


# XPS 15 9520

## Setup and Specifications



## Notes, cautions, and warnings

 **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.

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# Set up your XPS 15 9520

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

1. Connect the power adapter and press the power button.

**i** **NOTE:** You can charge your computer by connecting the power adapter to one of the Thunderbolt 4 (USB4) Type-C ports or to the USB 3.2 Gen 2 Type-C port located on your computer.



**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 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.

**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.

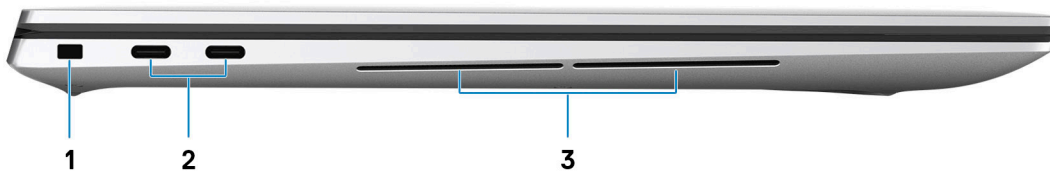
3. Locate and use Dell apps from the Windows Start menu—Recommended.

**Table 1. Locate Dell apps**

Resources	Description
	<p><b>My Dell</b></p> <p>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.</p>
	<p><b>SupportAssist</b></p> <p>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 <i>SupportAssist for Home PCs User's Guide</i> at <a href="http://www.dell.com/serviceabilitytools">www.dell.com/serviceabilitytools</a>. Click <b>SupportAssist</b> and then, click <b>SupportAssist for Home PCs</b>.</p> <p><b>NOTE:</b> In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.</p>
	<p><b>Dell Update</b></p> <p>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 <a href="http://www.dell.com/support">www.dell.com/support</a>.</p>
	<p><b>Dell Digital Delivery</b></p> <p>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 <a href="http://www.dell.com/support">www.dell.com/support</a>.</p>

## Views of XPS 15 9520

### Left



#### 1. Security-cable slot (wedge-shaped)

Connect a security cable to prevent unauthorized movement of your computer.

#### 2. Thunderbolt 4 (USB4) Type-C port with Power Delivery (2)

Supports USB4 Gen 3x2, DisplayPort 1.4a and Thunderbolt 4. Enables you to connect to an external display using a display adapter. Provides data transfer rates up to 40 Gbps for USB4 Gen 3x2 Thunderbolt 4. Supports Power Delivery that enables two-way power supply between devices. Provides up to 5 V/ 3 A power output that enables faster charging.

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

**NOTE:** A 40 Gbps-certified cable is required to achieve the maximum performance of 40 Gbps.

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

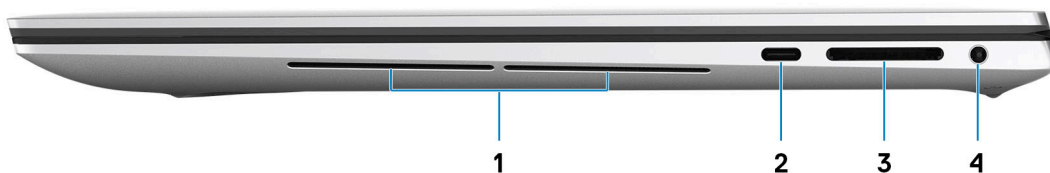
**NOTE:** USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

**NOTE:** You can connect a Dell docking station to the Thunderbolt 4 ports. For more information, see the knowledge base article [000124295](https://www.dell.com/support/article/000124295) at [www.dell.com/support](https://www.dell.com/support).

#### 3. Left woofer

Enhances low-frequency audio output.

### Right



#### 1. Right woofer

Enhances low-frequency audio output.

#### 2. USB 3.2 Gen 2 (Type-C) port with DisplayPort and Power Delivery

Connect peripherals such as external storage devices, printers, and external displays. Provides data transfer rate of up to 10 Gbps for USB 3.2 Gen 2x1 port.

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

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

Supports Power Delivery that enables two-way power supply between devices. Provides up to 5 V/1.50 A power output

### 3. SD-card slot

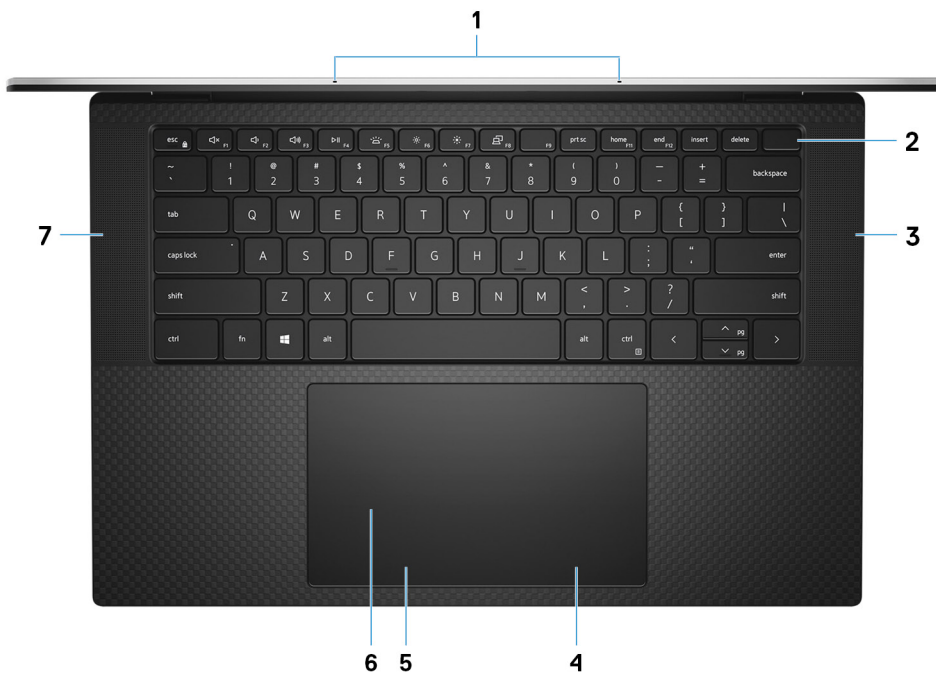
Reads from and writes to the SD card. The computer supports the following card types:

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

### 4. Universal audio jack

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

## Top



### 1. Microphones (2)

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

### 2. Power button with 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 10 seconds to force shut-down the computer.

Place your finger on the power button to log in with the fingerprint reader.

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

**i** **NOTE:** In Windows, Windows Hello supports a defined number of fingerprints per account. For more information about configuring your fingerprint reader with Windows Hello, search in the Knowledge Base Resource at [www.dell.com/support](http://www.dell.com/support).

### 3. Right speaker

Provides audio output.

**4. Right-click area**

Press to right-click.

**5. Left-click area**

Press to left-click.

**6. Touchpad**

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

**7. Left speaker**

Provides audio output.

## Front



**1. Infrared emitter**

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



## 2. Ambient-light sensor

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

## 3. RGB-infrared camera

This combined camera supports both infrared Windows Hello facial recognition and standard RGB imaging for photos and videos.

## 4. Camera-status light

Turns on when the camera is in use.

## 5. Infrared emitter

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

## 6. Battery-status light

Indicates the battery-charge status.

Solid white—Power adapter is connected and the battery has more than 5% charge.

Amber—Computer is running on battery and the battery has less than 5% charge.

Off—Power adapter is disconnected or the battery is fully charged.

# Bottom



## 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.

# Specifications of XPS 15 9520

## Dimensions and weight

The following table lists the height, width, depth, and weight of your XPS 15 9520.

**Table 2. Dimensions and weight**

Description	Values
Height:	
Front height	18.54 mm (0.73 in.)
Rear height	11.65 mm (0.46 in.)
Width	344.40 mm (13.56 in.)
Depth	230.14 mm (9.06 in.)
Weight (minimum)	<ul style="list-style-type: none"> <li>• 1.84 kg (4.06 lb) for non-touch with 56 Wh battery</li> <li>• 1.92 kg (4.22 lb) for non-touch with 86 Wh battery</li> <li>• 1.96 kg (4.31 lb) for OLED touch with 86 Wh battery</li> <li>• 2.10 kg (4.62 lb) for 4K+ touch with 86 Wh battery</li> </ul> <p><b>NOTE:</b> The weight of your computer depends on the configuration ordered and manufacturing variability.</p>

## Processor

The following table lists the details of the processors supported by your XPS 15 9520.

**Table 3. Processor**

Description	Option one	Option two	Option three
Processor type	12 <sup>th</sup> Generation Intel Core i5-12500H	12 <sup>th</sup> Generation Intel Core i7-12700H	12 <sup>th</sup> Generation Intel Core i9-12900HK
Processor wattage	45 W	45 W	45 W
Processor core count	12	14	14
Processor thread count	16	20	20
Processor speed	Up to 4.50 GHz	Up to 4.70 GHz	Up to 5 GHz
Processor cache	18 MB	24 MB	24 MB
Integrated graphics	Intel Iris X <sup>e</sup> Graphics	Intel Iris X <sup>e</sup> Graphics	Intel Iris X <sup>e</sup> Graphics

# Chipset

The following table lists the details of the chipset supported by your XPS 15 9520.

**Table 4. Chipset**

Description	Values
Chipset	Intel 600 Series
Processor	12 <sup>th</sup> Generation Intel Core i5/i7/i9k
DRAM bus width	64-bit
Flash EPROM	64 MB
PCIe bus	Up to PCIe Gen 4.0

# Operating system

Your XPS 15 9520 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 15 9520.


**Table 5. Memory specifications**

Description	Values
Memory slots	Two-SODIMM slots
Memory type	DDR5
Memory speed	4800 MHz
Maximum memory configuration	64 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, 32 GB
Memory configurations supported	<ul style="list-style-type: none"><li>• 8 GB, 1 x 8 GB, DDR5, 4800 MHz</li><li>• 16 GB, 2 x 8 GB, DDR5, 4800 MHz, dual-channel</li><li>• 32 GB, 2 x 16 GB, DDR5, 4800 MHz, dual-channel</li><li>• 64 GB, 2 x 32 GB, DDR5, 4800 MHz, dual-channel</li></ul>

# Internal slots

The following table lists the internal slots of your XPS 15 9520.


**Table 6. Internal slots**

Description	Values
M.2	Two M.2 2230/2280 slots for solid-state drive  <b>NOTE:</b> To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at <a href="http://www.dell.com/support">www.dell.com/support</a> .

# External ports

The following table lists the external ports on your XPS 15 9520.


**Table 7. External ports**

Description	Values
USB ports	<ul style="list-style-type: none"><li>• One USB 3.2 Gen 2 (Type-C) port with DisplayPort</li><li>• Two Thunderbolt 4 (USB4) Type-C ports with Power Delivery</li></ul>  <b>NOTE:</b> Connect the power adapter (USB Type-C) to one of the three USB Type-C ports.
Audio port	One universal audio jack
Video port	USB Type-C port with DisplayPort Alt mode and Thunderbolt 4
Media-card reader	One SD-card slot
Docking port	<ul style="list-style-type: none"><li>• One USB 3.2 Gen 2 (Type-C) port with DisplayPort</li><li>• Two Thunderbolt 4 (USB4) Type-C ports with Power Delivery</li></ul>
Power-adapter port	DC-IN through one of the three USB Type-C ports
Security	1 wedge-shaped lock slot

# Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your XPS 15 9520.

**Table 8. Wireless module specifications**

Description	Values
Model number	Intel Killer 1675 (AX211)  <b>NOTE:</b> The wireless module is soldered to the system board and cannot be replaced without replacing the system board.
Transfer rate	Up to 2400 Mbps

**Table 8. Wireless module specifications (continued)**

Description	Values
Frequency bands supported	2.4 GHz/5 GHz
Wireless standards	<ul style="list-style-type: none"><li>• WiFi 802.11a/b/g</li><li>• Wi-Fi 4 (WiFi 802.11n)</li><li>• Wi-Fi 5 (WiFi 802.11ac)</li><li>• Wi-Fi 6 (WiFi 802.11ax)</li></ul>
Encryption	<ul style="list-style-type: none"><li>• 64-bit/128-bit WEP</li><li>• AES-CCMP</li><li>• TKIP</li></ul>
Bluetooth	Bluetooth 5.2

## Audio

The following table lists the audio specifications of your XPS 15 9520.

**Table 9. Audio specifications**

Description	Values	
Audio controller	Realtek ALC3281	
Stereo conversion	Supported	
Internal audio interface	High definition audio interface	
External audio interface	Universal audio jack	
Number of speakers	Two	
Internal-speaker amplifier	Supported	
External volume controls	Keyboard shortcut controls	
Speaker output:		
	Average speaker output	Tweeters (2 x 2 Watt); Woofers (2 x 2 Watt)
	Peak speaker output	2.5 Watt x 4 = 10 Watt
Subwoofer output	Supported	
Microphone	Digital-array microphones	

## Storage

This section lists the storage options on your XPS 15 9520.

Your XPS 15 9520 supports the following storage options:

- One M.2 2230/2280 solid-state drive
- Up to two M.2 2230/2280 solid-state drives


**Table 10. Storage specifications**

Storage type	Interface type	Capacity
M.2 2230 solid-state drive	PCIe Gen3.0x4 NVMe, up to 32 Gbps	Up to 256 GB
M.2 2230 solid-state drive	PCIe Gen4.0x4 NVMe, up to 64 Gbps	Up to 256 GB
M.2 2280 solid-state drive	PCIe Gen4.0x4 NVMe, up to 64 Gbps	Up to 4 TB

## Media-card reader

The following table lists the media cards supported by your XPS 15 9520.


**Table 11. Media-card reader specifications**

Description	Values
Media-card type	One SD-card slot
Media-cards supported	<ul style="list-style-type: none"><li>Secure Digital (SD)</li><li>Secure Digital High Capacity (SDHC)</li><li>Secure Digital Extended Capacity (SDXC)</li></ul>
 <b>NOTE:</b> The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.	

## Keyboard

The following table lists the keyboard specifications of your XPS 15 9520.

**Table 12. Keyboard specifications**

Description	Values
Keyboard type	Standard backlit keyboard
Keyboard layout	QWERTY
Number of keys	<ul style="list-style-type: none"><li>United States and Canada: 79 keys</li><li>United Kingdom: 80 keys</li><li>Japan: 83 keys</li></ul>
Keyboard size	X = 19.05 mm key pitch Y = 18.05 mm key pitch
Keyboard shortcuts	<p>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.</p> <p> <b>NOTE:</b> You can define the primary behavior of the function keys (F1–F12) changing <b>Function Key Behavior</b> in BIOS setup program.</p> <p>For more information, see keyboard shortcuts <a href="#">Keyboard shortcuts</a>.</p>

# Camera

The following table lists the camera specifications of your XPS 15 9520.

**Table 13. Camera specifications**

Description		Values
Number of cameras		One
Camera type		RGB IR HD camera
Camera location		Front
Camera sensor type		CMOS-sensor technology
Camera resolution:		
	Still image	0.90 megapixel
	Video	1280 x 720 (HD) at 30 fps
Infrared camera resolution:		
	Still image	0.20 megapixel
	Video	576 x 360 (VGA) at 30 fps
Diagonal viewing angle:		
	Camera	78.50 degrees
	Infrared camera	78.50 degrees

# Touchpad

The following table lists the touchpad specifications of your XPS 15 9520.


**Table 14. Touchpad specifications**

Description		Values
Touchpad resolution:		
	Horizontal	1770
	Vertical	1039
Touchpad dimensions:		
	Horizontal	150.90 mm (5.94 in.)
	Vertical	90 mm (3.54 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows, see the Microsoft knowledge base article at <a href="https://support.microsoft.com">support.microsoft.com</a> .

# Power adapter

The following table lists the power adapter specifications of your XPS 15 9520.

**Table 15. Power adapter specifications**

Description	Option one	Option two
Type	90 W USB Type-C	130 W USB Type-C
Input voltage	100 VAC–240 VAC	100 VAC–240 VAC
Input frequency	50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)	1.50 A	1.80 A
Output current (continuous)	4.50 A	6.50 A
Rated output voltage	20 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)
Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
 <b>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.</b>		

# Battery

The following table lists the battery specifications of your XPS 15 9520.

**Table 16. Battery specifications**

Description	Option one	Option two
Battery type	3-cell, 56 Wh "smart" lithium-ion	6-cell, 86 Wh "smart" lithium-ion
Battery voltage	11.40 VDC	11.40 VDC
Battery weight (maximum)	0.26 kg (0.57 lb)	0.34 kg (0.75 lb)
Battery dimensions:		
Height	77.70 mm (3.06 in.)	77.70 mm (3.06 in.)
Width	295.20 mm (11.62 in.)	295.20 mm (11.62 in.)
Depth	7.56 mm (0.30 in.)	7.56 mm (0.30 in.)
Temperature range:		
Operating	0°C to 70°C (32°F to 158°F)	0°C to 70°C (32°F to 158°F)
Storage	-20°C to 65°C (-4°F to 149°F)	-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.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.



**Table 16. Battery specifications (continued)**

Description	Option one	Option two
Battery charging time (approximate) <b>i</b> <b>NOTE:</b> Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information on the Dell Power Manager see, <i>Me and My Dell</i> on <a href="http://www.dell.com/">www.dell.com/</a>	2hr (Express charge), 3hr (Standard charge) hours (when the computer is off)	2hr (Express charge), 3hr (Standard charge) hours (when the computer is off)
Coin-cell battery	Not supported	Not supported

## Display

The following table lists the display specifications of your XPS 15 9520.

**Table 17. Display specifications**

Description	Option one	Option two	Option three
Display type	Full High Definition (FHD+)	WLED UHD+ Touch	OLED 3.5K Touch
Display-panel technology	Wide Viewing Angle (WVA), Eyesafe	Wide Viewing Angle (WVA), Eyesafe	Wide Viewing Angle (WVA), Eyesafe
Display-panel dimensions (active area):			
Height	210.24 mm (8.28 in.)	210.24 mm (8.28 in.)	210.21 mm (8.28 in.)
Width	336.38 mm (13.24 in.)	336.38 mm (13.24 in.)	336.34 mm (13.24 in.)
Diagonal	396.24 mm (15.60 in.)	396.24 mm (15.60 in.)	396.24 mm (15.60 in.)
Display-panel native resolution	1920 x 1200	3840 x 2400	3456 x 2160
Luminance (typical)	500 nits	500 nits	400 nits
Megapixels	2.30	9.20	7.46
Color gamut	100% sRGB	100% AdobeRGB, DCI-P3 94% (typ)	DCI-P3 100% (typ)
Pixels Per Inch (PPI)	145	290	261
Contrast ratio (typical)	1650:1 (typical)	1600:1	<ul style="list-style-type: none"> <li>• SDR - 80,000:1 (typ)</li> <li>• HDR - 124,000:1 (typ)</li> </ul>
Response time (max)	35 ms	35 ms	2 ms
Refresh rate	60 Hz	60 Hz	60 Hz
Horizontal view angle	85 +/- degrees	85 +/- degrees	88 +/- degrees
Vertical view angle	85 +/- degrees	85 +/- degrees	88 +/- degrees
Pixel pitch	0.18 mm	0.09 mm	0.10 mm

**Table 17. Display specifications (continued)**

Description	Option one	Option two	Option three
Power consumption (maximum)	4.41 W	10.40 W	8.74 W
Anti-glare vs glossy finish	Anti-glare	Anti-reflective	Anti-reflective
Touch options	No	Touch support, with 10 touch points	Touch support, with 10 touch points

## Fingerprint reader

The following table lists the fingerprint-reader specifications of your XPS 15 9520.

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

**Table 18. Fingerprint reader specifications**

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

## GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your XPS 15 9520.

**Table 19. GPU—Integrated**

Controller	Memory size	Processor
Intel Iris X <sup>e</sup> Graphics (Dual-channel memory configurations)	Shared system memory	12 <sup>th</sup> Generation Intel Core i5/i7/i9
Intel UHD Graphics (Single-channel memory configurations)	Shared system memory	12 <sup>th</sup> Generation Intel Core i5/i7/i9

## GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your XPS 15 9520.

**Table 20. GPU—Discrete**


Controller	Memory size	Memory type
NVIDIA GeForce RTX 3050 Laptop	4 GB	GDDR6
NVIDIA GeForce RTX 3050Ti Laptop	4 GB	GDDR6

# Operating and storage environment

This table lists the operating and storage specifications of your XPS 15 9520.

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


**Table 21. 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)	140 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)
 <b>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.</b>		

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

† Measured using a 2 ms half-sine pulse.

## Dell low blue light display

 **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.

The ComfortView feature on Dell laptops and displays is designed to minimize blue light emitted from the display for better eye comfort.

To reduce the risk of eye strain after looking at the laptop's display for an extended period of time, it is recommended that you:

1. Set the laptop's display at a comfortable viewing distance between 20 inches and 28 inches (50 cm and 70 cm) from your eyes.
2. Blink frequently to moisten your eyes, or wet your eyes with water.
3. Take a break for 20 minutes every two hours.
4. 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.

## Keyboard shortcuts of XPS 15 9520

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

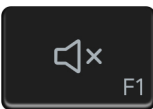
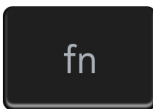
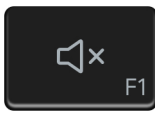
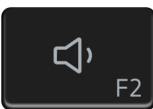
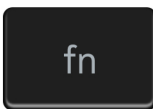
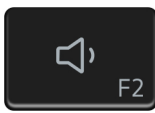
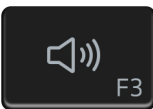
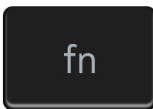
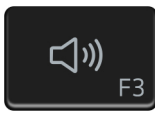
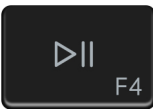
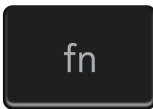
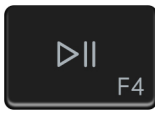

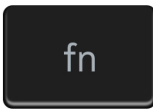
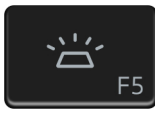
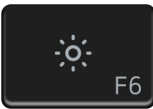
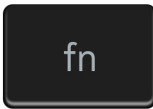
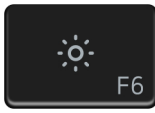
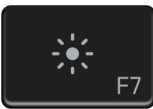
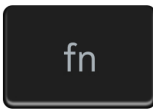
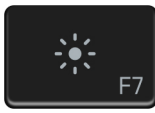
Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. The symbol shown on the lower part of the key refers to the character that is typed out when the key is pressed. If you press shift and the key, the symbol shown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



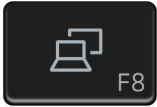






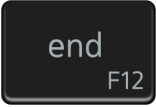
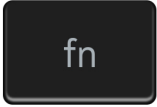
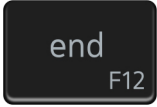
However, if the function keys **F1-F12** are needed for specific software applications, multi-media functionality can be disabled by pressing **Fn + esc**. Subsequently, multimedia control can be invoked by pressing **Fn** and the respective function key. For example, mute audio by pressing **Fn + F1**.

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

**Table 22. List of keyboard shortcuts**








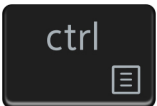

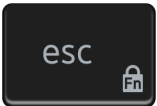
Function key	Redefined key (for multimedia control)	Behavior
 F1	 +  F1	Mute audio
 F2	 +  F2	Decrease volume
 F3	 +  F3	Increase volume
 F4	 +  F4	Play/Pause
 F5	 +  F5	Toggle keyboard backlight
 F6	 +  F6	Decrease brightness
 F7	 +  F7	Increase brightness

**Table 22. List of keyboard shortcuts (continued)**

Function key	Redefined key (for multimedia control)	Behavior
	 + 	Switch to external display
	 + 	Print screen
	 + 	Home
	 + 	End

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

**Table 23. List of keyboard shortcuts**



Function key	Behavior
 + 	Pause/Break
 + 	Toggle scroll lock
 + 	System request
 + 	Open application menu
 + 	Toggle Fn-key lock

# Getting help and contacting Dell

## Self-help resources


You can get information and help on Dell products and services using these self-help resources:


**Table 24. Self-help resources**

Self-help resources	Resource location
Information about Dell products and services	<a href="http://www.dell.com">www.dell.com</a>
My Dell app	
Tips	
Contact Support	In Windows search, type <code>Contact Support</code> , and press Enter.
Online help for operating system	<a href="http://www.dell.com/support/windows">www.dell.com/support/windows</a>
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals and documents.	Your Dell computer is uniquely identified by a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, enter the Service Tag or Express Service Code at <a href="http://www.dell.com/support">www.dell.com/support</a> .  For more information on how to find the Service Tag for your computer, see <a href="#">Locate the Service Tag on your computer</a> .
Dell knowledge base articles for a variety of computer concerns	<ol style="list-style-type: none"> <li>1. Go to <a href="http://www.dell.com/support">www.dell.com/support</a>.</li> <li>2. On the menu bar at the top of the Support page, select <b>Support &gt; Knowledge Base</b>.</li> <li>3. In the Search field on the Knowledge Base page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.</li> </ol>

## Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see [www.dell.com/contactdell](http://www.dell.com/contactdell).

 **NOTE:** Availability varies by country/region and product, and some services may not be available in your country/region.

 **NOTE:** If you do not have an active Internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell product catalog.