OptiPlex XE4 Small Form Factor

Setup and Specifications

Regulatory Model: D17S Regulatory Type: D17S001 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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Contents

Chapter 1: Set up your computer	4
Chapter 2: Chassis overview	0
Display	
Back	
Dack	IU
Chapter 3: Specifications of OptiPlex XE4 Small Form Factor	11
Dimensions and weight	11
Processor	
Chipset	
Operating system	
Memory	
Memory matrix	
External ports	14
Internal slots	
Ethernet	
Wireless module	
Audio	
Storage	
RAID (Redundant Array of Independent Disks)	
Media-card reader	
Power ratings	
Power supply connector	
GPU—Integrated	
GPU—Discrete	19
Hardware security	19
Environmental	
Regulatory compliance	20
Operating and storage environment	
Chapter 4: Catting halp and contracting Dall	20
Chapter 4: Getting help and contacting Dell	



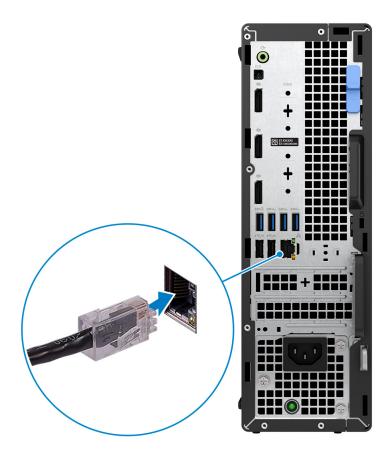
Set up your computer

Steps

1. Connect the keyboard and mouse.



2. Connect to your network using a cable.



(i) NOTE: Alternatively, you can connect to a wireless network.

3. Connect the display.



() NOTE: If you ordered your computer with a discrete graphics card, the HDMI and the display ports on the back panel of your computer are covered. Connect the display to the port on the discrete graphics card.



5. Press the power button.



6. 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.
- 7. 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.			
	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 .			

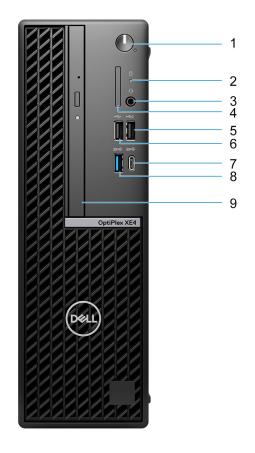
Table 1. Locate Dell apps (continued)

Resources	Description
	IDEX IN SUPPORTASSINT OF A STATE OF A STATE
L	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.



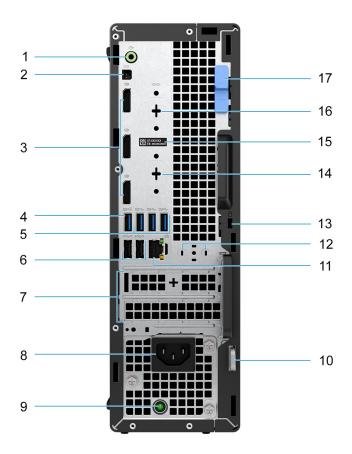
Chassis overview

Display



- 1. Power button
- 2. Hard-drive activity light
- **3.** Universal audio port
- 4. SD-card reader
- 5. USB 2.0 port with PowerShare
- 6. USB 2.0 port
- 7. USB 3.2 Gen 2x2 Type-C port
- 8. USB 3.2 Gen 2 port
- 9. Slim optical drive (optional)

Back



- 1. re-tasking line-out/line-in audio port
- **2.** Remote power switch port
- 3. Three DisplayPort 1.4 ports
- 4. USB 3.2 Gen 2 port
- 5. Three USB 3.2 Gen 1 ports
- 6. Two USB 2.0 ports with Smart Power On
- 7. Two expansion card slots
- 8. Power port
- 9. Power-supply diagnostic light
- 10. Padlock ring
- 11. RJ45 Ethernet port
- 12. External antenna slot
- 13. Kensington security-cable slot
- 14. HDMI 2.0b/DisplayPort 1.4/VGA/USB 3.2 Gen 2 type-C port with DisplayPort Alt Mode (optional)
- 15. Service Tag label
- 16. Serial port (optional)
- 17. Release latch

1. Speakers

Provide audio output.

2. Service Tag and regulatory labels

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. The regulatory label contains regulatory information of your computer.



Specifications of OptiPlex XE4 Small Form Factor

Dimensions and weight

The following table lists the height, width, depth, and weight of your OptiPlex XE4 Small Form Factor.

Table 2. Dimensions and weight

Description	Values
Height	290.00 mm (11.42 in.)
Width	92.60 mm (3.65 in.)
Depth	292.80 mm (11.53 in.)
Weight (maximum) (i) NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	 Minimum: 4.20 kg (9.27 lb) Maximum: 5.63 kg (12.42 lb)

Processor

The following table lists the details of the processors that are supported by your OptiPlex XE4 Small Form Factor .

Table 3. Processor

Descriptio n	Option one	Option two	Option three	Option four	Option five	Option six	Option seven	Option eight
Processor type	12 th Generation Intel Core i3-12100	12 th Generation Intel Core i3-12300	12 th Generation Intel Core i5-12400	12 th Generation Intel Core i5-12500 vPro	12 th Generation Intel Core i5-12600 vPro	12 th Generation Intel Core i7-12700 vPro	12 th Generation Intel Core i9-12900 vPro	12 th Generation Intel Pentium Gold G7400
Processor wattage	60 W	60 W	65 W	65 W	65 W	65 W	65 W	46 W
Processor core count	4	4	6	6	6	12	16	2
Processor thread count	8	8	12	12	12	20	24	4
Processor speed	3.30 GHz to 4.30 GHz	3.50 GHz to 4.40 GHz	2.50 GHz to 4.40 GHz	3.00 GHz to 4.60 GHz	3.30 GHz to 4.80 GHz	2.10 GHz to 4.90 GHz	2.40 GHz to 5.10 GHz	up to 3.70 GHz
Processor cache	12 MB	12 MB	18 MB	18 MB	18 MB	25 MB	30 MB	6 MB

Table 3. Processor (continued)

Descriptio n	Option one	Option two	Option three	Option four	Option five	Option six	Option seven	Option eight
Integrated graphics	Intel UHD Graphics 730	Intel UHD Graphics 730	Intel UHD Graphics 730	Intel UHD Graphics 770	Intel UHD Graphics 770	Intel UHD Graphics 770	Intel UHD Graphics 770	Intel UHD Graphics 710

Chipset

The following table lists the details of the chipset supported by your OptiPlex XE4 Small Form Factor.

Table 4. Chipset

Description	Values
Chipset	Intel Q670
Processor	12 th Generation Intel Pentium Gold and Intel Core i3/i5/i7/i9
DRAM bus width	64-bit, dual-channel
Flash EPROM	 16 MB (nRPMC) 32 MB (RPMC)
PCle bus	Up to Gen 4.0

Operating system

Your OptiPlex XE4 Small Form Factor supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit
- Windows 11 Downgrade (Windows 10 image)
- Windows 11 Pro National Education, 64-bit
- Ubuntu Linux 20.04 LTS, 64-bit

Memory

The following table lists the memory specifications of your OptiPlex XE4 Small Form Factor.

Table 5. Memory specifications

Description	Values
Memory slots	Four UDIMM slots
Memory type	Dual-channel, DDR4
Memory speed	3200 MHz
Maximum memory configuration	128 GB
Minimum memory configuration	4 GB

Table 5. Memory specifications (continued)

Description	Values
Memory size per slot	4 GB, 8 GB, 16 GB, 32 GB
Memory configurations supported	• 4 GB, 1 x 4 GB, DDR4, 3200 MHz, single-channel
	• 8 GB, 1 x 8 GB, DDR4, 3200 MHz, single-channel
	• 8 GB, 2 x 4 GB, DDR4, 3200 MHz, dual-channel
	• 16 GB, 1 x 16 GB, DDR4, 3200 MHz, single-channel
	• 16 GB, 2 x 8 GB, DDR4, 3200 MHz, dual-channel
	• 32 GB, 1 x 32 GB, DDR4, 3200 MHz, single-channel
	• 32 GB, 2 x 16 GB, DDR4, 3200 MHz, dual-channel
	• 32 GB, 4 x 8 GB, DDR4, 3200 MHz, dual-channel
	• 64 GB, 2 x 32 GB, DDR4, 3200 MHz, dual-channel
	• 64 GB, 4 x 16 GB, DDR4, 3200 MHz, dual-channel
	• 128 GB, 4 x 32 GB, DDR4, 3200 MHz, dual-channel

Memory matrix

The following table lists the memory configurations supported on your OptiPlex XE4 Small Form Factor.

Table 6. Memory matrix

Configurati	i Slot				
on	U-DIMM1	U-DIMM2	U-DIMM3	U-DIMM4	
4 GB DDR4	4G				
8 GB DDR4	4G	4G			
8 GB DDR4	8G				
16 GB DDR4	8G	8G			
16 GB DDR4	16G				
16 GB DDR4	8G	8G	8G	8G	
32 GB DDR4	16G	16G			
32 GB DDR4	32G				
32 GB DDR4	16G	16G	16G	16G	
64 GB DDR4	32G	32G			
64 GB DDR4	32G	32G	32G	32G	
128 GB DDR4	32 GB	32 GB	32 GB	32 GB	

External ports

The following table lists the external ports of your OptiPlex XE4 Small Form Factor.

Table 7. External ports

Description	Values
Network port	One RJ45 Ethernet port (rear)
USB ports	 One USB 2.0 port with PowerShare (front) One USB 2.0 port (front) One USB 3.2 Gen 2 port (front) One USB 3.2 Gen 2x2 Type-C port (front) Three USB 3.2 Gen 1 ports (rear) One USB 3.2 Gen 2 port (rear) Two USB 2.0 ports with Smart Power On (rear)
Audio port	 One Universal audio port (front) One re-tasking line-out/line-in audio port (rear)
Video port	 Three DisplayPort 1.4 ports One VGA port (optional) One DisplayPort 1.4 port (optional) One HDMI 2.0b port (optional) One USB 3.2 Gen 2 Type-C port with DisplayPort Alt Mode (optional) (i) NOTE: Download and install the latest Intel Graphics driver from www.dell.com/support to enable multiple displays.
Media-card reader	One SD-card 4.0 slot (front, optional)
Remote Power	One Remote power switch port
Security-cable slot	One Kensington lock slotOne Padlock ring

Internal slots

The following table lists the internal slots of your OptiPlex XE4 Small Form Factor.

Table 8. Internal slots

Description	Values
PCle Expansion	One Half-height Gen4 PCIe x16 slotOne Half-height Gen3 PCIe x4 slot
SATA	 Three SATA 3.0 slots for 3.5-inch/2.5-inch hard drive and slim optical drive
M.2	 One M.2 2230 slot for WiFi and Bluetooth card Three M.2 2230/2280 slot for SSD 1st M.2 slot for 2230/2280 2nd M.2 slot for 2230 SSD 3rdt M.2 slot for 2280 SSD

Table 8. Internal slots (continued)

Description	Values	
	() NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article 000144170 at www.dell.com/support.	

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your OptiPlex XE4 Small Form Factor.

Table 9. Ethernet specifications

Description	Values
Model number	Intel I219
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module specifications of your OptiPlex XE4 Small Form Factor.

Table 10. Wireless module specifications

Description	Option one	Option two	Option three
Model number	Intel AX211	Intel Dual Band Wireless-AC 9462	MediaTek MT7921
Transfer rate	Up to 2400 Mbps	Up to 433 Mbps	Up to 1200 Mbps
Frequency bands supported	2.4 GHz/5/6 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	 IEEE 802.11a/b/g/n/ac/ax 160MHz channel use MU-MIMO 6GHz band 	 WiFi 802.11a/b/g Wi-Fi 4 (WiFi 802.11n) Wi-Fi 5 (WiFi 802.11ac) 	 WiFi 802.11a/b/g Wi-Fi 4 (WiFi 802.11n) Wi-Fi 5 (WiFi 802.11ac) Wi-Fi 6 (WiFi 802.11ax) MU-MIMO
Encryption	 64-bit and 128-bit WEP 128-bit AES-CCMP TKIP 256-bit AES-GCMP 	 64-bit and 128-bit WEP 128-bit AES-CCMP TKIP 	 64-bit and 128-bit WEP 128-bit AES-CCMP TKIP
Bluetooth	5.2	5.1	5.2

Audio

The following table lists the audio specifications of your OptiPlex XE4 Small Form Factor.

Table 11. Audio specifications

Description	Values	
Audio type	4 Channel High Definition Audio	
Audio controller	Realtek Audio Controller, ALC3246-CG	
Internal audio interface	Intel HDA (high-definition audio)	
External audio interface	 One Universal audio port (front) One Line-out audio port with re-tasking to Line-in(rear) 	

Storage

This section lists the storage options on your OptiPlex XE4 Small Form Factor.

Your computer supports one of the following configurations:

- One 2.5 inch hard drive
- Two 2.5 inch hard drives
- One 3.5 inch hard drive
- One M.2 2230/2280 solid-state drive (class 35 or class 40)
- One M.2 2230/2280 solid-state drive (class 35 or class 40) and one 3.5 inch hard-disk drive
- One M.2 2230/2280 solid-state drive (class 35 or class 40) and one 2.5 inch hard-disk drive
- One M.2 2230/2280 solid-state drive (class 35 or class 40) and two 2.5 inch hard-disk drives
- Two M.2 2230/2280 solid-state drive (class 35 or class 40) and one 3.5 inch hard-disk drive
- Two M.2 2230/2280 solid-state drive (class 35 or class 40) and one 2.5 inch hard-disk drive
- Two M.2 2230/2280 solid-state drive (class 35 or class 40) and two 2.5 inch hard-disk drives

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

- with a M.2 solid-state drive, the M.2 solid-state drive is the primary drive
- without a M.2 drive, either the 3.5-inch hard drive or one of the 2.5-inch hard drives is the primary drive

Table 12. Storage specifications

Storage type	Interface type	Capacity
2.5-inch, 5400 RPM, hard-disk drive	SATA 3.0	Up to 2 TB
2.5-inch, 7200 RPM, hard-disk drive	SATA 3.0	Up to 1 TB
2.5-inch, 7200 RPM, Opal Self- Encrypting hard-disk drive	SATA 3.0	Up to 500 GB
3.5-inch, 5400 RPM, hard-disk drive	SATA 3.0	Up to 4 TB
3.5-inch, 7200 RPM, hard-disk drive	SATA 3.0	Up to 2 TB
M.2 2230, Class 35 solid-state drive	PCle NVMe Gen3 x4	256 GB
M.2 2230, Class 35, Opal Self- Encrypting solid-state drive	PCle NVMe Gen3 x4	256 GB
M.2 2280, Class 40 solid-state drive	PCle NVMe Gen4 x4	2 ТВ

Table 12. Storage specifications (continued)

Storage type	Interface type	Capacity
M.2 2280, Class 40, Opal Self- Encrypting solid-state drive	PCle NVMe Gen3 x4	Up to 1 TB

RAID (Redundant Array of Independent Disks)

For optimal performance when configuring drives as a RAID volume, Dell recommends drive models that are identical.

(i) NOTE: RAID is not supported on Intel Optane configurations.

RAID 0 (Striped, Performance) volumes benefit from higher performance when drives are matched because the data is split across multiple drives: any IO operations with block sizes larger than the stripe size will split the IO and become constrained by the slowest of the drives. For RAID 0 IO operations where block sizes are smaller than the stripe size, whichever drive the IO operation targets will determine the performance, which increases variability and results in inconsistent latencies. This variability is particularly pronounced for write operations and it can be problematic for applications that are latency sensitive. One such example of this is any application that performs thousands of random writes per second in very small block sizes.

RAID 1 (Mirrored, Data Protection) volumes benefit from higher performance when drives are matched because the data is mirrored across multiple drives: all IO operations must be performed identically to both drives, thus variations in drive performance when the models are different, results in the IO operations completing only as fast as the slowest drive. While this does not suffer the variable latency issue in small random IO operations as with RAID 0 across heterogeneous drives, the impact is nonetheless large because the higher performing drive becomes limited in all IO types. One of the worst examples of constrained performance here is when using unbuffered IO. To ensure writes are fully committed to non-volatile regions of the RAID volume, unbuffered IO bypasses cache (for example by using the Force Unit Access bit in the NVMe protocol) and the IO operation will not complete until all the drives in the RAID volume have completed the request to commit the data. This kind of IO operation completely negates any advantage of a higher performing drive in the volume.

Care must be taken to match not only the drive vendor, capacity, and class, but also the specific model. Drives from the same vendor, with the same capacity, and even within the same class, can have very different performance characteristics for certain types of IO operations. Thus, matching by model ensures that the RAID volumes is comprised of an homogeneous array of drives that will deliver all the benefits of a RAID volume without incurring the additional penalties when one or more drives in the volume are lower performing.

OptiPlex XE4 Small Form Factor supports RAID with more than one hard drive configuration.

Media-card reader

The following table lists the media cards supported by your OptiPlex XE4 Small Form Factor.

Table 13. Media-card reader specifications

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

Power ratings

The following table lists the power rating specifications of OptiPlex XE4 Small Form Factor.

Table 14. Power ratings

Description	Option one
Туре	300 W (92% Efficient, 80 PLUS Platinum)
Input voltage	90 VAC - 264 VAC
Input frequency	47 Hz - 63 Hz
Input current (maximum)	4.2 A
Output current (continuous)	 12 VA - 18 A 12 VB - 18 A Standby mode: 12 VA - 1.5 A 12 VB - 3.3 A
Rated output voltage	 +12 VA +12 VB
Temperature range:	
Operating	5°C to 45°C (41°F to 113°F)
Storage	-40°C to 70°C (-40°F to 158°F)

Power supply connector

The following table lists the Power supply connector specifications of your OptiPlex XE4 Small Form Factor.

Table 15. Power supply connector

300 W (80 PLUS Platinum)	Two 4 pin connectors for processor
	One 8 pin connector for system board

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your OptiPlex XE4 Small Form Factor.

Table 16. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel UHD Graphics 710	 Three DisplayPort 1.4 ports 	Shared-system memory	Intel Pentium Gold G7400 processors
Intel UHD Graphics 730	 Three DisplayPort 1.4 ports 	Shared-system memory	12 th Generation Intel Core i3-12100, i3-12300, and i5-12400 processors

Table 16. GPU—Integrated (continued)

Controller	External display support	Memory size	Processor
Intel UHD Graphics 770	 Three DisplayPort 1.4 ports 	Shared-system memory	12 th Generation Intel Core i5-12500, i5-12600, i7-12700, and i9-12900 processors

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your OptiPlex XE4 Small Form Factor.

Table 17. GPU—Discrete

Controller	External display support	Memory size	Memory type
AMD Radeon RX640	 Two Mini-DisplayPort 1.4 ports One DisplayPort 1.4 port 	4 GB	GDDR5
AMD Radeon 550	Two DisplayPort 1.4 ports	2 GB	GDDR5
AMD Radeon 540	Two DisplayPort 1.4 ports	1 GB	GDDR5

Hardware security

The following table lists the hardware security of your OptiPlex XE4 Small Form Factor.

Table 18. Hardware security

Hardware security
Kensington security-cable slot
Padlock ring
Chasis lock slot support
Chassis intrusion switch
Lockable cable covers
Supply chain tamper alerts
SafeID including Trusted Platform Module (TPM) 2.0
Smart card keyboard (FIPS)
Microsoft 10 Device Guard and Credential Guard (Enterprise SKU)
Microsoft Windows Bitlocker
Local hard drive data wipe through BIOS (Secure Erase)
Self-encrypting storage drives (Opal, FIPS)
Trusted Platform Module TPM 2.0

Table 18. Hardware security (continued)

China TPM

Environmental

The following table lists the environmental specifications of your OptiPlex XE4 Small Form Factor.

Table 19. Environmental

Feature	Values
Recyclable packaging	Yes
BFR/PVC—free chassis	No
Vertical orientation packaging support	Yes
Multi-Pack packaging	No
Energy-Efficient Power Supply	Standard
ENV0424 compliant	Yes

NOTE: Wood-based fiber packaging contains a minimum of 35% recycled content by total weight of wood-based fiber. Packaging that contains without wood-based fiber can be claimed as Not Applicable. The anticipated required criteria for EPEAT 2018.

Regulatory compliance

The following table lists the regulatory compliance of your OptiPlex XE4 Small Form Factor.

Table 20. Regulatory compliance

Regulatory compliance
EPEAT registered configurations available
ENERGY STAR compliant configurations available
TCO 8.0 certified configurations available
US CEC MEPS compliant configurations available
Australia and New Zealand MEPS compliant configurations available
CEL
WEEE
Japan Energy Law
South Korea E-standby
EU RoHS
China RoHS

Operating and storage environment

This table lists the operating and storage specifications of your OptiPlex XE4 Small Form Factor.

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

Table 21. Computer environment

Operating	Storage
5°C-45°C (41°F-113°F)	-40°C-65°C (-40°F-149°F)
20% to 80% (non-condensing, Max dew point temperature = 26°C)	5% to 95% (non-condensing, Max dew point temperature = 33°C)
0.26 GRMS random at 5 Hz to 350 Hz	1.37 GRMS random at 5 Hz to 350 Hz
Bottom/Right half-sine pulse 40G, 2ms	105G, 2ms half-sine pulse
3048 m (10,000 ft)	10,668 m (35,000 ft)
	5°C-45°C (41°F-113°F) 20% to 80% (non-condensing, Max dew point temperature = 26°C) 0.26 GRMS random at 5 Hz to 350 Hz Bottom/Right half-sine pulse 40G, 2ms

the device outside these ranges may impact the performance of specific components.

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

† Measured using a 2 ms half-sine pulse.

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 22. 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	
	www.dell.com/support/linux	
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.

4