DELL Technologies

XPS 16 9640

Owner's Manual

DELL Technologies

Contents

Views of XPS 16 9640

Left

Figure 1. Left view

1. **Thunderbolt 4.0 port with Power Delivery and DisplayPort (2)**

   Supports USB4, DisplayPort 2.1, 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:** Use the supplied USB Type-C to USB Type A and DisplayPort dongle to connect to 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.

Right

Figure 2. Right view

For computers shipped with integrated Intel Arc Graphics, NVIDIA GeForce RTX 4050, or NVIDIA GeForce RTX 4060 GPUs:

1. **microSD-card slot v6.0**

   The microSD-card slot reads from and writes to the microSD card. The computer supports the following card types:

   - Micro Secure Digital (microSD)
   - Micro Secure Digital High Capacity (microSDHC)
   - Micro Secure Digital Extended Capacity (microSDXC)

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

Supports USB4, DisplayPort 2.1, 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:** Use the supplied USB Type-C to USB Type A and DisplayPort dongle to connect to 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.

3. **Headphone and speaker port**

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

For computers shipped with NVIDIA GeForce RTX 4070 GPUs:

1. **microSD-card slot v6.0**

The microSD-card slot reads from and writes to the microSD card. The computer supports the following card types:

- Micro Secure Digital (microSD)
- Micro Secure Digital High Capacity (microSDHC)
- Micro Secure Digital Extended Capacity (microSDXC)

2. **USB 3.2 Gen 2 (Type-C) port with DisplayPort**

Connect devices such as external storage devices, printers, and external displays. Provides data transfer rate of up to 10 Gbps.

Supports DisplayPort 1.4 and also enables you to connect an external display using a display adapter.

(i) **NOTE:** Use the supplied USB Type-C to USB Type-A and DisplayPort dongle to connect a DisplayPort device.

3. **Headphone and speaker port**

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

Top

Figure 3. Top view

1. **Microphones (2)**

   Provide digital sound input for audio recording, voice calls, and so on.

2. **Capacitive touch function row**

   Displays media and display control keys or standard function keys, with the **esc** and **delete** keys.

   Press and hold the **fn** key on the physical keyboard to switch to the next set of keys.

   Press the **fn** key on the physical keyboard and the **esc** key on the capacitive touch function row to switch to the next set of keys and lock the mode of the panel.

3. **Power button with fingerprint reader**

   Press to turn on the computer if it is turned off, in sleep state, or in hibernate state. Place your finger on the power button steadily to log in.

   When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for 10 s to force shut-down the computer.

4. **Right speaker**

   Provides audio output.

5. **Touchpad**

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

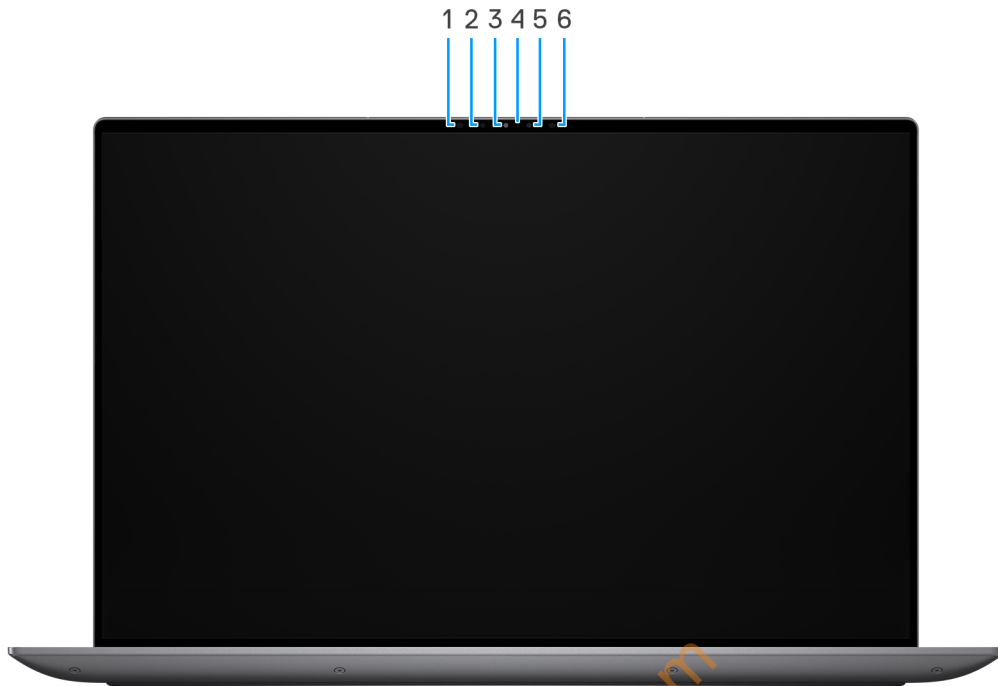6. **Left speaker**

   Provides audio output.

Front

Figure 4. Front view

1. **Infrared emitter**

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

2. **Infrared camera**

   Enhances security when paired with Windows Hello face authentication.

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. **Ambient-light sensor**

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

6. **Infrared emitter**

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

Bottom

Figure 5. Bottom view

1. **Left speaker**

   Provides audio output

   Air vents

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

2. **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.

3. **MyDell**

   MyDell provides a consolidated application experience housing capability that helps you get the most out of your computer. Intelligent, AI-based optimization features automatically fine-tune your computer for the best audio, video, battery, and performance. Each MyDell user experience is unique as the software learns and responds to the way you use your computer.

4. **Right speaker**

   Provides audio output

   Air vents

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

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.
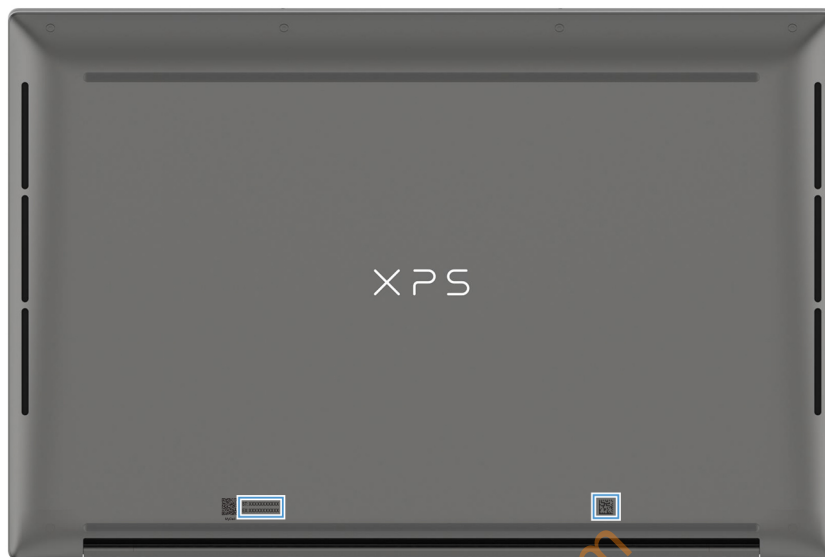
Figure 6. Location of the Service Tag

Set up your XPS 16 9640

About this task

(i) **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 and press the power button

(i) **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 operating system setup.

   For Windows:

   Follow the on-screen instructions to complete the setup. When setting up, Dell Technologies recommends that you:

   ● Connect to a network for Windows updates.

   (i) **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 1. Locate Dell apps in Windows

Resources	Description
Figure 8. My Dell	**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.
Figure 9. Dell Update	**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.
Figure 10. Dell Digital Delivery	**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.
Figure 11. Support Assist	**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. ⓘ **NOTE:** In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.

Specifications of XPS 16 9640

Dimensions and weight

The following table lists the height, width, depth, and weight of your XPS 16 9640.

Table 2. Dimensions and weight

Description	Values
Height	18.70 mm (0.74 in.)
Width	358.18 mm (14.10 in.)
Depth	240.05 mm (9.50 in.)
Weight ⓘ **NOTE:** The weight of your computer depends on the configuration that is ordered and manufacturing variability.	● Minimum: 2.13 kg (4.70 lbs) for computers shipped with FHD+ panel ● Minimum: 2.18 kg (4.80 lbs) for computers that are shipped with UHD+ panel ● Maximum: 2.34 kg (5.15 lbs)

Processor

The following table lists the details of the processors that are supported for your XPS 16 9640.

Table 3. Processor

Description	Option one	Option two
Processor type	Intel Core Ultra 7 155H	Intel Core Ultra 7 165H
Processor wattage	28 W	28 W
Processor total core count	16	16
Performance-cores	6	6
Efficient-cores	8	8
Processor total thread counts ⓘ **NOTE:** Intel® Hyper-Threading Technology is only available on Performance-cores.	20	20
Processor speed	Up to 4.8 GHz	Up to 5.0 GHz
Performance-cores frequency		
Processor base frequency	1.4 Ghz	1.4 Ghz
Maximum turbo frequency	4.8 Ghz	5.0 Ghz
Efficient-cores frequency		

Table 3. Processor (continued)

Description		Option one	Option two
	Processor base frequency	0.9 Ghz	0.9 Ghz
	Maximum turbo frequency	3.8 Ghz	3.8 Ghz
Thermal Mode/Thermal Design Power (TDP)			
	Cool	• Type 4: 20 W + 20 W • Type 3: 20 W + 20 W • UMA: 30 W	• Type 4: 20 W + 20 W • Type 3: 20 W + 20 W • UMA: 30 W
	Optimized	• Type 4: 20 W + 50 W • Type 3: 20 W + 40 W • UMA: 45 W	• Type 4: 20 W + 50 W • Type 3: 20 W + 40 W • UMA: 45 W
	Quiet	• Type 4: 20 W + 40 W • Type 3: 20 W + 30 W • UMA: 30 W	• Type 4: 20 W + 40 W • Type 3: 20 W + 30 W • UMA: 30 W
	Ultra Performance	• Type 4: 20 W + 60 W • Type 3: 20 W + 50 W • UMA: 55 W	• Type 4: 20 W + 60 W • Type 3: 20 W + 50 W • UMA: 55 W
		ⓘ **NOTE:** Processor clock speeds and thermal design power differ according to the thermal mode selected in the My Dell app on your computer.	
Processor cache		24 MB	24 MB
Integrated graphics		Intel Arc Graphics ⓘ **NOTE:** Requires 128-bit (Two-channel) memory populated	Not applicable

Chipset

The following table lists the details of the chipset that is supported for your XPS 16 9640.

Table 4. Chipset

Description	Values
Chipset	Integrated with the processor
Processor	Intel Core Ultra 7 processors
DRAM bus width	128-bit (per 64-bit channel)
Flash EPROM	64 MB
PCIe bus	Up to Gen 5.0

Operating system

Your XPS 16 9640 supports the following operating systems:

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

Memory

The following table lists the memory specifications of your XPS 16 9640.

Table 5. Memory specifications

Description	For computers shipped with Intel Arc Graphics	For computers shipped with NVIDIA GeForce RTX 4050 or NVIDIA GeForce RTX 4060 GPUs:	For computers shipped with NVIDIA GeForce RTX 4070 GPUs:
Memory slots	Onboard	Onboard	Onboard
Memory type	LPDDR5x	LPDDR5x	LPDDR5x
Memory speed	6400 MT/s	6400 MT/s	7467 MT/s
Maximum memory configuration	16 GB	64 GB	64 GB
Minimum memory configuration	16 GB	16 GB	32 GB
Memory configurations supported	16 GB: LPDDR5x, 6400 MT/s (onboard)	• 16 GB: LPDDR5x, 6400 MT/s (onboard) • 32 GB: LPDDR5x, 6400 MT/s (onboard) • 64 GB: LPDDR5x, 6400 MT/s (onboard)	• 32 GB: LPDDR5x, 7467 MT/s (onboard) • 64 GB: LPDDR5x, 7467 MT/s (onboard)

External ports

The following table lists the external ports of your XPS 16 9640.

Table 6. External ports

Description	Values
Network port	Not supported
USB ports	For computers shipped with integrated Intel Arc Graphics, NVIDIA GeForce RTX 4050, or NVIDIA GeForce RTX 4060 GPUs: • Three Thunderbolt 4 Gen 2 Type-C ports with DisplayPort Alt Mode/USB4 and PowerDelivery For computers shipped with NVIDIA GeForce RTX 4070 GPUs: • Two Thunderbolt 4 Gen 2 Type-C ports with DisplayPort Alt Mode/USB4 and PowerDelivery (Left side) • One USB 3.2 Gen 2 Type-C port with Power Delivery and DisplayPort (Right side)
Audio port	One headphone/microphone combo jack (3.5mm)
Video port	Via Thunderbolt 4 (USB Type-C) ports
Media-card reader	One microSD card slot v6.0
Power-adapter port	USB Type-C
Security-cable slot	Not supported

Internal slots

The following table lists the internal slots of your XPS 16 9640.

Table 7. Internal slots

Description	Values
M.2	One slot for M.2 2230 and M.2 2280 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 that is supported on your XPS 16 9640.

Table 8. Wireless module specifications

Description	Values
Model number	Intel WiFi 7 BE200
Transfer rate	Up to 5760 Mbps
Frequency bands supported	2.4 GHz/5 GHz
Wireless standards	• Wi-Fi 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	• 128-bit AES-CCMP • 256-bit AES-GCMP
Bluetooth wireless card	Bluetooth 5.4
	(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 XPS 16 9640.

Table 9. Audio specifications

Description	Values
Audio controller	Cirrus Logic CS42L43
Stereo conversion	Supported
Internal audio interface	SoundWire
External audio interface	Universal audio jack

Table 9. Audio specifications (continued)

Description	Values
Number of speakers	2 x Woofers 2 x Tweeters
Internal-speaker amplifier	Cirrus Logic CS35L56
External volume controls	Keyboard shortcut controls
Speaker output:	

	Average speaker output	- Woofer: 2 x 3 W - Tweeters: 2 x 2 W
	Peak speaker output	- Woofer: 2 x 3.5 W - Tweeters: 2 x 2.5 W

Subwoofer output	Not supported
Microphone	Digital-array microphones

Storage

This section lists the storage options on your XPS 16 9640.

Table 10. Storage specifications

Storage type	Interface type	Capacity
M.2 2230, Class 35 solid-state drive	PCIe NVMe Gen4 x4	512 GB
M.2 2280, Class 40 solid-state drive	PCIe NVMe Gen4 x4	1 TB
M.2 2280, Class 40 solid-state drive	PCIe NVMe Gen4 x4	2 TB
M.2 2280, Class 40 solid-state drive	PCIe NVMe Gen4 x4	4 TB

Media-card reader

The following table lists the media cards that are supported on your XPS 16 9640.

Table 11. Media-card reader specifications

Description	Values
Media-card type	One microSD card slot v6.0
Media-cards supported	- Micro Secure Digital (microSD) - Micro Secure Digital High Capacity (microSDHC) - Micro Secure Digital Extended Capacity (microSDXC)
(i) **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 XPS 16 9640.

Table 12. Keyboard specifications

Description	Values
Keyboard type	Standard backlit ⓘ **NOTE:** The top row of the keyboard is a capacitive touch panel which displays standard function keys or media and display control keys.
Keyboard layout	QWERTY
Number of keys	● United States and Canada: 64 keys ● United Kingdom: 65 keys ● Japan: 68 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. ⓘ **NOTE:** You can define the primary behavior of the function keys (F1–F12) changing **Function Key Behavior** in BIOS setup program.

Keyboard shortcuts of XPS 16 9640

ⓘ **NOTE:** Keyboard characters may differ depending on the keyboard language configuration. Keys that are 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 that is 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 that is 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 top row of the keyboard is a capacitive touch panel. The **fn** mechanical key toggles between the keys **F1**-**F12** and keys for multimedia control. Releasing the **fn** key switches back to the previous mode.

Pressing the **fn** key and the **esc** key locks the "mode" of the capacitive touch panel. If the computer restarts, the default mode is the last mode set by the user before the computer is restarted.

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

Table 13. List of keyboard shortcuts

Keyboard shortcut	Behavior
fn	Switch between modes of the capacitive touch panel
fn + B	Pause
fn + S	Toggle scroll lock
fn + R	System request
fn + ctrl + B	Break
fn + esc	Lock the mode of the capacitive touch panel

Table 13. List of keyboard shortcuts (continued)

Keyboard shortcut	Behavior
fn + left arrow	Home
fn + right arrow	End
Copilot	Launch Copilot in Windows (i) **NOTE:** If Copilot in Windows is not available on your computer, the Copilot key launches Windows Search. For more information about Copilot in Windows, search in the Knowledge Base Resource at www.dell.com/support.

Camera

The following table lists the camera specifications of your XPS 16 9640.

Table 14. Camera specifications

Description	Values
Number of cameras	Two
Camera type	● FHD RGB camera ● IR camera
Camera location	Front camera
Camera sensor type	CMOS sensor technology
Camera resolution:	
Still image	2.07 megapixel
Video	1920 x 1080 (FHD) at 30 fps
Infrared camera resolution:	
Still image	0.23 megapixels
Video	640 x 360 at 15 fps
Diagonal viewing angle:	
Camera	81.30 degrees
Infrared camera	78.10 degrees

Touchpad

The following table lists the touchpad specifications of your XPS 16 9640.

Table 15. Touchpad specifications

Description	Values
Touchpad resolution:	> 300 DPI
Touchpad dimensions:	
Horizontal	148 mm (5.83 in.)

Table 15. Touchpad specifications (continued)

Description		Values
	Vertical	90 mm (3.54 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 XPS 16 9640.

Table 16. Power adapter specifications

Description		Values
Type		130W AC small form factor adapter, USB Type-C, E5
Power-adapter dimensions:		
	Height	22 mm (0.87 in.)
	Width	55 mm (2.17 in.)
	Depth	128 mm (5.04 in.)
Input voltage		100 VAC to 240 VAC
Input frequency		50 to 60 Hz
Input current (maximum)		1.80 A
Output current (continuous)		5 V/3 A 9 V/3 A 15 V/3 A 20 V/6.5 A
Rated output voltage		5 VDC 9 VDC 15 VDC 20 VDC
Temperature range:		
	Operating	0°C to 35°C (32°F to 95°F)
	Storage	-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 XPS 16 9640.

Table 17. Battery specifications

Description		Values
Battery type		6-cell, 99.5 Wh lithium-polymer, ExpressCharge
Battery voltage		11.70 VDC
Battery weight (maximum)		0.38 kg (0.84 lb)
Battery dimensions:		
	Height	7.26 mm (0.29 in.)
	Width	289.00 mm (11.40 in.)
	Depth	84.40 mm (3.32 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 65°C (-4°F to 149°F)
Battery operating time		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.		- Standard charge, 0°C to 50°C (32°F to 122°F): 4 hours - ExpressCharge, 0°C to 15°C (32°F to 59°F): 4 hours - ExpressCharge, 16°C to 45°C (60.80°F to 113°F): 2 hours - ExpressCharge, 46°C to 50°C (114.80°F to 122°F): 3 hours
Coin-cell battery		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 Technologies recommends that you charge the battery regularly for optimal power consumption. If your battery charge is 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 XPS 16 9640.

Table 18. Display specifications

Description	Option one	Option two
Display type	White Light Emitting Diode Full High Definition Plus (WLED FHD+), InfinityEdge, Eyesafe technology, low blue light display (hardware solution)	Organic-Light Emitting Diode Ultra High Definition Plus (OLED UHD+), InfinityEdge, Eyesafe technology, low blue light display (hardware solution)

Table 18. Display specifications (continued)

Description		Option one	Option two
Touch options		No	Pen support, Passive pen
Display-panel technology		Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)
Display-panel dimensions (active area):			
	Height	219.17 mm (8.63 in.)	219.17 mm (8.63 in.)
	Width	350.67 mm (13.81 in.)	350.67 mm (13.81 in.)
	Diagonal	413.51 mm (16.28 in.)	413.53 mm (16.28 in.)
Display-panel native resolution		1920 x 1200	3840 x 2400
Luminance (typical)		500 nits typical	400 nits typical
Megapixels		2.07	9.20
Color gamut		sRGB 100% typical	DCI-P3 100% typical
Pixels Per Inch (PPI)		139	278.10
Contrast ratio (minimum)		2000:1 typical	1,000,000:1 typical with SR-UL2
Response time (maximum)		35 ms	● 1 ms typical ● 2 ms maximum
Refresh rate		30 to 120 Hz	48 to 90 Hz
Horizontal view angle		+/- 88 degrees typical	+/- 89 degrees typical
Vertical view angle		+/- 88 degrees typical	+/- 89 degrees typical
Pixel pitch		0.18 mm	0.09 mm
Power consumption (maximum)		● 4.21 W @120 Hz ● 3.51 W @60 Hz	● 9.70 W @90 Hz typical ● 11.71 W @90 Hz maximum
Anti-glare vs glossy finish		Anti-glare	Anti-reflective, Anti-smudge

Fingerprint reader

The following table lists the fingerprint-reader specifications of your XPS 16 9640.

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

Table 19. Fingerprint reader specifications

Description	Values
Fingerprint-reader sensor technology	Capacitive
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	108 x 88

Sensor

The following table lists the sensor of your XPS 16 9640.

Table 20. Sensor

Sensor support
Accelerometer in the base: ST Micro LIS2DW12TR
Ambient Light Sensor (ALS) for the panel backlight control: ams-OSRAM TCS35303

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your XPS 16 9640.

Table 21. GPU—Integrated

Controller	Memory size	Processor
Intel Arc Graphics	Shared system memory	Intel Core Ultra 7 processors

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your XPS 16 9640.

Table 22. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce RTX 4050	6 GB	GDDR6
NVIDIA GeForce RTX 4060	8 GB	GDDR6
NVIDIA GeForce RTX 4070	8 GB	GDDR6

Multiple display support matrix

The following table lists the multiple display support matrix for your XPS 16 9640.

Table 23. Multiple display support matrix

Graphics Card	Discrete Graphics Controller Direct Output Mode	Supported external displays with computer internal display on	Supported external displays with computer internal display off
NVIDIA GeForce RTX 4050 and 4060	Not supported	- Three connected displays with DisplayPort support up to 4K/ 60 Hz. - One connected display with DisplayPort supports up to 8K/ 60 Hz: - One DisplayPort cable supports up to 8K/ 30 Hz, and - Two DisplayPort cables support up to 8K/ 60Hz.	- Four connected displays with DisplayPort support up to 4K/ 60 Hz. - Two connected displays with DisplayPort support up to 8K/ 60 Hz: - One DisplayPort cable supports up to 8K/ 30 Hz, and - Two DisplayPort cables support up to 8K/ 60 Hz.

Table 23. Multiple display support matrix (continued)

Graphics Card	Discrete Graphics Controller Direct Output Mode	Supported external displays with computer internal display on	Supported external displays with computer internal display off
NVIDIA GeForce RTX 4070	Supported	- Three connected displays with DisplayPort support up to 4K/ 60 Hz. - One connected display with DisplayPort supports up to 8K/ 60 Hz: - One DisplayPort cable supports up to 8K/ 30 Hz, and - Two DisplayPort cables support up to 8K/ 60Hz.	- Four connected displays with DisplayPort support up to 4K/ 60 Hz. - Two connected displays with DisplayPort support up to 8K/ 60 Hz: - One DisplayPort cable supports up to 8K/ 30 Hz, and - Two DisplayPort cables support up to 8K/ 60 Hz.

Hardware security

The following table lists the hardware security of your XPS 16 9640.

Table 24. Hardware security

Hardware security
Trusted Platform Module (TPM) 2.0
FIPS 140-2 Certified for TPM
TCG Certification for TPM (Trusted Computing Group)
Windows Hello-compliant fingerprint reader in power button
Windows Hello camera in upper bezel

Operating and storage environment

This table lists the operating and storage specifications of your XPS 16 9640.

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 (4.64 ft to 5518.4 ft)	-15.2 m to 10668 m (4.64 ft to 19234.4 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.