

# Latitude 9420/Latitude 9420 2-in-1

## 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.

<b>Chapter 1: Set up your Latitude 9420</b> .....	<b>4</b>
<b>Chapter 2: Views of Latitude 9420</b> .....	<b>6</b>
Right.....	6
Left.....	6
Top.....	7
Front.....	8
Bottom.....	9
Modes.....	9
Battery Charge and Status LED .....	12
<b>Chapter 3: Specifications of Latitude 9420</b> .....	<b>13</b>
Dimensions and weight.....	13
Processor.....	13
Chipset.....	14
Operating system.....	14
Memory.....	14
External ports.....	15
Internal slots.....	15
Wireless module.....	15
WWAN module.....	16
Audio.....	16
Storage.....	17
Media-card reader.....	17
Keyboard.....	17
Camera.....	18
Touchpad.....	18
Power adapter.....	19
Battery.....	19
Display.....	20
Fingerprint reader (optional).....	21
Sensor .....	21
GPU—Integrated.....	22
Operating and storage environment.....	22
<b>Chapter 4: Dell Optimizer</b> .....	<b>23</b>
<b>Chapter 5: SafeShutter</b> .....	<b>24</b>
<b>Chapter 6: Dell low blue light display</b> .....	<b>25</b>
<b>Chapter 7: Keyboard shortcuts</b> .....	<b>26</b>
<b>Chapter 8: Getting help and contacting Dell</b> .....	<b>28</b>

# Set up your Latitude 9420

**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.



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



2. Finish Windows setup.

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





- Connect to a network for Windows updates.
  - NOTE:** If connecting to a secured wireless network, enter the password for the wireless network access when prompted.
- If connected to the Internet, sign in with or create a Microsoft account. If not connected to the Internet, create an offline account.
- On the **Support and Protection** screen, enter your contact details.

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

**Table 1. Locate Dell apps**

Resources	Description
	<p><b>Dell Product Registration</b></p> <p>Register your computer with Dell.</p>
	<p><b>Dell Help &amp; Support</b></p> <p>Access help and support for your computer.</p>

**Table 1. Locate Dell apps (continued)**

Resources	Description
	<p><b>SupportAssist</b></p> <p>SupportAssist is the smart technology that keeps your computer running at its best by optimizing settings, detecting issues, removing viruses and notifies when you need to make system updates. SupportAssist proactively checks the health of your system's hardware and software. When an issue is detected, the necessary system state information is sent to Dell to begin troubleshooting. SupportAssist is preinstalled on most of the Dell devices running Windows operating system. For more information, see SupportAssist for Home PCs User's Guide on <a href="http://www.dell.com/serviceabilitytools">www.dell.com/serviceabilitytools</a>.</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 about using Dell Update, see the knowledge base article <a href="https://www.dell.com/support">SLN305843</a> 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 pre-installed on your computer. For more information about using Dell Digital Delivery, see the knowledge base article <a href="https://www.dell.com/support">153764</a> at <a href="http://www.dell.com/support">www.dell.com/support</a>.</p>

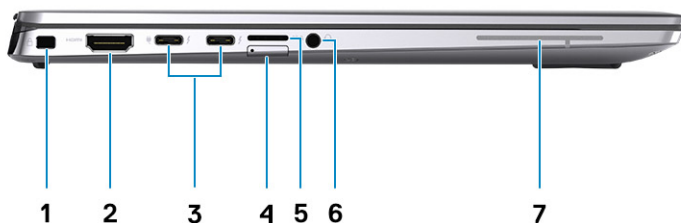
## Views of Latitude 9420

### Right



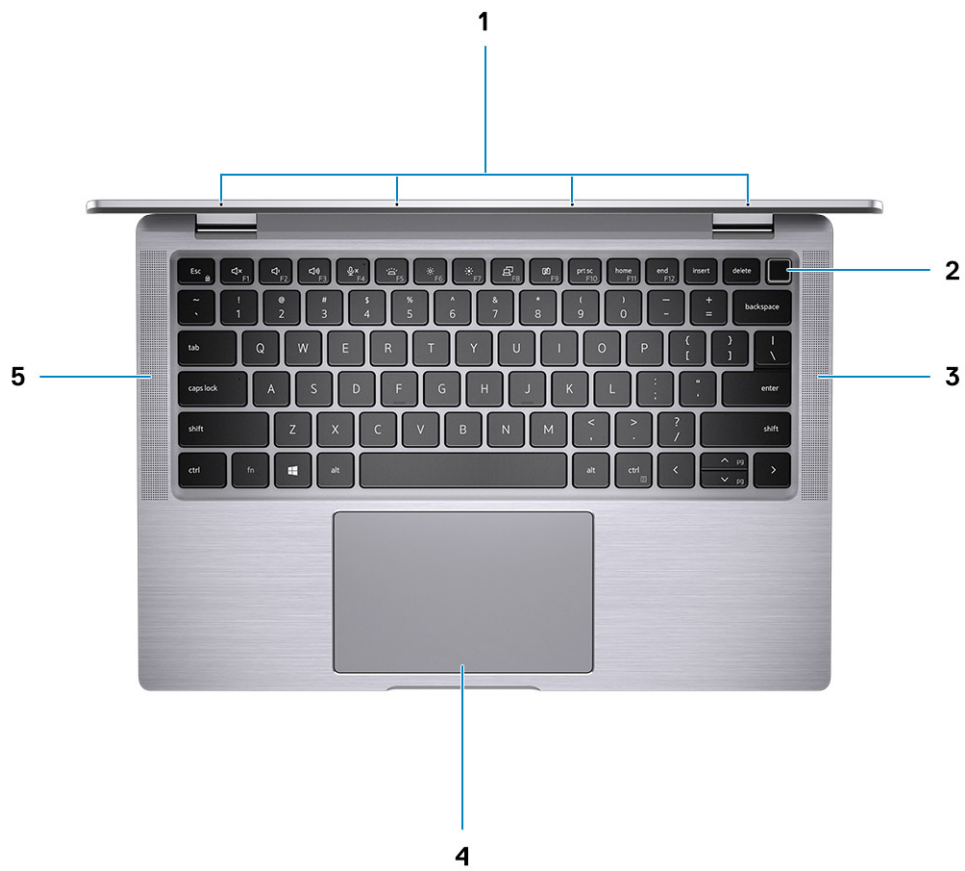
1. Antenna (WWAN only)
2. Air vents
3. USB 3.2 Gen 1 port with PowerShare

### Left



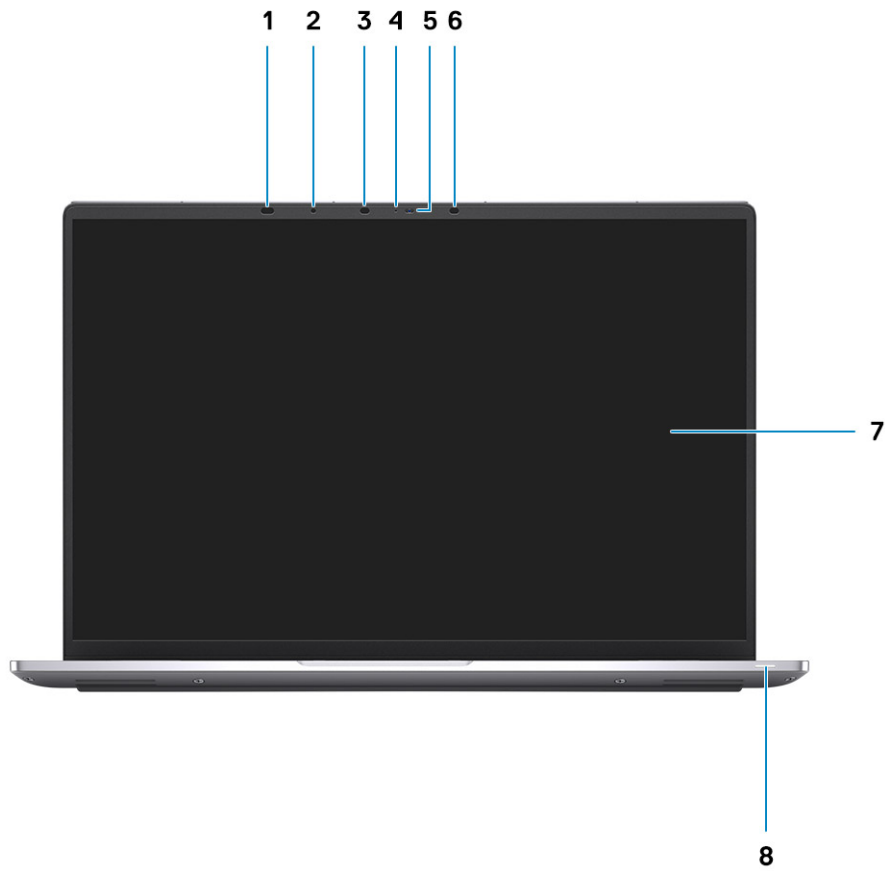
- |  |                              |
|--|------------------------------|
| 1. Wedge-shaped lock slot  | 2. HDMI 2.0 port             |
| 3. Two Thunderbolt 4 ports with DisplayPort Alt Mode/USB4/Power Delivery | 4. microSIM slot (WWAN only) |
| 5. microSD-card slot   | 6. Universal audio port      |
| 7. Antenna (WWAN only)   |                              |

# Top



- 1. Quad-array microphones
- 2. Power button with optional fingerprint reader
- 3. Right speaker
- 4. Clickpad
- 5. Left speaker

# Front

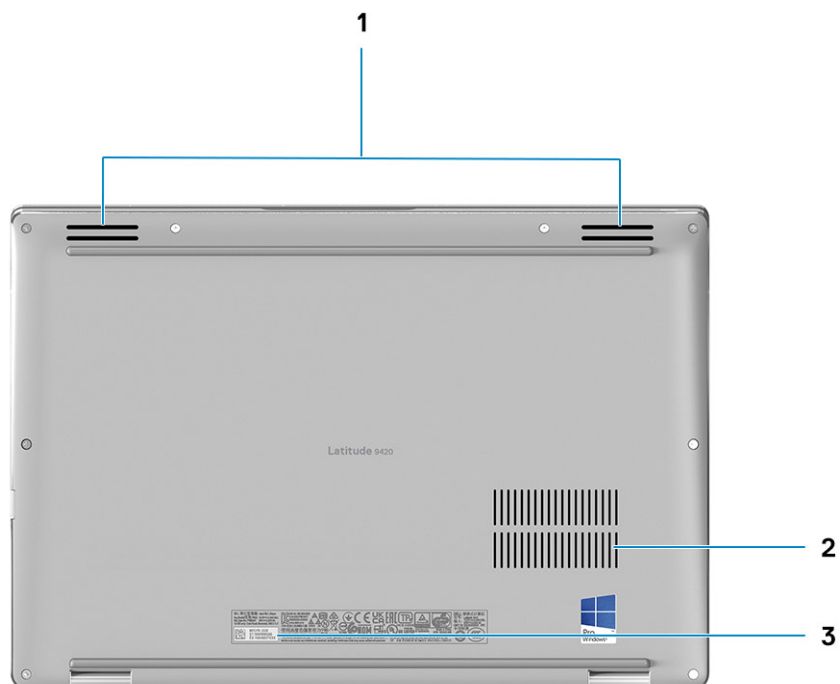


1. Proximity Sensors
2. Ambient-light sensor
3. IR Camera light
4. Camera-status light
5. Camera (RGB/IR) with SafeShutter
6. IR Camera light
7. Display

2. Ambient-light sensor
4. Camera-status light
6. IR Camera light
8. Battery-status light/Diagnostic-status light



## Bottom



1. Speakers
2. Air vents
3. Service tag label

## Modes

**NOTE:** The modes are applicable to 2-in-1 only.

## Notebook



## Tablet



## Stand



## Tent



# Battery Charge and Status LED

Table 2. Battery Charge and Status LED Indicator

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

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

# Specifications of Latitude 9420

## Dimensions and weight

The following table lists the height, width, depth, and weight of your Latitude 9420.

**Table 3. Dimensions and weight**

Description	Values
Height:	
Front height	8.42 mm (0.33 in.)
Rear height	13.91 mm (0.54 in.)
Width	310.59 mm (12.22 in.)
Depth	215.18 mm (8.47 in.)
Weight	<ul style="list-style-type: none"> <li>Laptop: 1.27 kg (2.8 lb)</li> <li>2-in-1: 1.4 kg (3.2 lb)</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 Latitude 9420.

**NOTE:** Processor numbers are not a measure of performance. Processor availability subject to change and may vary by region/country.

**Table 4. Processor**

Processor	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics
11 <sup>th</sup> Generation Intel Core i5-1135G7	28 W	4	8	2.40 GHz to 4.20 GHz	8 MB	Intel Iris X <sup>e</sup> Graphics
11 <sup>th</sup> Generation Intel Core i5-1145G7	28 W	4	8	2.60 GHz to 4.40 GHz	8 MB	Intel Iris X <sup>e</sup> Graphics
11 <sup>th</sup> Generation Intel Core i7-1185G7	28 W	4	8	3.00 GHz to 4.80 GHz	12 MB	Intel Iris X <sup>e</sup> Graphics

# Chipset

The following table lists the details of the chipset supported by your Latitude 9420

**Table 5. Chipset**

Description	Values
Chipset	Integrated with the processor
Processor	11th Generation Intel Core i5/i7 processors
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

# Operating system


Your Latitude 9420 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit
- Windows 11 Pro National Academic, 64-bit
- Windows 10 Home, 64-bit
- Windows 10 Pro, 64-bit
- Windows 10 Pro Education, 64-bit
- Windows 10 Enterprise, 64-bit
- Ubuntu 20.04 LTS, 64-bit

# Memory

The following table lists the memory specifications of your Latitude 9420.

**Table 6. Memory specifications**

Description	Values
Memory slots	Integrated  <b>NOTE:</b> This is not upgradeable.
Memory type	LPDDR4x
Memory speed	4266 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	8 GB
Memory size per channel	8 GB, 16 GB, 32 GB
Memory configurations supported	<ul style="list-style-type: none"><li>• 8 GB, LPDDR4x, SDRAM, 4266 MT/s, dual-channel, integrated</li><li>• 16 GB, LPDDR4x, SDRAM, 4266 MT/s, dual-channel, integrated</li><li>• 32 GB, LPDDR4x, SDRAM, 4266 MT/s, dual-channel, integrated</li></ul>

## External ports

The following table lists the external ports on your Latitude 9420.


**Table 7. External ports**

Description	Values
USB ports	<ul style="list-style-type: none"><li>One USB 3.2 Gen 1 port with PowerShare</li><li>Two Thunderbolt 4 ports with DisplayPort Alt Mode/USB4/Power Delivery</li></ul>
Audio port	One universal audio port
Video port/ports	One HDMI 2.0 port
Media-card reader	One microSD-card slot
Power-adaptor port	Type-C power input
Security-cable slot	One wedge-shaped lock slot

## Internal slots

The following table lists the internal slots of your Latitude 9420.


**Table 8. Internal slots**

Description	Values
M.2	<ul style="list-style-type: none"><li>On-board Wi-Fi and Bluetooth</li><li>One M.2 3042 slot for WWAN</li><li>One M.2 2230 slot for solid-state drive (SSD)</li></ul> <p> <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>.</p>

## Wireless module

The following table lists the onboard Wireless Local Area Network (WLAN) module supported on your Latitude 9420.

**Table 9. Wireless module**

Description	Values
Model number	Intel AX210
Transfer rate	Up to 2.40 Gbps
Frequency bands supported	2.4 GHz/5.0 GHz/6.0 GHz
Wireless standards	Wi-Fi 6E (WiFi 802.11ax)  <b>NOTE:</b> The WLAN configuration above is available only in specific regions. Hence, the performance in certain regions may vary.
Encryption	<ul style="list-style-type: none"><li>64-bit/128-bit WEP</li></ul>

**Table 9. Wireless module (continued)**


Description	Values
	<ul style="list-style-type: none"> <li>• AES-CCMP</li> <li>• TKIP</li> </ul>
Bluetooth	Bluetooth 5.2

## WWAN module

The following table lists the Wireless Wide Area Network (WWAN) module supported on your Latitude 9420.

**Table 10. WWAN module specifications**

Description	Option one	Option two
Model number	Qualcomm Snapdragon X20 Global Gigabite LTE	Qualcomm Snapdragon X55 Global Gigabite NR/LTE
Transfer rate	Up to 1 Gbps DL/150 Mbps UL (CAT 16)	Up to 3Gbps DL/250 Mbps UL (3GPP Release15 NR/LTE CAT 20)
Frequency bands supported	(1,2,3,4,5,7,8,12,13,14,17,18,19,20,25,26,28,29,30,32,38,39,40,41,42,43,46,66), HSPA+ (1, 2, 4, 5,6, 8, 9, 19)	NR (1,2,3,5,7,8,12,20,28,38,41,66,71,77,78,79) LTE (1,2,3,4,5,7,8,12,13,14,17,18,19,20,25,26,28,29,30,32,34,38,39,40,41,42,46,48, 66) HSPA+ (1,2,4,5,6,8,9,19)

 **NOTE:** For instructions on how to find your computer's IMEI (International Mobile Station Equipment Identity) number, see the knowledge base article [000143678](https://www.dell.com/support) at [www.dell.com/support](https://www.dell.com/support).

## Audio

The following table lists the audio specifications of your Latitude 9420.

**Table 11. Audio specifications**

Description	Values
Audio controller	Realtek ALC711-CG
Stereo conversion	Supported, 24-bit DAC (Digital-to-Analog) and ADC (Analog-to-Digital)
Internal audio interface	SoundWire interface
External audio interface	Universal audio jack
Number of speakers	Four
Internal-speaker amplifier	Realtek ALC1319D
External volume controls	Keyboard shortcut controls
Speaker output:	
	Average speaker output
	8 W



**Table 11. Audio specifications (continued)**

Description		Values
	Peak speaker output	10 W
Subwoofer output		Supported
Microphone		Quad-array microphone

## Storage

This section lists the storage options on your Latitude 9420.

Your computer supports one M.2 2230 solid-state drive:

- One M.2 2230 solid-state drive


**Table 12. Storage specifications**

Storage type	Interface type	Capacity
M.2 2230, Class 35 solid-state drive	Gen 3 PCIe x4 NVMe	Up to 1 TB
M.2 2230, Class 35 solid-state drive, Self-encrypting drive	Gen 3 PCIe x4 NVMe	Up to 256 GB

## Media-card reader

The following table lists the media cards supported by your Latitude 9420.

**Table 13. Media-card reader specifications**

Description	Values
Media-card type	One microSD-card slot
Media-cards supported	<ul style="list-style-type: none"> <li>• micro-Secure Digital (mSD)</li> <li>• micro-Secure Digital High Capacity (mSDHC)</li> <li>• micro-Secure Digital Extended Capacity (mSDXC)</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 Latitude 9420.

**Table 14. Keyboard specifications**

Description	Values
Keyboard type	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>

**Table 14. Keyboard specifications (continued)**

Description	Values
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 <b>Fn</b> and the desired key.  <b>NOTE:</b> You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program. For more information, see <a href="#">Keyboard shortcuts</a> .

## Camera

The following table lists the camera specifications of your Latitude 9420.

**Table 15. Camera specifications**

Description	Values
Number of cameras	One
Camera type	HD RGB Infrared camera
Camera location	Front camera
Camera sensor type	CMOS-sensor technology
Camera resolution:	
Still image	0.92 megapixel
Video	1280 x 720 (HD) at 30 fps
Infrared camera resolution:	
Still image	0.23 megapixel
Video	640 x 360 at 15 fps
Diagonal viewing angle:	
Camera	78 degrees
Infrared camera	78 degrees

## Touchpad

The following table lists the touchpad specifications of your Latitude 9420.

**Table 16. Touchpad specifications**

Description	Values
Touchpad resolution:	>=300dpi


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

Description		Values
Touchpad dimensions:		
	Horizontal	116 mm (4.56 in.)
	Vertical	72 mm (2.83 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows, see the Microsoft knowledge base article <a href="https://support.microsoft.com">4027871</a> at <a href="https://support.microsoft.com">support.microsoft.com</a> .

## Power adapter

The following table lists the power adapter specifications of your Latitude 9420.

**Table 17. Power adapter specifications**

Description	Option one	Option two	Option three
Type	60 W AC adapter, USB-C	65 W AC adapter, USB-C	90 W AC adapter, USB-C
Input voltage	100 VAC—240 VAC	100 VAC—240 VAC	100 VAC—240 VAC
Input frequency	50 Hz—60 Hz	50 Hz—60 Hz	50 Hz—60 Hz
Input current (maximum)	1.70 A	1.70 A	1.50 A
Output current (continuous)	<ul style="list-style-type: none"> <li>20 V/3.25 A (Continuous)</li> <li>15 V/3 A (Continuous)</li> <li>9.0 V/3 A (Continuous)</li> <li>5.0 V/3 A (Continuous)</li> </ul>	<ul style="list-style-type: none"> <li>20 V/3.25 A (Continuous)</li> <li>15 V/3 A (Continuous)</li> <li>9.0 V/3 A (Continuous)</li> <li>5.0 V/3 A (Continuous)</li> </ul>	<ul style="list-style-type: none"> <li>20 V/4.5 A (Continuous)</li> <li>15 V/3 A (Continuous)</li> <li>9.0 V/3 A (Continuous)</li> <li>5.0 V/3 A (Continuous)</li> </ul>
Rated output voltage	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 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 158 °F)	-40 °C to 70 °C (-40 °F 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 Latitude 9420.

**Table 18. Battery specifications**

Description	Option one	Option two
Battery type	2-cell, 39.7 WHr, ExpressChargeBoost	3-cell, 59.6 WHr, ExpressChargeBoost
Battery voltage	7.70 VDC	11.40 VDC

**Table 18. Battery specifications (continued)**

Description		Option one	Option two
Battery weight (maximum)		0.19 kg (0.41 lb)	0.26 kg (0.57 lb)
Battery dimensions:			
	Height	250.70 mm (9.87 in.)	250.70 mm (9.87 in.)
	Width	89.18 mm (3.50 in.)	89.18 mm (3.50 in.)
	Depth	6.17 mm (0.24 in.)	6.17 mm (0.24 in.)
Temperature range:			
	Operating	<ul style="list-style-type: none"> <li>Charge: 0 °C to 50 °C (32 °F to 122 °F)</li> <li>Discharge: 0°C to 70°C (32°F to 158°F)</li> </ul>	<ul style="list-style-type: none"> <li>Charge: 0 °C to 50 °C (32 °F to 122 °F)</li> <li>Discharge: 0°C to 70°C (32°F to 158°F)</li> </ul>
	Storage	-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.
Battery charging time (approximate) ⓘ <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> .		4 hours (when the computer is off)	4 hours (when the computer is off)
 <b>CAUTION:</b> 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.			

## Display

The following table lists the display specifications of your Latitude 9420.

**Table 19. Display specifications**

Description		Option one	Option two
Display type		14-inch, Full High Definition (FHD+)	14-inch, Quad High Definition (QHD+)
Display-panel technology		Low blue light (LBL)	Low blue light (LBL)
Display-panel dimensions (active area):			
	Height	188.49 mm (7.42 in.)	188.49 mm (7.42 in.)
	Width	301.59 mm (11.87 in.)	301.59 mm (11.87 in.)
	Diagonal	355.64 mm (14.00 in.)	355.64 mm (14.00 in.)
Display-panel native resolution		1920 x 1200	2560 x 1600
Luminance (typical)		500 nits	500 nits

**Table 19. Display specifications (continued)**

<b>Description</b>	<b>Option one</b>	<b>Option two</b>
Megapixels	2.30	4.09
Color gamut	sRGB 100%	sRGB 100%
Pixels Per Inch (PPI)	161	216
Contrast ratio (typ)	16:10	16:10
Response time (max)	35 ms	35 ms
Refresh rate	60 Hz	60 Hz
Horizontal view angle	88 degree	88 degree
Vertical view angle	88 degree	88 degree
Pixel pitch	0.1572 mm	0.1178 mm
Power consumption (maximum)	2.85 W	3.70 W
Anti-glare vs glossy finish	Anti-glare	Anti-reflection, Anti-smudge
Touch options	No	Yes

## Fingerprint reader (optional)

The following table lists the specifications of the optional fingerprint-reader of your Latitude 9420.

**Table 20. Fingerprint reader specifications**

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

## Sensor

The following table lists the sensor of your Latitude 9420.

**Table 21. Sensor**

<b>Sensor support</b>
Gyroscope
eCompass/Magnetometer
Accelerometer
GPS (via WWAN Card only)
Ambient Light Sensor
Adaptive Thermal Performance (via Gyroscope/Accelerometer)

**Table 21. Sensor (continued)**

Sensor support
Dell ExpressSign-In 1.0 (via Proximity Sensor)
Dell ExpressSign-in 2.0 (via Intel Camera Sensing Technology)
Wake/Power on with lid open

## GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Latitude 9420.

**Table 22. GPU—Integrated**


Controller	External display support	Memory size	Processor
Intel Iris X <sup>e</sup> Graphics	HDMI 2.0, DisplayPort over USB Type-C	Shared system memory	11 <sup>th</sup> Generation Intel Core i5/i7 Processors

## Operating and storage environment

This table lists the operating and storage specifications of your Latitude 9420.

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

**Table 23. Computer environment**

Description	Operating	Storage
Temperature range	0°C to 40°C (32°F to 104°F)	-40°C to 60°C (-40°F to 140°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 (-50 ft to 10000 ft)	-15.2 m to 10668 m (-50 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 Optimizer

On Latitude 9420 with Dell Optimizer, the following features are supported:

- **Express Connect**—Automatically joins the access point with the strongest signal, and directs bandwidth to conferencing applications when in use.
- **Express Sign-in**—The Intel Context Sensing Technology's proximity sensor detects your presence to instantly wake up the computer and login using the IR camera and Windows Hello feature. Windows locks when you walk away.
- **ExpressResponse**—Prioritizes the most important applications. Applications open faster and perform better.
- **ExpressCharge**—Extends the battery runtime and improves battery performance by adapting to your patterns.

For more information on configuring and using these features, see the Dell Optimizer User's guide at, <https://www.dell.com/support/home/en-in/product-support/product/dell-optimizer/docs>.


## SafeShutter

SafeShutter is an automatic security webcam that knows when to automatically open or close the camera shutter by syncing to your video conferencing applications when you grant permission.

SafeShutter lets you take control of your privacy with the Camera disable (F9 Key) and Mic mute (F4 Key) to override software settings. When the Camera is on, press the F9 key to close the Camera shutter and then press the F9 key again to open the Camera shutter.



## 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.**

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

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

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

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

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

## Keyboard shortcuts

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

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

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

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

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

**Table 24. List of keyboard shortcuts**

Function key	Primary behavior	Function key	Secondary behavior
F1	Mute audio	Fn + F1	Operating system and application specific F1 behavior
F2	Decrease volume	Fn + F2	Operating system and application specific F2 behavior
F3	Increase volume	Fn + F3	Operating system and application specific F3 behavior
F4	Mic Mute	Fn + F4	Operating system and application specific F4 behavior
F5	Keyboard backlight <b>NOTE:</b> Not applicable for non-backlight keyboard.	Fn + F5	Operating system and application specific F5 behavior
F6	Decrease screen brightness	Fn + F6	Operating system and application specific F6 behavior
F7	Increase screen brightness		Operating system and application specific F7 behavior
F8	Switch to external display	Fn + F8	Operating system and application specific F8 behavior
F9	Disable camera	Fn + F9	Operating system and application specific F9 behavior

**Table 24. List of keyboard shortcuts (continued)**

Function key	Primary behavior	Function key	Secondary behavior
F10	Print Screen	Fn + F10	Operating system and application specific F10 behavior
F11	Home	Fn + F11	Operating system and application specific F11 behavior
F12	End	Fn + F12	Operating system and application specific F12 behavior

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

**Table 25. Secondary behavior**


Function key	Behavior
Fn + Esc	Toggle Fn-key lock
Fn + PrtScr	Turn off/on wireless
Fn + B	Pause/Break
Fn + Insert	Sleep
Fn + S	Toggle scroll lock
Fn + H	Toggle between power and battery-status light/hard-drive activity light
Fn + R	System request
Fn + Ctrl	Open application menu
Fn + PgUp	Page up
Fn + PgDn	Page down
Fn + Home	Home
Fn + End	End

# 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 26. Self-help resources**

Self-help resources	Resource location
Information about Dell products and services	<a href="http://www.dell.com">www.dell.com</a>
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> <a href="http://www.dell.com/support/linux">www.dell.com/support/linux</a>
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.	<a href="http://www.dell.com/support">www.dell.com/support</a>
Dell knowledge base articles for a variety of computer concerns.	<ol style="list-style-type: none"> <li>1. Go to <a href="https://www.dell.com/support/home/?app=knowledgebase">https://www.dell.com/support/home/?app=knowledgebase</a>.</li> <li>2. Type the subject or keyword in the <b>Search</b> box.</li> <li>3. Click <b>Search</b> to retrieve 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 and product, and some services may not be available in your country.

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