XPS 17 9720

Setup and Specifications

Regulatory Model: P92F Regulatory Type: P92F003 July 2022 Rev. A01



Notes, cautions, and warnings

(i) 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.

MARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Set up your XPS 17 9720

(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.



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
	My Dell
Deell	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.

Table 1. Locate Dell apps (continued)

Resources	Description
	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 <i>SupportAssist for Home PCs User's Guide</i> at www.dell.com/serviceabilitytools. Click SupportAssist and then, click SupportAssist for Home PCs .
I ¢	Dell Update 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 www.dell.com/ support.
	Dell Digital Delivery 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 www.dell.com/support.



Views of XPS 17 9720

Right



- 1. Two Thunderbolt 4 Type-C ports with DisplayPort Alt Mode and Power Delivery
- 2. SD-card slot
- 3. Universal audio jack

Left



- 1. Wedge-shaped lock slot
- 2. Two Thunderbolt 4 Type-C ports with DisplayPort Alt Mode and Power Delivery

Тор



- 1. Dual digital-array microphones
- 2. Power button
- 3. Right speaker
- 4. Trackpad
- 5. Left speaker

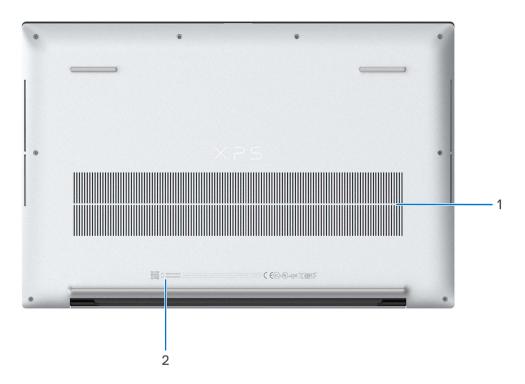
Display



7

- 1. IR LED
- 2. Ambient Light Sensor (ALS)
- 3. Camera (RGB/IR)
- 4. Camera status light
- 5. IR LED
- 6. Display panel
- 7. Power LED indicator

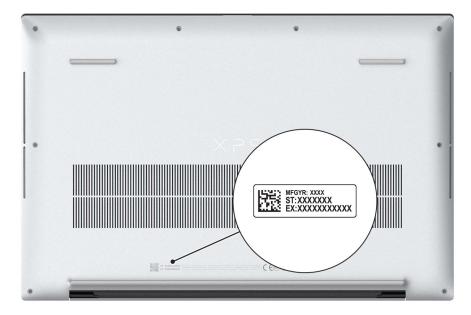
Bottom



- 1. Air vents
- 2. Service tag label

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.



Battery charge and status light

The following table lists the battery charge and status light behavior of your XPS 17 9720.

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%

Table 2. Battery charge and status light behavior

• 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 XPS 17 9720

Dimensions and weight

The following table lists the height, width, depth, and weight of your XPS 17 9720.

Table 3. Dimensions and weight

Description	Values
Height:	
Front height	8.67 mm (0.34 in.)
Rear height	13.15 mm (0.51 in.)
Width	374.48 mm (14.74 in.)
Depth	248.08 mm (9.76 in.)
Weight (i) NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	 Minimum: 2.17 kg (4.79 lb) Maximum: 2.57 kg (5.67 lb)

Processor

The following table lists the details of the processors supported by your XPS 17 9720.

Table 4. Processor

Description	Option one	Option two	Option three
Processor type	12 th Generation Intel Core i5-12500H	12 th Generation Intel Core i7-12700H	12 th 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	2.50 Ghz to 4.50 GHz	2.30 GHz to 4.70 GHz	2.50 GHz to 5.00 GHz
Processor cache	18 MB	24 MB	24 MB
Integrated graphics	Intel Iris X ^e Graphics OR Intel UHD Graphics	Intel Iris X ^e Graphics OR Intel UHD Graphics	Intel Iris X ^e Graphics OR Intel UHD Graphics

Chipset

The following table lists the details of the chipset supported by your XPS 17 9720.

Table 5. Chipset

Description	Values
Chipset	Intel Alder Lake H45
Processor	12 th Generation Intel Core i5/i7/i9
DRAM bus width	64-bit
Flash EPROM	64 MB
PCle bus	Up to Gen 4.0

Operating system

Your XPS 17 9720 supports the following operating systems:

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

Memory

The following table lists the memory specifications of your XPS 17 9720.

Table 6. Memory specifications

Description	Values	
Memory slots	Two-SODIMM slots	
Memory type	Dual-channel 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	 8 GB, 1 x 8 GB, DDR5, 4800 MHz, Non-ECC, single channel 16 GB, 2 x 8 GB, DDR5, 4800 MHz, Non-ECC, dual channel 32 GB, 2 x 16 GB, DDR5, 4800 MHz, Non-ECC, dual channel 64 GB, 2 x 32 GB, DDR5, 4800 MHz, Non-ECC, dual channel 	

External ports

The following table lists the external ports on your XPS 17 9720.

Table 7. External ports

Description	Values
USB ports	Four Thunderbolt 4 (USB Type-C) with DisplayPort Alt Mode and Power Delivery
Audio port	One universal audio jack
Video port/ports	Via Thunderbolt 4 (USB Type-C) ports
Media-card reader	One SD 4.0 card slot
Power-adapter port	USB Type-C
Security-cable slot	One Wedge-shaped lock slot

Internal slots

The following table lists the internal slots of your XPS 17 9720.

Table 8. Internal slots

Description	Values
M.2	 Two M.2 2230/2280 slot for solid-state drive (i) NOTE: To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at www.dell.com/support.

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your XPS 17 9720.

Table 9. Wireless module specifications

Description	Values
Model number	Intel Wi-Fi 6 AX211 (onboard)
Transfer rate	Up to 2400 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 6 (WiFi 802.11ax)
Encryption	 64-bit/128-bit WEP AES-CCMP TKIP

Table 9. Wireless module specifications (continued)

Description	Values
Bluetooth	Bluetooth 5.2

Audio

The following table lists the audio specifications of your XPS 17 9720.

Table 10. Audio specifications

Description		Values	
Audio controller		Realtek ALC711-CG	
Stereo conversion		Supported	
Internal audio interf	ace	SoundWire	
External audio inter	face	Universal audio jack	
Number of speakers		 2 x Woofers 2 x Tweeters 	
Internal-speaker amplifier		Realtek ALC1319D	
External volume controls		Keyboard shortcut controls	
Speaker output:			
	Average speaker output	 Woofer: 2 x 2 W Tweeters: 2 x 2 W 	
	Peak speaker output	 Woofer: 2 x 2.5 W Tweeters: 2 x 2.5 W 	
Subwoofer output		Not supported	
Microphone		Dual-array microphones	

Storage

This section lists the storage options on your XPS 17 9720.

Your computer supports the following configurations:

- M.2 2230, solid-state drive
- M.2 2280, solid-state drive

(i) NOTE: This system supports two solid-state drives. Each slot supports a M.2 2230 or M.2 3380 solid-state drive.

The primary drive of your computer varies with the storage configuration.

Storage type	Interface type	Capacity
M.2 2230, Class 35 solid-state drive	PCle NVMe Gen3 x4	256 GB
M.2 2230, Class 35 solid-state drive	PCle NVMe Gen4 x4	256 GB

Table 11. Storage specifications

Table 11. Storage specifications (continued)

Storage type	Interface type	Capacity
M.2 2280, Class 40 solid-state drive		Up to 4 TB (i) NOTE: 4 TB SSD only supported on systems with discrete graphics.

Media-card reader

The following table lists the media cards supported by your XPS 17 9720.

Table 12. Media-card reader specifications

Description	Values	
Media-card type	One SD 4.0 card slot	
Media-cards supported	 Secure Digital (SD) Secure Digital High Capacity (SDHC) Secure Digital Extended Capacity (SDXC) 	
() NOTE: The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.		

Keyboard

The following table lists the keyboard specifications of your XPS 17 9720.

Table 13. Keyboard specifications

Description	Values	
Keyboard type	• Backlit	
Keyboard layout	QWERTY	
Number of keys	 United States and Canada: 79 keys United Kingdom: 80 keys Japan: 83 keys 	
Keyboard size	X=19.05 mm key pitch Y=18.05 mm key pitch	
Keyboard shortcuts	Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key. (i) NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.	

Camera

The following table lists the camera specifications of your XPS 17 9720.

Table 14. Camera specifications

Des	cription	Values
Num	ber of cameras	One
Cam	era type	RGB-Ir camera with dual digital-array microphones
Cam	era location	Front camera
Cam	era sensor type	CMOS RGB-Ir hybrid technology
Cam	era resolution:	
	Still image	0.90 megapixel
	Video	1280 x 720 (HD) at 30 fps
Infra	red camera resolution:	
	Still image	0.92 megapixel
	Video	640 x 360 at 30 fps
Diagonal viewing angle:		
	Camera	78.5 degrees
	Infrared camera	78.5 degrees

Touchpad

The following table lists the touchpad specifications of your XPS 17 9720.

Table 15. Touchpad specifications

Description		Values	
Touchpad re	esolution:	4655	
	Horizontal		
	Vertical	2731	
Touchpad d	imensions:		
	Horizontal	149.90 mm (5.90 in.)	
	Vertical	89 mm (3.50 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 17 9720.

Table 16. Power adapter specifications

Description	Values	
Туре	130 W USB Type-C	
Input voltage	100 VAC to 240 VAC	
Input frequency	50 to 60 Hz	
Input current (maximum)	1.80 A	
Output current (continuous)	 20 V/6.5 A 5.0 V/1 A 	
Rated output voltage	 20 VDC 5 VDC	
Temperature range:		
Operating	0°C to 40°C (32°F to 104°F)	
Storage	-40°C to 70°C (-40°F to 158°F)	

Battery

The following table lists the battery specifications of your XPS 17 9720.

Table 17. Battery specifications

Description		Values	
Battery type		6-cell, 97 WHr ExpressCharge	
Battery voltage		11.40 VDC	
Battery weight (r	naximum)	0.385 kg (0.85 lb)	
Battery dimension	ns:		
	Height	8.45 mm (0.33 in.)	
	Width	69.70 mm (2.74 in.)	
	Depth	330.65 mm (13.02 in.)	
Temperature rang	ge:		
	Operating	 Charge: 0°C to 50°C (32°F to 122°F) Discharge: 0°C to 60°C (32°F to 140°F) 	
	Storage	-40°C to 60°C (-4°F to 140°F)	

Table 17. Battery specifications (continued)

Description	ValuesVaries depending on operating conditions and can significantly reduce under certain power-intensive conditions.	
Battery operating time		
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 on the Dell Power Manager see, <i>Me and My Dell</i> on www.dell.com.	 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 (i) NOTE: Control the charging time, duration, start and end time, and so on, using the Dell Power Manager application. For more information about the Dell Power Manager, see, Me and My Dell on www.dell.com/. 	
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.

Display

The following table lists the display specifications of your XPS 17 9720.

Table 18. Display specifications

Description	Option one	Option two	
Display type	Full High Definition Plus (FHD+)	Ultra High Definition Plus (UHD+)	
Display-panel technology	Wide Viewing Angle (WVA) with Low Blue Light	Wide Viewing Angle (WVA) with Low Blue Light	
Display-panel dimensions (active area):			
Height	366.34 mm (14.42 in.)	366.34 mm (14.42 in.)	
Width	228.96 mm (9.01 in.)	228.96 mm (9.01 in.)	
Diagonal	432.00 mm (17 in.)	432.00 mm (17 in.)	
Display-panel native resolution	1920 x 1200	3840 x 2400	
Luminance (typical)	500 nits	500 nits	
Megapixels	2.3	9.2	
Color gamut	sRGB 100% min	Adobe 100% min; DCI-P3 99% typ, 95% min	
Pixels Per Inch (PPI)	133	266	
Contrast ratio (min.)	1650:1 typical	1600:1 typical	
Response time (max.)	35 ms	35 ms	
Refresh rate	60 Hz	60 Hz	
Horizontal view angle	+/- 85 degrees typical	+/- 85 degrees typical	

Table 18.	Display	specifications	(continued)
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Description	Option one	Option two
Vertical view angle	+/- 85 degrees typical	+/- 85 degrees typical
Pixel pitch	0.1908 mm	0.0954 mm
Power consumption (maximum)	5.06 W	13.73 W
Anti-glare vs glossy finish	Anti-glare	Anti-reflective
Touch options	No	Yes, 10 finger touch

Fingerprint reader

The following table lists the fingerprint-reader specifications of your XPS 17 9720.

(i) NOTE: The fingerprint reader is located 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 17 9720.

Table 20. Sensor

Sensor support
Accelerometer (ST Micro LIS2DW12TR): on the base (system board)
ALS for Panel Backlight Control

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your XPS 17 9720.

Table 21. GPU—Integrated

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

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your XPS 17 9720.

Table 22. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce RTX 3050	4 GB	GDDR6
NVIDIA GeForce RTX 3060	6 GB	GDDR6

Multiple display support matrix

The following table lists the multiple display support matrix for your XPS 17 9720.

Table 23. Multiple display support matrix

Graphics Card	Direct Graphics Controller Direct Output Mode	Supported external displays with computer internal display on	Supported external displays with computer internal display off
NVIDIA GeForce RTX 3050	No	No	No
NVIDIA GeForce RTX 3060	Yes	4	4
Intel UHD Graphics	Not applicable	3	4
Intel Iris Xe Graphics	Not applicable	3	4

Hardware security

The following table lists the hardware security of your XPS 17 9720.

Table 24. Hardware security

Hardware security
Trusted Platform Module (TPM) 2.0 FIPS 140-2 Certified
Chassis Intrusion Detection
1 wedge-shaped lock slot

Operating and storage environment

This table lists the operating and storage specifications of your XPS 17 9720.

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

Table 25. Computer environment (continued)

Description	Operating	Storage
Shock (maximum)	110 G†	160 G†
Altitude range	-15.2 m to 3048 m (-49.9 ft to 10000 ft)	-15.2 m to 10668 m (-49.9 ft to 35000 ft)
CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.		

 $\ast\,$ Measured using a random vibration spectrum that simulates user environment.

† Measured using a 2 ms half-sine pulse.

ComfortView Plus

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.

5

Keyboard shortcuts of XPS 17 9720

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

However, if the function keys F1-F12 are needed for specific software applications, multimedia 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.

Function key	Re-defined key (for multi-media control)	Behavior
F1	fn + F1	Mute audio
F2	fn + F2	Decrease volume
F3	fn + F3	Increase volume
F4	fn + F4	Play/Pause
F5	fn + F5	Click keyboard backlight NOTE: Toggle to cycle the keyboard backlight status through off, low-backlight, and high- backlight
F6	fn + F6	Decrease brightness
F7	fn + F7	Increase brightness
F8	fn + F8	Switch to external display
F10	fn + F10	Print screen
F11	fn + F11	Home
F12	fn + F12	End

Table 26. List of keyboard shortcuts

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

Table 27. List of keyboard shortcuts

Function key	Behavior
fn + B	Pause/Break
fn + S	Toggle scroll lock
fn + R	System request
fn + ctrl	Open application menu

Table 27. List of keyboard shortcuts (continued)

Function key	Behavior
fn + esc	Toggle fn-key lock
fn + left arrow	Home
fn + right arrow	End

6

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 28. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell app	Deell
Tips	·••
Contact Support	In Windows search, type Contact Support, and press Enter.
Online help for operating system	www.dell.com/support/windows
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 www.dell.com/support. For more information on how to find the Service Tag for your computer, see Locate the Service Tag on your computer.
Dell knowledge base articles for a variety of computer concerns	 Go to www.dell.com/support. On the menu bar at the top of the Support page, select Support > Knowledge Base. 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.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.

(i) 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.