Capacity (SDHC) - Secure Digital Extended Capacity (SDXC)
ⓘ **NOTE:** The maximum capacity supported by the media-card reader varies depending on the standard of the media card that is installed on your computer.	

Keyboard

The following table lists the keyboard specifications of your Inspiron 16 Plus 7640.

Table 15. Keyboard specifications

Description	Values
Keyboard type	- Standard AI hotkey non-backlit keyboard (for computers shipped with 12th Generation Intel Core i5 processor only). - Standard backlit keyboard - Standard AI hotkey backlit keyboard
Keyboard layout	QWERTY
Number of keys	- United States and Canada: 79 keys - United Kingdom: 80 keys - Japan: 83 keys
Keyboard size	X=19.05 mm key pitch Y=18.05 mm key pitch
Keyboard shortcuts	Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key. (i) **NOTE:** You can define the primary behavior of the function keys (F1–F12) changing **Function Key Behavior** in BIOS setup program. For more information, see Keyboard shortcuts.

Keyboard shortcuts of Inspiron 16 Plus 7640

(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 (see 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**.

Table 16. List of keyboard shortcuts

Function key	Primary behavior
F1	Mute audio
F2	Decrease volume
F3	Increase volume
F4	Play/Pause

Table 16. List of keyboard shortcuts (continued)

Function key	Primary behavior
F5	Keyboard-backlight (i) **NOTE:** Toggle to cycle the keyboard backlight status through off, low-backlight, and high-backlight (i) **NOTE:** Not applicable to computers shipped with 12th Generation Intel Core i5 processor.
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 17. 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 the application menu
fn + / (i) **NOTE:** Brazilian keyboard only	Open the application menu
fn + Space bar	Open Emoji menu
fn + esc	Toggle fn-key lock
fn + Left arrow	Home
fn + Right arrow	End
fn + Copilot	Open the application menu

Camera

The following table lists the camera specifications of your Inspiron 16 Plus 7640.

Table 18. Camera specifications

Description	Values
Number of cameras	One
Camera type	FHD camera
Camera location	Front camera
Camera sensor type	CMOS sensor technology
Camera resolution:	

Table 18. Camera specifications (continued)

Description		Values
	Still image	2.07 megapixel
	Video	1920 x 1080 (FHD) at 30 fps
Diagonal viewing angle:		82 degrees

Touchpad

The following table lists the touchpad specifications of your Inspiron 16 Plus 7640.

Table 19. 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 7640.

Table 20. Power adapter specifications

Description		For computers shipped with 12th Generation Intel Core i5 processor	For computers shipped with 13th Generation Intel Core i5/i7 or Intel Core Ultra 5/7/9 processor	For computers shipped with Intel Core Ultra 5/7/9 processor	For computers shipped with 13th Generation Intel Core i5/i7 or Intel Core Ultra 5/7/9 processor	For computers shipped with Intel Core Ultra 5/7/9 processor
Type		65 W AC, 4.50 mm barrel	90 W AC, 4.50 mm barrel	130 W, 4.50 mm barrel	100 W, USB Type-C	130 W, USB Type-C
Connector dimensions:						
	External diameter	4.50 mm	4.50 mm	4.50 mm	Not applicable	Not applicable
	Internal diameter	2.90 mm	2.90 mm	2.90 mm	Not applicable	Not applicable
Input voltage		100 VAC–240 VAC	100 VAC–240 VAC	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	50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)		1.70 A	1.50 A	1.80 A	1.70 A	1.80 A
Output current (continuous)		3.34 A	4.62 A	6.67 A	● 20 VDC/5 A ● 15 VDC/3 A	6.50 A

Table 20. Power adapter specifications (continued)

Description		For computers shipped with 12th Generation Intel Core i5 processor	For computers shipped with 13th Generation Intel Core i5/i7 or Intel Core Ultra 5/7/9 processor	For computers shipped with Intel Core Ultra 5/7/9 processor	For computers shipped with 13th Generation Intel Core i5/i7 or Intel Core Ultra 5/7/9 processor	For computers shipped with Intel Core Ultra 5/7/9 processor
					• 9 VDC/3 A • 5 VDC/3 A	
Rated output voltage		19.50 VDC	19.50 VDC	19.50 VDC	• 20 VDC • 15 VDC • 9 VDC • 5 V DC	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)	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)	-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 7640.

Table 21. Battery specifications

Description		For computers shipped with 12th Generation Intel Core i5 processor or 13th Generation Intel Core i5/i7	For computers shipped with Intel Core Ultra 5/7/9 processor	For computers shipped with Intel Core Ultra 5/7/9 processor
Battery type		4-cell, 54 Wh "smart" lithium-ion	4-cell, 64 Wh "smart" lithium-ion	6-cell, 90 Wh "smart" lithium-ion
Battery voltage		15 VDC	15.20 VDC	11.70 VDC
Battery weight (minimum)		0.231 kg (0.51 lb)	0.26 kg (0.57 lb)	0.34 kg (0.75 lb)
Battery dimensions:				
	Height	271.90 mm (10.70 in.)	271.90 mm (10.70 in.)	294.90 mm (11.31 in.)
	Width	82 mm (3.23 in.)	82 mm (3.23 in.)	77.50 mm (3.05 in.)
	Depth	5.75 mm (0.23 in.)	5.75 mm (0.23 in.)	7.56 mm (0.30 in.)
Temperature range:				
	Operating	• 0°C to 45°C, 32°F to 113°F (Charge) • 0°C to 70°C, 32°F to 150°F (Discharge)	• 0°C to 45°C, 32°F to 113°F (Charge) • 0°C to 70°C, 32°F to 150°F (Discharge)	• 0°C to 45°C, 32°F to 113°F (Charge) • 0°C to 70°C, 32°F to 150°F (Discharge)

Table 21. Battery specifications (continued)

Description		For computers shipped with 12th Generation Intel Core i5 processor or 13th Generation Intel Core i5/i7	For computers shipped with Intel Core Ultra 5/7/9 processor	For computers shipped with Intel Core Ultra 5/7/9 processor
	Storage	-20°C to 60°C (-4°F to 140°F)	-20°C to 60°C (-4°F to 140°F)	-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.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Battery charging time (approximate) (i) **NOTE:** Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information about Dell Power Manager, search in the Knowledge Base Resource at www.dell.com/support.		2 hours (ExpressCharge) 3 hours (standard charge)	2 hours (ExpressCharge) 3 hours (standard charge)	20 minutes, from 0% to up to 35% battery level (ExpressCharge Boost) 2 hours (ExpressCharge) 3 hours (standard charge)
Coin-cell battery		Not supported	Not supported	Not supported

⚠ **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 7640.

Table 22. Display specifications

Description	For computers shipped with 12th Generation Intel Core i5 processor or 13th Generation Intel Core i5/i7 processor	For computers shipped with Intel Core Ultra 5/7/9 processor	For computers shipped with Intel Core Ultra 5/7/9 processor	For computers shipped with 12th Generation Intel Core i5 processor,13th Generation Intel Core i5/i7, or Intel Core Ultra 5/7/9 processor
Display type	16-inch, Full High Definition Plus (FHD+) with ComfortView	16-inch, Full High Definition Plus (FHD+) with Dolby Vision	16-inch, Full High Definition Plus (FHD+) with Dolby Vision	16-inch, 2.5K with Dolby Vision
Touch options	Not supported	Not supported	Not supported	Not supported
Display-panel technology	Wide-viewing angle (WVA)	Wide-viewing angle (WVA)	Wide-viewing angle (WVA)	Wide-viewing angle (WVA)
Display-panel dimensions (active area):				

Table 22. Display specifications (continued)

Description		For computers shipped with 12th Generation Intel Core i5 processor or 13th Generation Intel Core i5/i7 processor	For computers shipped with Intel Core Ultra 5/7/9 processor	For computers shipped with Intel Core Ultra 5/7/9 processor	For computers shipped with 12th Generation Intel Core i5 processor,13th Generation Intel Core i5/i7, or Intel Core Ultra 5/7/9 processor
	Height	344.68 mm (13.57 in.)	344.68 mm (13.57 in.)	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.)	215.42 mm (8.48 in.)	215.42 mm (8.48 in.)
	Diagonal	406.46 mm (16 in.)	406.46 mm (16 in.)	406.46 mm (16 in.)	406.46 mm (16 in.)
Display-panel native resolution		1920 x 1200	2240 x 1400	2240 x 1400	2560 x 1600
Luminance (typical)		250 nits	300 nits	300 nits	300 nits
Megapixels		2.30	2.30	2.30	4.08
Color gamut		100% sRGB (typical)	100% sRGB (typical)	100% sRGB (typical)	100% sRGB (typical)
Pixels Per Inch (PPI)		141	141	141	189
Contrast ratio (typical)		● 1000:1 (minimum) ● 1200:1 (typical)	● 1000:1 (minimum) ● 1200:1 (typical)	● 1000:1 (minimum) ● 1200:1 (typical)	● 1000:1 (minimum) ● 1200:1 (typical)
Response time (maximum)		35 ms	35 ms	35 ms	35 ms
Refresh rate		60 Hz	60 Hz	60 Hz	120 Hz
Horizontal view angle		● +/- 80 degrees (minimum) ● +/- 85 degrees (typical)	● +/- 80 degrees (minimum) ● +/- 85 degrees (typical)	● +/- 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)	● +/- 80 degrees (minimum) ● +/- 85 degrees (typical)	● +/- 80 degrees (minimum) ● +/- 85 degrees (typical)
Pixel pitch		0.180 mm x 0.180 mm	0.180 mm x 0.180 mm	0.180 mm x 0.180 mm	0.1346 mm x 0.1346 mm
Power consumption (maximum)		4 W (at mosaic pattern, 60 Hz)	4 W (at mosaic pattern, 60 Hz)	4.40 W (at mosaic pattern, 60 Hz)	4 W (at mosaic pattern, 120 Hz)
Anti-glare vs glossy finish		Anti-glare	Anti-glare	Glossy	Anti-glare

Fingerprint reader (optional)

The following table lists the specifications of the optional fingerprint-reader of your Inspiron 16 Plus 7640.

Table 23. Fingerprint reader specifications

Description	Values
Fingerprint-reader sensor technology	Trans-capacitive sensing
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	100 x 88 pixels

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Inspiron 16 Plus 7640.

Table 24. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics	Shared system memory	12th Generation Intel Core i5
Intel UHD Graphics	Shared system memory	13th Generation Intel Core i5/i7
Intel Arc Graphics	Shared system memory	14th Generation Intel Ultra 5/7/9

Operating and storage environment

This table lists the operating and storage specifications of your Inspiron 16 Plus 7640.

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

Table 25. 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
Shock (maximum)	110 G†	160 G†
Altitude range	-15.2 m to 3048 m (-49.87 ft to 10000 ft)	-15.2 m to 10668 m (-49.87 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 the user environment.

† Measured using a 2 ms half-sine pulse.

ComfortView

⚠️ **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.

ComfortView mode can be enabled and configured using the Dell CinemaColor application.

ComfortView mode complies with TÜV Rheinland's requirement for low blue light displays.

Low blue light: Dell ComfortView software technology reduces harmful blue light emissions to make extended screen time easy on your eyes.

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 cm and 70 cm) from your eyes.