Latitude 7420

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.

Contents

Set up your Latitude 7420

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

   (i) **NOTE:** To conserve battery power, the battery might enter power saving mode.

2. Finish Windows system 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

Dell apps	Details
	Dell Product Registration Register your computer with Dell.
	Dell Help & Support Access help and support for your computer.

Table 1. Locate Dell apps (continued)

Dell apps	Details
	SupportAssist Proactively checks the health of your computer's hardware and software. ⓘ **NOTE:** Renew or upgrade your warranty by clicking the warranty expiry date in SupportAssist.
	Dell Update Updates your computer with critical fixes and important device drivers as they become available.
	Dell Digital Delivery Download software applications including software that is purchased but not preinstalled on your computer.

4. Create recovery drive for Windows.

   ⓘ **NOTE:** It is recommended to create a recovery drive to troubleshoot and fix problems that may occur with Windows.

   For more information, see Create a USB recovery drive for Windows.

Create a USB recovery drive for Windows

Create a recovery drive to troubleshoot and fix problems that may occur with Windows. An empty USB flash drive with a minimum capacity of 16 GB is required to create the recovery drive.

ⓘ **NOTE:** This process may take up to an hour to complete.

ⓘ **NOTE:** The following steps may vary depending on the version of Windows installed. Refer to the Microsoft support site for latest instructions.

1. Connect the USB flash drive to your computer.
2. In Windows search, type **Recovery**.
3. In the search results, click **Create a recovery drive**.
   The **User Account Control** window is displayed.
4. Click **Yes** to continue.
   The **Recovery Drive** window is displayed.
5. Select **Back up system files to the recovery drive** and click **Next**.
6. Select the **USB flash drive** and click **Next**.
   A message appears, indicating that all data in the USB flash drive will be deleted.
7. Click **Create**.
8. Click **Finish**.
   For more information about reinstalling Windows using the USB recovery drive, see the *Troubleshooting* section of your product's *Service Manual* at www.dell.com/support/manuals.

Views of Latitude 7420

Topics:

Right
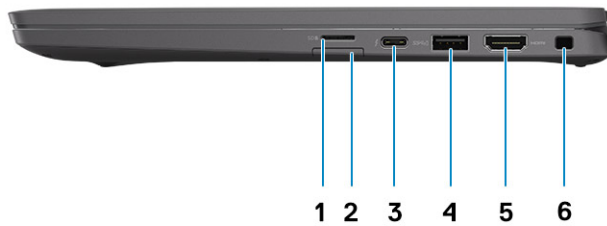
1. micro-SD card slot
2. micro-SIM card slot (optional with WWAN configuration only)
3. Thunderbolt 4 with Power Delivery/DisplayPort Alt Mode/USB 4 type-C
4. SuperSpeed USB 3.2 Gen 1 Type-A with PowerShare
5. HDMI 2.0 port
6. Wedge security lock slot

Left
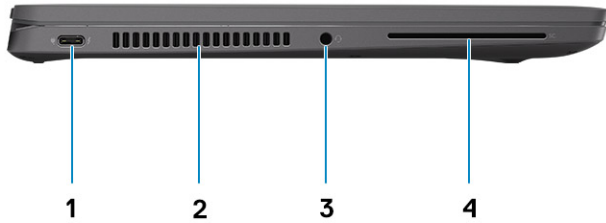
1. Thunderbolt 4 with Power Delivery/DisplayPort Alt Mode/USB 4 type-C
2. Air vents
3. Headset (headphone and microphone combo) port
4. Smart card reader slot (optional)

Palmrest
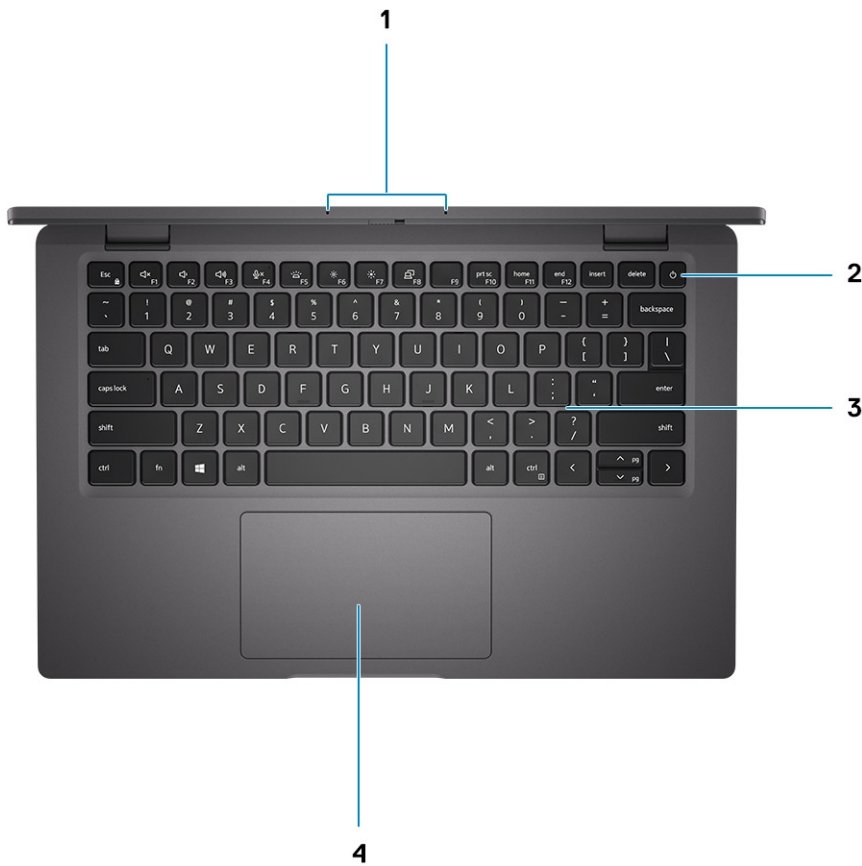
1. Microphone array
2. Power button (optional with Fingerprint reader)
3. Keyboard
4. Touchpad

Display
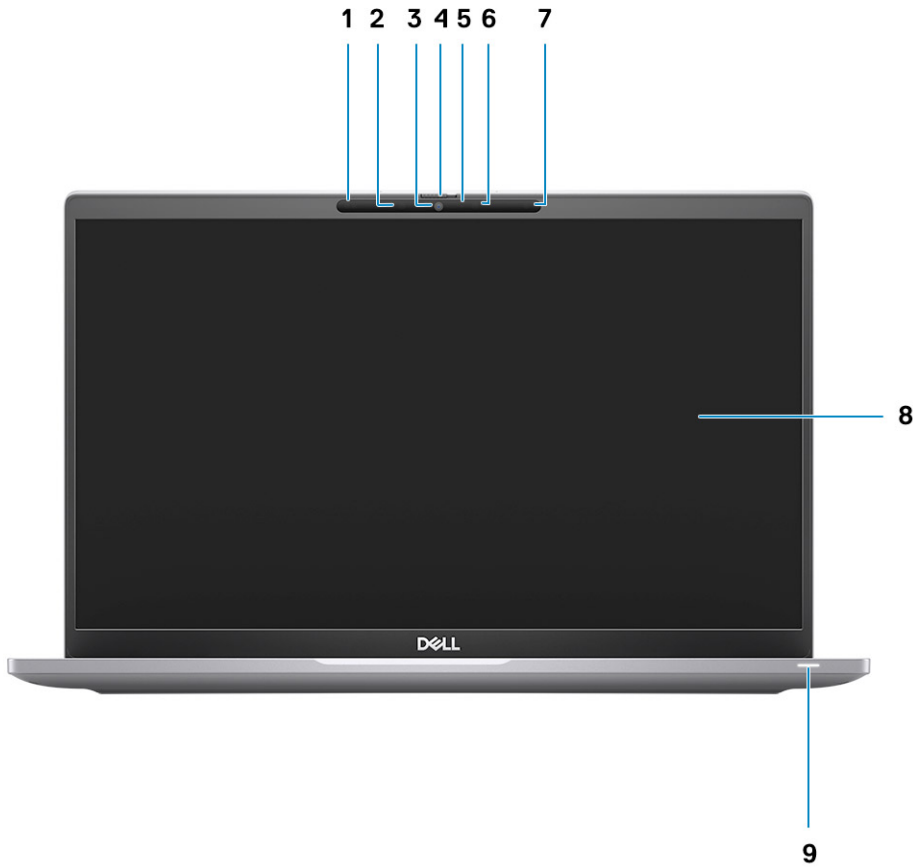
1. Proximity sensor (optional)
2. IR emitter (optional)
3. RGB or IR Camera (optional)
4. Camera shutter
5. Camera status LED
6. IR emitter (optional)
7. Ambient Light Sensor (ALS) (optional)
8. LCD panel
9. LED indicator

Bottom
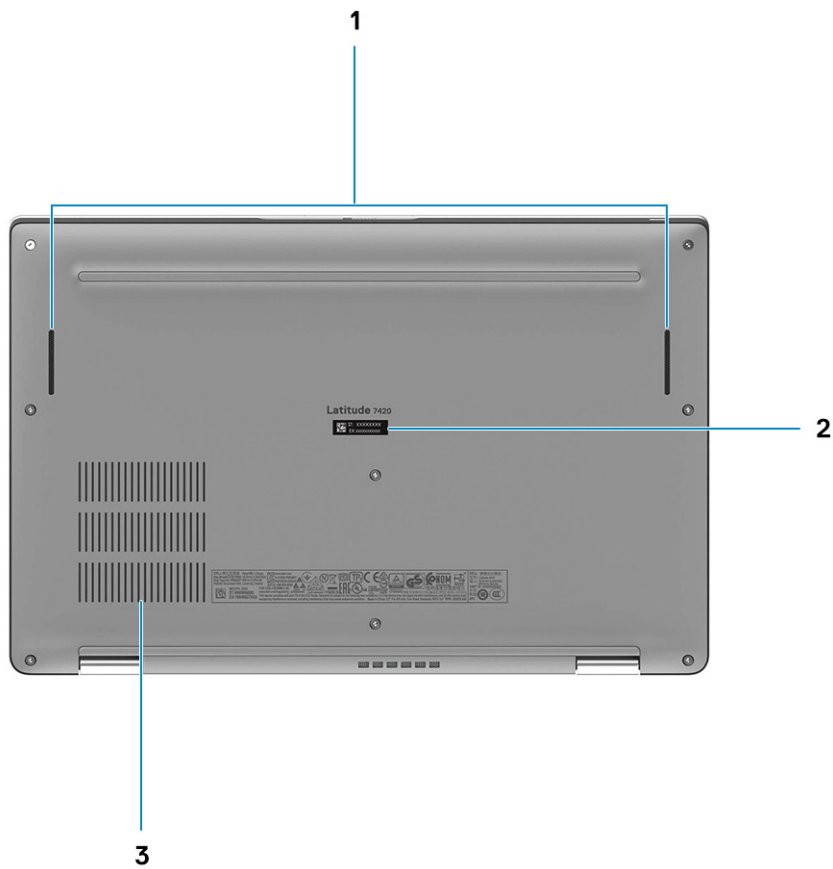
1. Speakers
2. Service tag label
3. Cooling vents

Modes

ⓘ **NOTE:** The modes are applicable only to Latitude 7420 2-in-1 (an upsell option).

Tablet mode

Laptop mode

Tent mode

Stand mode

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 7420

Topics:

Dimensions and weight

The following table lists the height, width, depth, and weight of your Latitude 7420.

Table 3. Dimensions and weight

Description	Values
Height:	
Front height	17.27 mm (0.68 in.) - Carbon Fiber 16.90 mm (0.67 in.) - Aluminium 17.06 mm (0.67 in.) - Carbon Fiber (2-in-1) 16.40 mm (0.64 in.) - Aluminium (2-in-1)
Rear height	18.88 mm (0.74 in.) - Carbon Fiber 18.00 mm (0.708 in.) - Aluminium 18.91 mm (0.74 in.) - Carbon Fiber (2-in-1) 18.70 mm (0.736 in.) - Aluminium (2-in-1)
Width	321.35 mm (12.65 in.) - Carbon Fiber 321.35 mm (12.65 in.) - Aluminium 321.35 mm (12.65 in.) - Carbon Fiber (2-in-1) 321.35 mm (12.65 in.) - Aluminium (2-in-1)
Depth	208.69 mm (8.22 in.) - Carbon Fiber 208.69 mm (8.22 in.) - Aluminium

Table 3. Dimensions and weight (continued)

Description	Values
	208.69 mm (8.22 in.) - Carbon Fiber (2-in-1) 208.69 mm (8.22 in.) - Aluminium (2-in-1)
Weight (minimum)	1.22 kg (2.70 lb) - Carbon Fiber 1.31 kg (2.89 lb) - Aluminium 1.36 kg (3.00 lb) - Carbon Fiber (2-in-1) 1.46 kg (3.23 lb) - Aluminium (2-in-1) (i) **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.

Processor

The following table lists the details of the processors supported by your Latitude 7420.

Table 4. Processor

Description	Option one	Option two	Option three	Option four
Processor type	11th Generation Intel Core i5-1135G7 (Non-vPro)	11th Generation Intel Core i5-1145G7 (vPro)	11th Generation Intel Core i7-1165G7 (Non-vPro)	11th Generation Intel Core i7-1185G7 (vPro)
Processor wattage	- Maximum TDP: 28 W - cTDP: 13 W - 15 W	- Maximum TDP: 28 W - cTDP: 13 W - 15 W	- Maximum TDP: 28 W - cTDP: 13 W - 15 W	- Maximum TDP: 28 W - cTDP: 13 W - 15 W
Processor core count	4	4	4	4
Processor thread count	8	8	8	8
Processor speed	2.40 GHz to 4.20 GHz	2.60 GHz to 4.40 GHz	2.80 GHz to 4.70 GHz	3.00 GHz to 4.80 GHz
Processor cache	8 MB	8 MB	12 MB	12 MB
Integrated graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics

Chipset

The following table lists the details of the chipset supported by your Latitude 7420.

Table 5. Chipset

Description	Values
Chipset	Tiger Lake U PCH
Processor	11th Generation Intel Core i5/i7
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Latitude 7420 supports the following operating systems:

- Windows 10 Home (64-bit)
- Windows 10 Pro (64-bit)
- Ubuntu Linux 20.04 (64-bit) (available on laptop only)

Memory

Table 6. Memory specifications

Description	Values
Slots	Built on system board ⓘ **NOTE:** not upgradable
Type	Dual-channel Low-Power Dual Data Rate (LPDDR4x)
Speed	4267 MHz
Maximum memory	32 GB
Minimum memory	8 GB
Configurations supported	8 GB, 2 x 4 GB 16 GB, 2 x 8 GB 32 GB, 2 x 16 GB

External ports

The following table lists the external ports on your Latitude 7420.

Table 7. External ports

Description	Values
USB ports	- One SuperSpeed USB 3.2 Gen 1 Type-A with PowerShare - Two Thunderbolt 4 with Power Delivery/DisplayPort Alt Mode/USB 4 type-C
Audio port	One Combo Mic/Headphone Jack
Video port	- One HDMI 2.0 - Two Thunderbolt 4 with DisplayPort Alt Mode
Media-card reader	One microSD-card 4.0 slot
Power-adapter port	USB Type-C port with Power Delivery
Security-cable slot	One Wedge shaped lock slot

Internal slots

The following table lists the internal slots of your Latitude 7420.

Table 8. Internal slots

Description	Values
M.2	One M.2 2230/2280 Keyed M slot for solid-state drive
	(i) **NOTE:** To learn more about the features of different types of M.2 cards, see the knowledge base article Article Number: 144170 at www.dell.com/support.

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module that is supported on your Latitude 7420.

Table 9. Wireless module specifications

Description	Values
Model number	Intel AX201
	(i) **NOTE:** Built on system board and not replaceable as a standalone part
Transfer rate	• 2.4 GHz 40M: Up to 574 Mbps • 5 GHz 80M: Up to 1.2 Gbps • 5 GHz 160M: Up to 2.4 Gbps
Frequency bands supported	2.4 GHz/5 GHz
Wireless standards	• WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6 (802.11ax)
Encryption	• 64-bit and 128-bit WEP • TKIP • 128-bit AES-CCMP • 256-bit AES-GCMP
Bluetooth	Bluetooth 5.1

WWAN modules

The following list provides the mobile broadband module options available on Latitude 7420

1. • Qualcomm Snapdragon X20 Gigabit LTE CAT 16 (DW5821e; e-SIM enabled), WW excluding China, Turkey, US
   • Qualcomm Snapdragon X20 Gigabit LTE CAT 16 (DW5821e) WW
   • Qualcomm Snapdragon X20 Gigabit LTE CAT 16 (DW5821e) for AT&T, Verizon, and Sprint, US only
2. • Qualcomm Snapdragon X20 LTE-A CAT 9 (DW5829e; e-SIM enabled) WW excluding China, Turkey, US
   • Qualcomm Snapdragon X20 LTE-A CAT 9 (DW5829e) WW
   • Qualcomm Snapdragon X20 LTE-A CAT 9 (DW5829e) for AT&T, Verizon, and Sprint, US only

Audio

The following table lists the audio specifications of your Latitude 7420.

Table 10. Audio specifications

Description		Values
Audio controller		Realtek ALC3281-CG, High Definition Audio
Stereo conversion		Supported
Internal audio interface		High definition audio
External audio interface		Universal audio jack
Number of speakers		Two
Internal-speaker amplifier		Supported (audio codec integrated)
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W
	Peak speaker output	2.5 W
Subwoofer output		Not supported
Microphone		Dual-array microphones

Storage

Your computer supports the following configuration: The primary drive of your computer varies with the storage configuration.
- M.2 2230, PCIe x4 NVMe, Class 35 Solid-State Drive
- M.2 2280, PCIe x4 NVMe, Class 40 Solid-State Drive
- M.2 2280, PCIe x4 NVMe, Class 40 Solid-State Drive, Self Encrypting Drive

Table 11. Storage specifications

Form factor	Interface type	Capacity
M.2 2230, Class 35 Solid-State Drive	Gen 3 PCIe x4 NVMe	Up to 512 GB
M.2 2280, Class 40 Solid-State Drive	Gen 3 PCIe x4 NVMe	Up to 1 TB
M.2 2280, Class 40 Solid-State Drive, Self Encrypting Drive	Gen 3 PCIe x4 NVMe	Up to 512 GB

Media-card reader

Table 12. Media-card reader specifications

Description	Values
Type	micro-SD 4.0 card slot

Table 12. Media-card reader specifications (continued)

Description	Values
Cards supported	• Micro Secure Digital (mSD) • Micro Secure Digital High Capacity (mSDHC) • Micro Secure Digital Extended Capacity (mSDXC)

Keyboard

Table 13. Keyboard specifications

Description	Values
Type	• Non-backlit, Without Numberpad, Bottom Mount • Backlit, Without Numberpad, Bottom Mount
Layout	QWERTY/KANJI
Number of keys	• United States and Canada: 79 keys • United Kingdom: 80 keys • Japan: 83 keys
Size	X=19.05 mm key pitch Y=18.05 mm key pitch
Shortcut keys	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.

Camera

Table 14. Camera specifications

Description	Value				
Number of cameras	One	One	One	One	One
Type	Integrated 2.7 mm HD RGB Webcam	Integrated 2.7 mm HD RGB/IR Webcam with ALS and Proximity Sensor	Integrated 6 mm HD RGB Webcam	Integrated 6 mm HD RGB/IR Webcam with ALS and Proximity Sensor	Integrated 6 mm FHD RGB/IR Webcam with ALS and Proximity Sensor
Location	Front	Front	Front	Front	Front
Sensor type	CMOS sensor technology	CMOS sensor technology	CMOS sensor technology	CMOS sensor technology	CMOS sensor technology
Resolution (RGB):					
Still Image	0.92	0.92	0.92	0.92	2

Table 14. Camera specifications (continued)

Description	Value				
Video	1280 x 720 at 30 fps	1280 x 720 at 30 fps	1280 x 720 at 30 fps	1280 x 720 at 30 fps	1920 x 1080 at 30 fps
Diagonal viewing angle	74.9°	75.8°	78.6°	87°	87.6°
Resolution (IR):					
Still Image	NA	0.23	NA	0.23	0.23
Video	NA	640 x 360 at 15 fps	NA	640 x 360 at 15 fps	640 x 360 at 15 fps
Diagonal viewing angle	NA	75.8°	NA	87°	87.6°

Touchpad

Table 15. Touchpad specifications

Description		Option 1	Option 2
Resolution:			
	Horizontal	3339	1337
	Vertical	1994	761
Dimensions:			
	Horizontal	115 mm (4.52 in.)	115 mm (4.52 in.)
	Vertical	65 mm (2.56 in.)	65 mm (2.56 in.)

Power adapter

The following table lists the power adapter specifications of your Latitude 7420.

Table 16. Power adapter specifications

Description	Option one	Option two
Type	65 W, USB Type-C	90 W, USB Type-C
Input voltage	100 VAC to 240 VAC	100 VAC to 240 VAC
Input frequency	50 Hz to 60 Hz	50 Hz to 60 Hz
Input current (maximum)	1.70 A	1.50 A
Output current (continuous)	5 V/3 A (Continuous) 9 V/3 A (Continuous) 15 V/3 A (Continuous) 20 V/3.25 A (Continuous)	5 V/3 A (Continuous) 9 V/3 A (Continuous) 15 V/3 A (Continuous) 20 V/4.5 A (Continuous)
Rated output voltage	5 VDC 9 VDC	5 VDC 9 VDC

Table 16. Power adapter specifications (continued)

Description		Option one	Option two
		• 15 VDC • 20 VDC	• 15 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)
Dimensions			
	Width (mm/inch)	112 mm (4.41 in.)	130 mm (5.1 in.)
	Depth (mm/inch)	51 mm (2.01 in.)	66 mm (2.6 in.)
	Height (mm/inch)	28 mm (1.1 in.)	22 mm (0.8 in.)
Weight (kg/lb)		201 g (0.44 lb)	291 g (0.64 lb)

Battery

Table 17. Battery specifications

Specifications		Option 1	Option 2
Type		4-cell, 63 WHr, optional with ExpressCharge or Long Life Cycle	3-cell, 42 WHr, optional with ExpressCharge or Long Life Cycle
Voltage (VDC)		11.40 VDC	15.2 VDC
Weight (maximum)		0.212 kg (0.467lb)	0.264 kg (0.582lb)
Dimensions:			
	Height	92.8 mm (3.654 in.)	92.8 mm (3.654 in.)
	Width	238 mm (9.37 in.)	238 mm (9.37 in.)
	Depth	5.7 mm (0.224 in.)	5.7 mm (0.224 in.)
Temperature range:			
	Operating	• Charging: 0°C to 45°C (32°F to 113°F) • Discharging: 0°C to 65°C (32°F to 149°F)	
	Storage	-20°C to 60°C (-4°F to 140°F)	
Battery Operating time		Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	
Battery Charging time (approximate)		• ExpressCharge Boost (0% up to 35%) : 20 minutes • Express charge : 2 hours • Standard charge: 3 hours ⓘ **NOTE:** Control the charging time, duration, start and end time, and so on using the Dell Power Manger application. For more information on the Dell Power Manger	

Table 17. Battery specifications (continued)

Specifications	Option 1	Option 2
	see, https://www.dell.com/support/home/product-support/product/power-manager/docs	
Life span (approximate)	• Standard: 1 Year or 300 discharge/charge cycles • Long Life Cycle (LCL) capable: 3 Years or 1000 discharge/charge cycles (Optional)	
ExpressCharge	Supported on Express Charge Capable Battery	Supported on Express Charge Capable Battery
User replaceable	No (FRU¶)	No (FRU)
Coin-cell battery	Main battery reserves 2% of capacity for RTC function.	
Coin-cell Operating time	68 days with 3-cell 42 WHr battery ⓘ **NOTE:** Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	

ⓘ **NOTE:**

For batteries with the ExpressCharge feature, the battery will typically have at least an 80% charge after about an hour of charging with the system off, and fully charged in about 2 hours with the system off.

Enabling ExpressCharge requires that both the computer and the battery used be ExpressCharge capable. If these requirements are not met, ExpressCharge will not be enabled.

¶ : Field Replaceable Part

Display

Table 18. Display specifications

Description	Values					
Type	14 in. Full High Definition (FHD)	14 in. Full High Definition (FHD)	14 in. Full High Definition (FHD)	14 in. Full High Definition (FHD)	14 in. Ultra High Definition (UHD)	14 in. Full High Definition (FHD) for 2-in-1
Panel technology	WVA	WVA	WVA	WVA	WVA	WVA
Luminance (typical)	250 nits	400 nits	300 nits	300 nits	400 nits	300 nits
Dimensions (Active Area):						
Height	173.95 mm (6.85 in.)	173.95 mm (6.85 in.)	173.95 mm (6.85 in.)	173.95 mm (6.85 in.)	173.95 mm (6.85 in.)	173.95 mm (6.85 in.)
Width	309.40 mm (12.18 in.)	309.40 mm (12.18 in.)	309.40 mm (12.18 in.)	309.40 mm (12.18 in.)	309.40 mm (12.18 in.)	309.40 mm (12.18 in.)
Diagonal	355.60 mm (14 in.)	355.60 mm (14 in.)	355.60 mm (14 in.)	355.60 mm (14 in.)	355.60 mm (14.00 in.)	355.60 mm (14.00 in.)
Native Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	3840 x 2160	1920 x 1080

Table 18. Display specifications (continued)

Description	Values					
Megapixels	2.07	2.07	2.07	2.07	8.29	2.07
Pixels per Inch (PPI)	157 PPI	157 PPI	157 PPI	157 PPI	314.7 PPI	157 PPI
Contrast Ratio (typ)	500:1	600:1	1000:1	600:1	1000:1	1000:1
Response Time (max)	35 ms	35 ms	35 ms	35 ms	40 ms	35 ms
Refresh Rate	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Horizontal View Angle	80°	80°	80°	80°	80°	80°
Vertical View Angle	80°	80°	80°	80°	80°	80°
Pixel Pitch	0.161 x 0.161	0.161 x 0.161	0.161 x 0.161	0.161 x 0.161	0.0805 x 0.0805	0.161 x 0.161
Power Consumption (maximum)	3.2 W	2.5 W	4.1 W	3.5 W	3.75 W	1.8 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare	Anti-Glare, SafeScreen	Anti-glare	Anti-Reflection/ Anti-Smudge coating
Touch options	No	No	Yes	Yes	No	Yes
Stylus support	No	No	No	No	No	Yes (optional Wacom pen)

Fingerprint reader in power button

Table 19. Fingerprint reader specifications

Description	Values
Sensor technology	Capacitive
Sensor resolution	500 dpi
Sensor pixel size	108 x 88

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Latitude 7420.

Table 20. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel Iris Xe Graphics	● One HDMI 2.0 port ● Two Thunderbolt 4 ports with DisplayPort Alt Mode	Shared system memory	11th Generation Intel Core i5/i7

Operating and storage environment

This table lists the operating and storage specifications of your Latitude 7420.

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 80% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0.26 GRMS	1.37 GRMS
Shock (maximum)	105 G†	40 G†
Altitude range	-15.2 m to 3048 m (-50 ft to 10,000 ft)	-15.2 m to 10668 m (-50 ft to 35,000 ft)

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

† Measured using a 2 ms half-sine pulse when the hard drive is in use.

Keyboard shortcuts

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

Table 22. List of keyboard shortcuts

Keys	Primary Behavior	Secondary Behavior (Fn + Key)
Fn + Esc	Escape	Switch Fn-key lock
Fn + F1	Mute audio	F1 behavior
Fn + F2	Decrease volume	F2 behavior
Fn + F3	Increase volume	F3 behavior
Fn + F4	Mic Mute	F4 behavior
Fn + F5	Keyboard backlight ⓘ **NOTE:** Not applicable for non-backlight keyboard.	F5 behavior
Fn + F6	Decrease screen brightness	F6 behavior
Fn + F7	Increase screen brightness	F7 behavior
Fn + F8	Switch to external display	F8 behavior
Fn + F10	Print Screen	F10 behavior
Fn + F11	Home	F11 behavior
Fn + F12	End	F12 behavior
Fn + Right Ctrl	Emulates right-click	--

Getting help

Topics:

- Contacting Dell

Contacting Dell

ⓘ **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.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Go to **Dell.com/support**.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.