

# OptiPlex 7000 Tower

## 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.

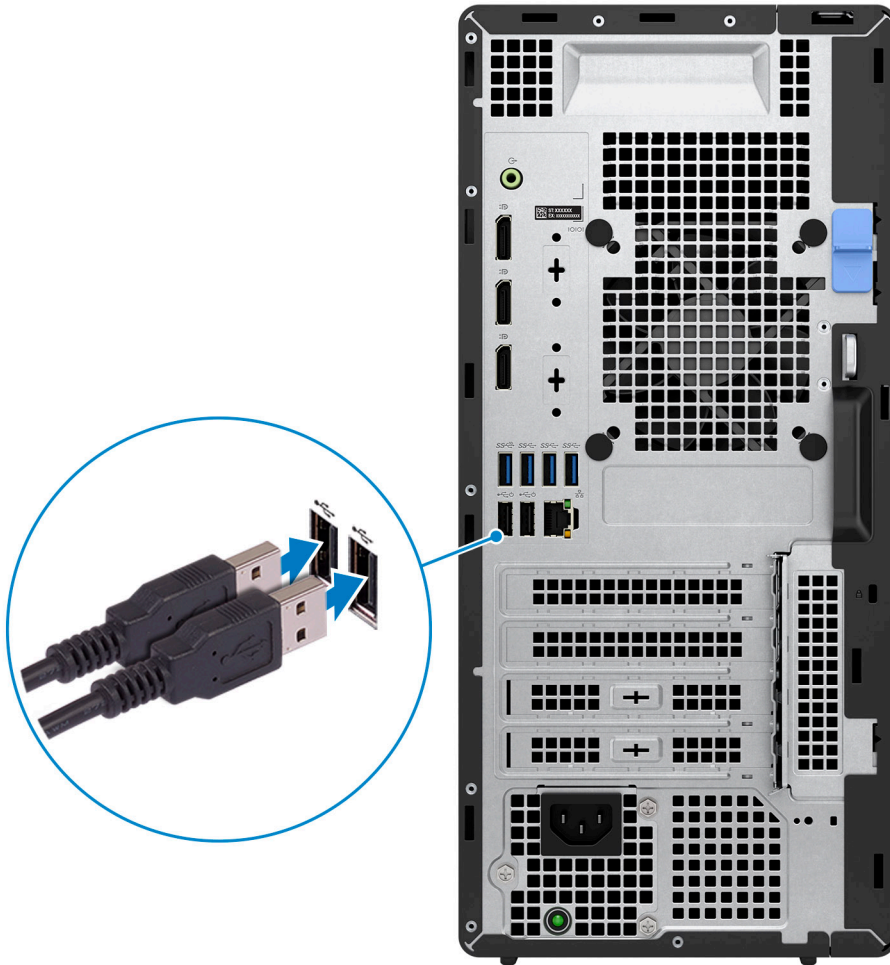
 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

<b>Chapter 1: Set up your computer</b> .....	<b>4</b>
<b>Chapter 2: Chassis overview</b> .....	<b>9</b>
Display.....	9
Back.....	10
<b>Chapter 3: Specifications of OptiPlex 7000 Tower</b> .....	<b>11</b>
Dimensions and weight.....	11
Processors.....	11
Chipset.....	12
Operating system.....	13
Memory.....	13
Memory matrix.....	14
External ports.....	14
Internal slots.....	15
Ethernet.....	15
Wireless module.....	15
Audio.....	16
Storage.....	16
RAID (Redundant Array of Independent Disks).....	18
Media-card reader.....	18
Power ratings.....	19
Power supply connector.....	19
GPU—Integrated.....	20
Multiple display support matrix.....	20
GPU—Discrete.....	21
Multiple display support matrix.....	21
Hardware security.....	22
Environmental.....	22
Regulatory compliance.....	23
Operating and storage environment.....	23
<b>Chapter 4: Getting help and contacting Dell</b> .....	<b>24</b>

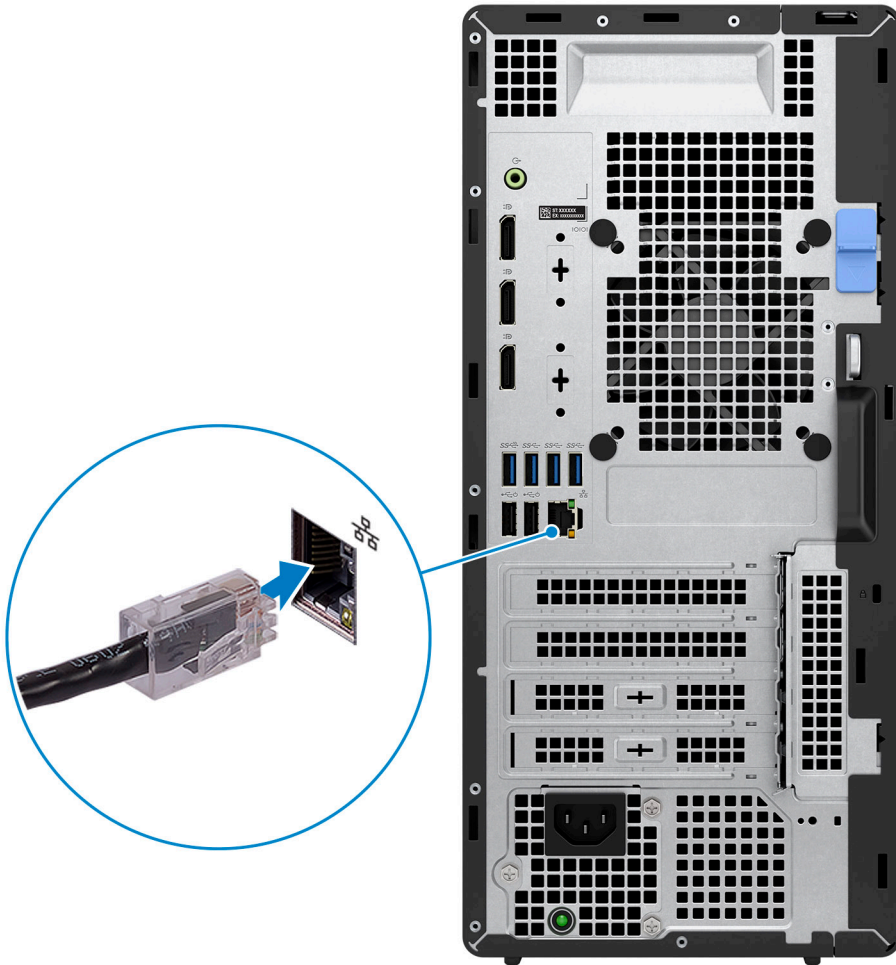
# Set up your computer

## Steps

1. Connect the keyboard and mouse.



2. Connect to your network using a cable.



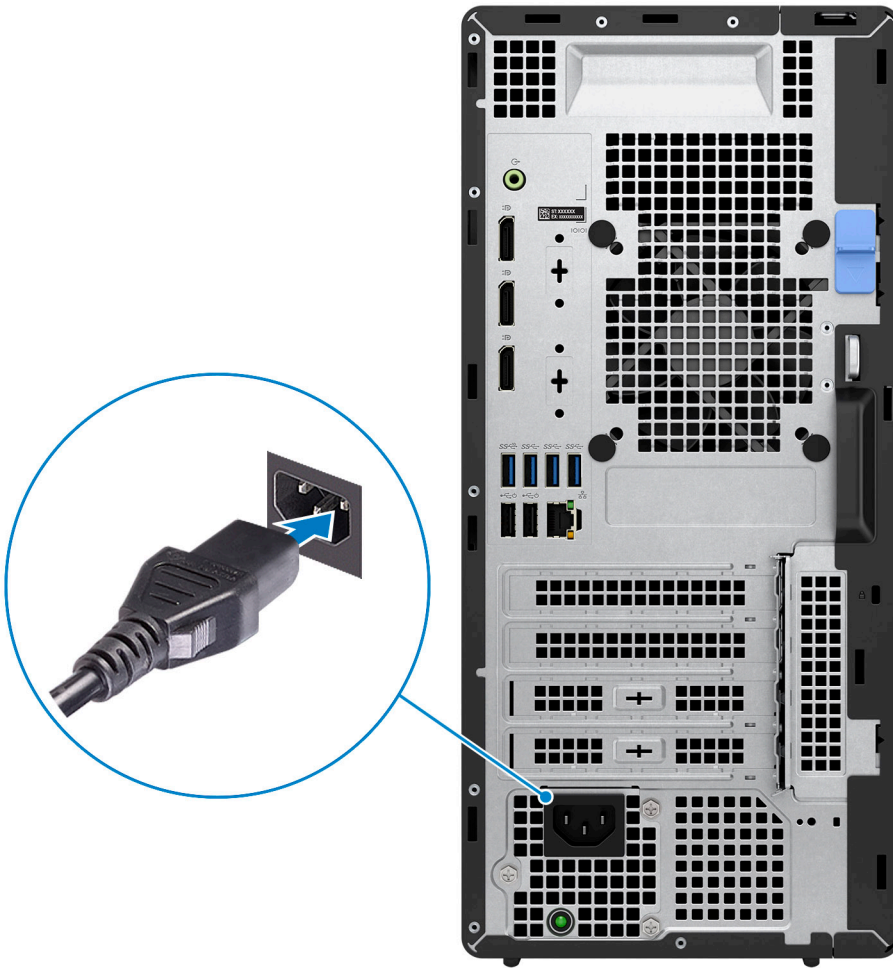
**i** **NOTE:** Alternatively, you can connect to a wireless network.

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.

4. Connect the power cable.



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
	<b>My Dell</b> 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.
	<b>SupportAssist</b> 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

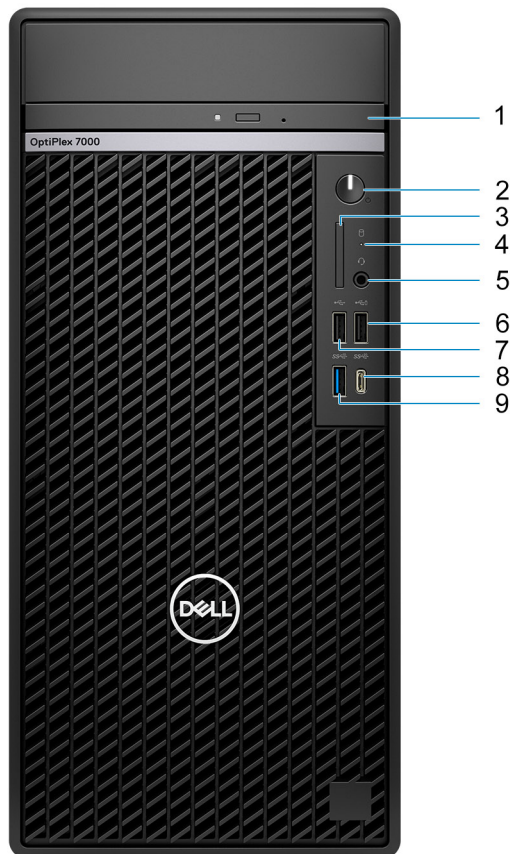
**Table 1. Locate Dell apps (continued)**

Resources	Description
	<p>failures. For more information, see <i>SupportAssist for Home PCs User's Guide</i> at <a href="http://www.dell.com/serviceabilitytools">www.dell.com/serviceabilitytools</a>. Click <b>SupportAssist</b> and then, click <b>SupportAssist for Home PCs</b>.</p> <p> <b>NOTE:</b> In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.</p>
	<p><b>Dell Update</b></p> <p>Updates your computer with critical fixes and latest device drivers as they become available. For more information on using Dell Update, search in the Knowledge Base Resource at <a href="http://www.dell.com/support">www.dell.com/support</a>.</p>
	<p><b>Dell Digital Delivery</b></p> <p>Download software applications, which are purchased but not preinstalled on your computer. For more information on using Dell Digital Delivery, search in the Knowledge Base Resource at <a href="http://www.dell.com/support">www.dell.com/support</a>.</p>



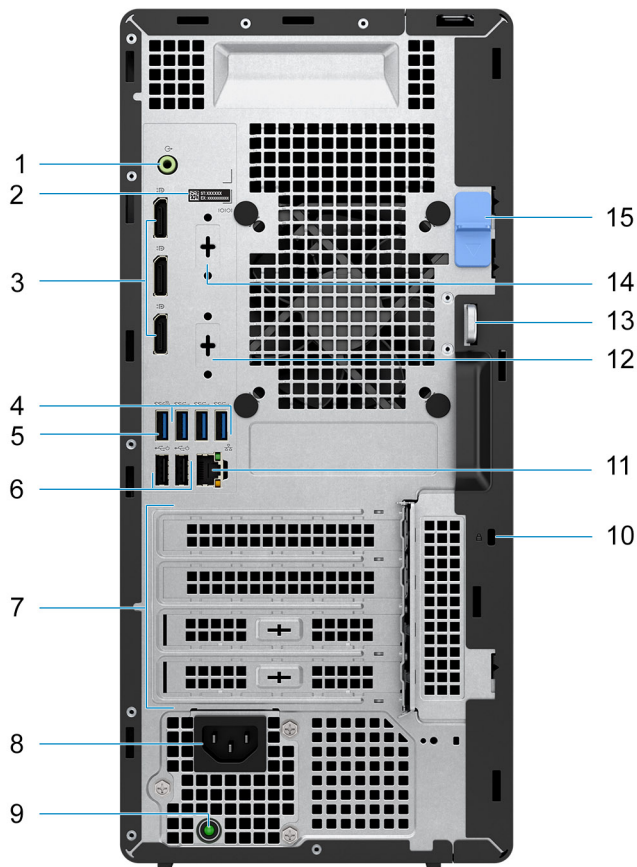
## Chassis overview

### Display



1. Optical disk-drive (optional)
2. Power button with diagnostic LED
3. SD-card slot (optional)
4. Hard-disk drive activity light
5. Universal audio jack
6. USB 2.0 port with PowerShare
7. USB 2.0 port
8. USB 3.2 Gen 2x2 Type-C port
9. USB 3.2 Gen 2 port

# Back



1. Line-out audio port with re-tasking to Line-in
2. Service tag label
3. Three DisplayPort 1.4a (HBR2) ports
4. Three USB 3.2 Gen 1 ports
5. One USB 3.2 Gen 2 port
6. Two USB 2.0 ports with Smart Power On
7. Four expansion card slots
8. Power cord connector port
9. Power supply diagnostic light
10. Kensington security-cable slot
11. RJ45 Ethernet port
12. One video port (HDMI 2.0b/DisplayPort 1.4a/VGA/USB Type-C with DisplayPort Alt mode) (optional)
13. Padlock ring
14. Serial port (optional)
15. Release latch

# Specifications of OptiPlex 7000 Tower

## Dimensions and weight

The following table lists the height, width, depth, and weight of your OptiPlex 7000 Tower.

**Table 2. Dimensions and weight**

Description	Values
Height	367.00 mm (14.45 in.)
Width	169.00 mm (6.65 in.)
Depth	300.80 mm (11.84 in.)
Weight <i>i</i> <b>NOTE:</b> The weight of your computer depends on the configuration ordered and manufacturing variability.	<ul style="list-style-type: none"> <li>• Minimum - 5.92 kg (13.06 lb)</li> <li>• Maximum - 9.68 kg (21.35 lb)</li> </ul>

## Processors

The following table lists the details of the processors supported by your OptiPlex 7000 Tower.

*i* **NOTE:** Global Standard Products (GSP) are a subset of Dell's relationship products that are managed for availability and synchronized transitions on a worldwide basis. They ensure the same platform is available for purchase globally. This allows customers to reduce the number of configurations managed on a worldwide basis, thereby reducing their costs. They also enable companies to implement global IT standards by locking in specific product configurations worldwide.

Device Guard (DG) and Credential Guard (CG) are the new security features that are only available on Windows today.

Device Guard is a combination of enterprise-related hardware and software security features that, when configured together, will lock a device down so that it can only run trusted applications. If it is not a trusted application, it cannot run.

Credential Guard uses virtualization-based security to isolate secrets (credentials) so that only privileged system software can access them. Unauthorized access to these secrets can lead to credential theft attacks. Credential Guard prevents these attacks by protecting NTLM password hashes and Kerberos Ticket Granting Tickets.

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

**Table 3. Processors**

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics	GSP	DG/CG Ready
12 <sup>th</sup> Generation Intel Core i3-12100	60 W	4	8	3.30 GHz to 4.30 GHz	12 MB	Intel UHD Graphics 730	No	Yes
12 <sup>th</sup> Generation Intel Core i3-12300	60 W	4	8	3.50 GHz to 4.40 GHz	12 MB	Intel UHD Graphics 730	No	Yes

**Table 3. Processors (continued)**

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics	GSP	DG/CG Ready
12 <sup>th</sup> Generation Intel Core i5-12400	65 W	6	12	2.50 GHz to 4.40 GHz	18 MB	Intel UHD Graphics 730	No	Yes
12 <sup>th</sup> Generation Intel Core i5-12500, vPro	65 W	6	12	3.00 GHz to 4.60 GHz	18 MB	Intel UHD Graphics 770	Yes	Yes
12 <sup>th</sup> Generation Intel Core i5-12600, vPro	65 W	6	12	3.30 GHz to 4.80 GHz	18 MB	Intel UHD Graphics 770	Yes	Yes
12 <sup>th</sup> Generation Intel Core i7-12700, vPro	65 W	12	20	2.10 GHz to 4.90 GHz	25 MB	Intel UHD Graphics 770	Yes	Yes
12 <sup>th</sup> Generation Intel Core i9-12900, vPro	65 W	16	24	2.40 GHz to 5.10 GHz	30 MB	Intel UHD Graphics 770	Yes	Yes
12 <sup>th</sup> Generation Intel Core i5-12600K, vPro	125 W	10	16	3.70 GHz to 4.90 GHz	20 MB	Intel UHD Graphics 770	Yes	Yes
12 <sup>th</sup> Generation Intel Core i7-12700K, vPro	125 W	12	20	3.60 GHz to 5.00 GHz	25 MB	Intel UHD Graphics 770	Yes	Yes
12 <sup>th</sup> Generation Intel Core i9-12900K, vPro	125 W	16	24	3.20 GHz to 5.20 GHz	30 MB	Intel UHD Graphics 770	Yes	Yes

## Chipset

The following table lists the details of the chipset supported by your OptiPlex 7000 Tower.

**Table 4. Chipset**

Description	Values
Chipset	Intel Q670

**Table 4. Chipset (continued)**

Description	Values
Processor	12 <sup>th</sup> Generation Intel Core i3/i5/i7/i9
DRAM bus width	64-bit
Flash EPROM	32 MB + 16 MB
PCIe bus	Up to Gen4

## Operating system

Your OptiPlex 7000 Tower 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
- Windows 11 CMIT Government Edition, 64-bit (China only)
- Kylin Linux Desktop version 10.1 (China only)
- Ubuntu Linux 20.04 LTS, 64-bit

## Memory

The following table lists the memory specifications of your OptiPlex 7000 Tower.

**Table 5. Memory specifications**

Description	Values
Memory slots	Four-DIMM slots
Memory type	DDR5
Memory speed	<ul style="list-style-type: none"> <li>• 3600 MHz</li> <li>• 4000 MHz</li> <li>• 4400 MHz</li> </ul>
Maximum memory configuration	128 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, and 32 GB
Memory configurations supported	<ul style="list-style-type: none"> <li>• 8 GB, 1 x 8 GB, DDR5, 4400 MHz, single-channel</li> <li>• 16 GB, 1 x 16 GB, DDR5, 4400 MHz, single-channel</li> <li>• 16 GB, 2 x 8 GB, DDR5, 4000 MHz, dual-channel</li> <li>• 32 GB, 1 x 32 GB, DDR5, 4400 MHz, single-channel</li> <li>• 32 GB, 2 x 16 GB, DDR5, 4000 MHz, dual-channel</li> <li>• 32 GB, 4 x 8 GB, DDR5, 4000 MHz, dual-channel</li> <li>• 64 GB, 2 x 32 GB, DDR5, 3600 MHz, dual-channel</li> <li>• 64 GB, 4 x 16 GB, DDR5, 4000 MHz, dual-channel</li> <li>• 128 GB, 4 x 32 GB, DDR5, 3600 MHz, dual-channel</li> </ul>

## Memory matrix

The following table lists the memory configurations supported on your OptiPlex 7000 Tower.

**Table 6. Memory matrix**

Configuration	Slot			
	DIMM1	DIMM2	DIMM3	DIMM4
8 GB DDR5	8 GB	NA	NA	NA
16 GB DDR5	16 GB	NA	NA	NA
16 GB DDR5	8 GB	8 GB	NA	NA
32 GB DDR5	32 GB	NA	NA	NA
32 GB DDR5	16 GB	16 GB	NA	NA
32 GB DDR5	8 GB	8 GB	8 GB	8 GB
64 GB DDR5	32 GB	32 GB	NA	NA
64 GB DDR5	16 GB	16 GB	16 GB	16 GB
128 GB DDR5	32 GB	32 GB	32 GB	32 GB

## External ports

The following table lists the external ports of your OptiPlex 7000 Tower.

**Table 7. External ports**

Description	Values
Network port	<ul style="list-style-type: none"> <li>One RJ45 Ethernet port, 1 GHz</li> <li>One RJ45 Ethernet port, 2.5 GHz (optional)</li> </ul>
USB ports	<p>Front:</p> <ul style="list-style-type: none"> <li>One USB 2.0 (480 Mbps) port</li> <li>One USB 2.0 (480 Mbps) port with PowerShare</li> <li>One USB 3.2 Gen 2 (10 Gbps) port</li> <li>One USB 3.2 Gen 2x2 (20 Gbps) Type-C port</li> </ul> <p>Rear:</p> <ul style="list-style-type: none"> <li>Two USB 2.0 ports (480 Mbps) with Smart Power On</li> <li>One USB 3.2 Gen 2 (10 Gbps) port</li> <li>Three USB 3.2 Gen 1 (5 Gbps) ports</li> </ul>
Audio port	Universal audio jack
Video port	<ul style="list-style-type: none"> <li>Three DisplayPort 1.4a (HBR2)</li> <li>One Optional video port (HDMI 2.0b/Displayport 1.4a (HBR3)/VGA/PS2/serial/USB Type-C with DisplayPort Alt mode)</li> </ul> <p><b>NOTE:</b> Download and install the latest Intel Graphics driver from <a href="http://www.dell.com/support">www.dell.com/support</a> to enable multiple displays.</p>
I/O port	One Serial port (optional)

**Table 7. External ports (continued)**

Description	Values
Media-card reader	One SD-card slot (optional)
Power-adaptor port	NA
Security-cable slot	<ul style="list-style-type: none"> <li>One Kensington security-cable slot</li> <li>Padlock ring</li> </ul>

## Internal slots

The following table lists the internal slots of your OptiPlex 7000 Tower.

**Table 8. Internal slots**

Description	Values
Expansion	<ul style="list-style-type: none"> <li>One full-height Gen 4 PCIe x16 slot</li> <li>One full-height Gen 3 PCIe x4 open end (wired x4) slot</li> <li>One full-height Gen 3 PCIe x1 slot</li> <li>One full-height PCI-32 slot</li> </ul>
SATA	Four SATA slots for 3.5-inch/2.5-inch Hard disk drive/Solid-state drive/Optical Disk Drive
M.2	<ul style="list-style-type: none"> <li>One M.2 2230 slot for WiFi and Bluetooth card</li> <li>Three M.2 2230/2280 slots for solid-state drives</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>

## Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your OptiPlex 7000 Tower.

**Table 9. Ethernet specifications**

Description	Values
Model number	Intel i219-LM
Transfer rate	10/100/1000 Mbps

## Wireless module

The following table lists the Wireless Local Area Network (WLAN) module specifications of your OptiPlex 7000 Tower.

**Table 10. Wireless module specifications**

Description	Option one	Option two	Option three
Model number	Intel AX211	Intel 9462	MediaTek MT7921
Transfer rate	2400 Mbps	433 Mbps	1200 Mbps

**Table 10. Wireless module specifications (continued)**

Description	Option one	Option two	Option three
Frequency bands supported	2.40 GHz/5 GHz/6 GHz <b>i</b> <b>NOTE:</b> The 6 GHz frequency is supported on computers installed with Windows 11 operating system only.	2.40 GHz/5 GHz	2.40 GHz/5 GHz
Wireless standards	<ul style="list-style-type: none"> <li>• WiFi 802.11a/b/g</li> <li>• Wi-Fi 4 (WiFi 802.11n)</li> <li>• Wi-Fi 5 (WiFi 802.11ac)</li> <li>• Wi-Fi 6E (WiFi 802.11ax)</li> </ul>	<ul style="list-style-type: none"> <li>• WiFi 802.11a/b/g</li> <li>• Wi-Fi 4 (WiFi 802.11n)</li> <li>• Wi-Fi 5 (WiFi 802.11ac)</li> </ul>	<ul style="list-style-type: none"> <li>• WiFi 802.11a/b/g</li> <li>• Wi-Fi 4 (WiFi 802.11n)</li> <li>• Wi-Fi 5 (WiFi 802.11ac)</li> <li>• Wi-Fi 6 (WiFi 802.11ax)</li> </ul>
Encryption	<ul style="list-style-type: none"> <li>• 64-bit/128-bit WEP</li> <li>• AES-CCMP</li> <li>• TKIP</li> </ul>	<ul style="list-style-type: none"> <li>• 64-bit/128-bit WEP</li> <li>• AES-CCMP</li> <li>• TKIP</li> </ul>	<ul style="list-style-type: none"> <li>• 64-bit/128-bit WEP</li> <li>• AES-CCMP</li> <li>• TKIP</li> </ul>
Bluetooth wireless card	Bluetooth 5.2	Bluetooth 5.1	Bluetooth 5.2
	<b>i</b> <b>NOTE:</b> The version of the Bluetooth wireless card may vary depending on the operating system that is installed on your computer.		

## Audio

The following table lists the audio specifications of your OptiPlex 7000 Tower.

**Table 11. Audio specifications**

Description	Values
Audio type	High Definition Audio
Audio controller	Realtek ALC3246-CG
Internal audio interface	Intel HDA (high-definition audio)
External audio interface	<ul style="list-style-type: none"> <li>• Universal audio jack</li> <li>• One Line-out audio port with re-tasking to Line-in (rear)</li> </ul>

## Storage

This section lists the storage options on your OptiPlex 7000 Tower.

**Table 12. Storage Matrix**

Storage	1st 2.5-inch hard drive	2nd 2.5-inch hard drive	1st 3.5-inch hard drive	2nd 3.5-inch hard drive	Single M.2 socket	2nd M.2 2230/2280 socket	3rd M.2 2230/2280 socket
2.5-inch hard drive	Y	N	N				
Dual 2.5-inch hard drive	Y	Y	N				
3.5-inch hard drive	N	N	Y				
Dual 3.5-inch hard drive	N	N	Y	Y			



**Table 12. Storage Matrix (continued)**

Storage		1st 2.5-inch hard drive	2nd 2.5-inch hard drive	1st 3.5-inch hard drive	2nd 3.5-inch hard drive	Single M.2 socket	2nd M.2 2230/2280 socket	3rd M.2 2230/2280 socket
2.5-inch hard drive	3.5-inch hard drive	Y	N	Y				
3.5-inch hard drive	2.5-inch hard drive	N	Y	Y				
3.5-inch hard drive	Dual 2.5-inch hard drive	Y	Y	Y				
Dual 2.5-inch hard drive	3.5-inch hard drive	Y	Y	Y				
Dual 2.5-inch hard drive	Dual 3.5-inch hard drive	Y	Y	Y	Y			
Dual 3.5-inch hard drive	Dual 2.5-inch hard drive	Y	Y	Y	Y			
M.2 solid-state drive		N	N	N	N	Y	N	
Dual M.2 solid-state drive		N	N	N	N	Y	Y	
Triple M.2 solid-state drive		N	N	N	N	Y	Y	Y
Dual M.2 solid-state drive	2.5-inch hard drive	Y				Y	Y	
Dual M.2 solid-state drive	3.5-inch hard drive			Y		Y	Y	
Dual M.2 solid-state drive	Dual 2.5-inch hard drive	Y	Y	N	N	Y	Y	N
Dual M.2 solid-state drive	Dual 3.5-inch hard drive	N	N	Y	Y	Y	Y	N
Triple M.2 solid-state drive	2.5-inch hard drive	Y	N	N	N	Y	Y	Y
Triple M.2 solid-state drive	3.5-inch hard drive	N	N	Y	N	Y	Y	Y
Triple M.2 solid-state drive	Dual 2.5-inch hard drive	Y	Y	N	N	Y	Y	Y
Triple M.2 solid-state drive	Dual 3.5-inch hard drive	N	N	Y	Y	Y	Y	Y
M.2 solid-state drive	3.5-inch hard drive	N	N	Y	N	Y	N	
M.2 solid-state drive	2.5-inch hard drive/solid-state drive	N	Y	N	N	Y	N	
M.2 solid-state drive	Dual 2.5-inch hard drive	Y	Y	N	N	Y	N	
M.2 solid-state drive	Dual 3.5-inch hard drive	N	N	Y	Y	Y	N	

**Table 13. 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

**Table 13. Storage specifications (continued)**

Storage type	Interface type	Capacity
2.5-inch, 7200 RPM, FIPS Self Encrypting Opal 2.0, hard-disk drive	SATA 3.0	500 GB
3.5-inch, 5400 RPM, hard-disk drive	SATA 3.0	4 TB
3.5-inch, 7200 RPM, hard-disk drive	SATA 3.0	Up to 2 TB
M.2 2230 solid-state drive	PCIe 3 Gen x4 NVMe, Class 35	Up to 1 TB
M.2 2230 Opal Self-Encrypting solid-state drive	PCIe 3 Gen x4 NVMe, Class 35	256 GB
M.2 2280 solid-state drive	PCIe NVMe Gen4 x4, Class 40	Up to 2 TB

## RAID (Redundant Array of Independent Disks)

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

**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 7000 Tower supports RAID with more than one hard drive configuration.

## Media-card reader

The following table lists the media cards supported by your OptiPlex 7000 Tower.

**Table 14. Media-card reader specifications**

Description	Values
Media-card type	SD card
Media-cards supported	<ul style="list-style-type: none"> <li>Secure Digital (SD)</li> <li>Secure Digital High Capacity (SDHC)</li> <li>Secure Digital Extended Capacity (SDXC)</li> </ul>

**Table 14. Media-card reader specifications (continued)**

Description	Values
<p><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.</p>	

## Power ratings

The following table lists the power rating specifications of OptiPlex 7000 Tower.

**Table 15. Power ratings**

Description	Option one	Option two	Option three	Option four
Type	240 W internal power supply unit (PSU), 85% Efficient, 80 Plus Bronze	260 W internal power supply unit (PSU), 85% Efficient, 80 Plus Bronze	400 W internal power supply unit (PSU), 92% Efficient, 80 Plus Platinum	500 W internal power supply unit (PSU), 92% Efficient, 80 Plus Platinum
Input voltage	90 VAC–264 VAC	90 VAC–264 VAC	90 VAC–264 VAC	90 VAC–264 VAC
Input frequency	47 Hz–63 Hz	47 Hz–63 Hz	47 Hz–63 Hz	47 Hz–63 Hz
Input current (maximum)	4.0 A	4.2 A	5.4 A	7 A
Output current (continuous)	<ul style="list-style-type: none"> <li>12 VA/18 A</li> <li>12 VB/15 A</li> </ul> Standby mode: <ul style="list-style-type: none"> <li>12 VA/1.5 A</li> <li>12 VB/3.3 A</li> </ul>	<ul style="list-style-type: none"> <li>12 VA/18 A</li> <li>12 VB/16 A</li> </ul> Standby mode: <ul style="list-style-type: none"> <li>12 VA/1.5 A</li> <li>12 VB/3.3 A</li> </ul>	<ul style="list-style-type: none"> <li>12 VA/18 A</li> <li>12 VB/18 A</li> <li>12 VC/12 A</li> </ul> Standby mode: <ul style="list-style-type: none"> <li>12 VA/1.5 A</li> <li>12 VB/3.3 A</li> <li>12 VC/0 A</li> </ul>	<ul style="list-style-type: none"> <li>12 VA/18 A</li> <li>12 VB/18 A</li> <li>12 VC/18 A</li> </ul> Standby mode: <ul style="list-style-type: none"> <li>12 VA/1.5 A</li> <li>12 VB/3.3 A</li> <li>12 VC/0 A</li> </ul>
Rated output voltage	<ul style="list-style-type: none"> <li>+12 VA</li> <li>+12 VB</li> </ul>	<ul style="list-style-type: none"> <li>+12 VA</li> <li>+12 VB</li> </ul>	<ul style="list-style-type: none"> <li>+12 VA</li> <li>+12 VB</li> <li>+12 VC</li> </ul>	<ul style="list-style-type: none"> <li>+12 VA</li> <li>+12 VB</li> <li>+12 VC</li> </ul>
Temperature range:				
Operating	10°C–35°C (50°F–95°F)	10°C–35°C (50°F–95°F)	10°C–35°C (50°F–95°F)	10°C–35°C (50°F–95°F)
Storage	-40°C–70°C (-40°F–158°F)	-40°C–70°C (-40°F–158°F)	-40°C–70°C (-40°F–158°F)	-40°C–70°C (-40°F–158°F)

## Power supply connector

The following table lists the Power supply connector specifications of your OptiPlex 7000 Tower.

**Table 16. Power supply connector**

PSU	Connector type
240 W (80 PLUS Bronze)	<ul style="list-style-type: none"> <li>Two 4 pin connectors for processor</li> <li>One 8 pin connector for system board</li> </ul>
260 W (80 PLUS Bronze)	<ul style="list-style-type: none"> <li>Two 4 pin connectors for processor</li> <li>One 8 pin connector for system board</li> </ul>

**Table 16. Power supply connector (continued)**

PSU	Connector type
400 W (80 PLUS Platinum)	<ul style="list-style-type: none"> <li>• Two 4 pin connectors for processor</li> <li>• One 8 pin connector for system board</li> <li>• One 2 + 6 pin connector for graphic card</li> </ul>
500 W (80 PLUS Platinum)	<ul style="list-style-type: none"> <li>• Two 4 pin connectors for processor</li> <li>• One 8 pin connector for system board</li> <li>• One 6 pin and one 2 + 6 pin connectors for graphic card</li> </ul>

## GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your OptiPlex 7000 Tower.

**Table 17. GPU—Integrated**

Controller	External display support	Memory size	Processor
Intel UHD Graphics 730	Three DisplayPort 1.4a (HBR2)	Shared system memory	12 <sup>th</sup> Generation Intel Core i3/i5
Intel UHD Graphics 770	Three DisplayPort 1.4a (HBR2)	Shared system memory	12 <sup>th</sup> Generation Intel Core i5/i7/i9

## Multiple display support matrix

The following table lists the multiple display support matrix for your OptiPlex 7000 Tower.

**Table 18. Multiple display support matrix**

Description	Option one	Option two
Integrated Graphics Card	Intel UHD Graphics 730	Intel UHD Graphics 770
Optional Module	<ul style="list-style-type: none"> <li>• Option card with VGA (1920 x 1200 @ 60 Hz)</li> <li>• Option card with DP1.4a (HBR3) (5120 x 3200 @ 60 Hz)</li> <li>• Option card with HDMI 2.0b (4096 x 2160 @ 60 Hz)</li> <li>• Option card with Type-C (5120 x 3200 @ 60 Hz)</li> </ul>	<ul style="list-style-type: none"> <li>• Option card with VGA (1920 x 1200 @ 60 Hz)</li> <li>• Option card with DP1.4a (HBR3) (5120 x 3200 @ 60 Hz)</li> <li>• Option card with HDMI 2.0b (4096 x 2160 @ 60 Hz)</li> <li>• Option card with Type-C (5120 x 3200 @ 60 Hz)</li> </ul>
Supported 4K Displays	<ul style="list-style-type: none"> <li>• On board integrated DP1.4a (HBR2) (4096 x 2304 @ 60 Hz)</li> <li>• Option card with DP1.4a (HBR3) (5120 x 3200 @ 60 Hz)</li> <li>• Option card with HDMI 2.0b (4096 x 2160 @ 60 Hz)</li> <li>• Option card with Type-C (5120 x 3200 @ 60 Hz)</li> </ul>	<ul style="list-style-type: none"> <li>• On board integrated DP1.4a (HBR2) (4096 x 2304 @ 60 Hz)</li> <li>• Option card with DP1.4a (HBR3) (5120 x 3200 @ 60 Hz)</li> <li>• Option card with HDMI 2.0b (4096 x 2160 @ 60 Hz)</li> <li>• Option card with Type-C (5120 x 3200 @ 60 Hz)</li> </ul>
Supported 5K Displays	<ul style="list-style-type: none"> <li>• Option card with DP1.4a (HBR3) (5120 x 3200 @ 60 Hz)</li> <li>• Option card with Type-C (5120 x 3200 @ 60 Hz)</li> </ul>	<ul style="list-style-type: none"> <li>• Option card with DP1.4a (HBR3) (5120 x 3200 @ 60 Hz)</li> <li>• Option card with Type-C (5120 x 3200 @ 60 Hz)</li> </ul>

## GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your OptiPlex 7000 Tower.

**Table 19. GPU—Discrete**

Controller	External display support	Memory size	Memory type
AMD Radeon 540	Two DisplayPort 1.4 ports	1 GB	GDDR5
AMD Radeon 550	Two DisplayPort 1.4 ports	2 GB	GDDR5
AMD Radeon RX640	<ul style="list-style-type: none"> <li>One DisplayPort 1.4</li> <li>Two mini DisplayPort (mDP) ports</li> </ul>	4 GB	GDDR5
NVIDIA GeForce RTX 3070	<ul style="list-style-type: none"> <li>Three DisplayPort 1.4 ports</li> <li>One HDMI 2.1</li> </ul>	8 GB	GDDR6

## Multiple display support matrix

The following table lists the multiple display support matrix for your OptiPlex 7000 Tower.

**Table 20. Multiple display support matrix**

Graphics Card	Memory	Ports	Supported external displays with Direct Connect	Supported external displays with DP Multi-Stream	Supported 4K Displays	Supported 5K Displays	Resolution	Total Power
AMD Radeon 540	1 GB GDDR5	Two DisplayPort 1.4 ports	2	2	1	1	5120 x 2880 @60 Hz	50 W
AMD Radeon 550	2 GB GDDR5	Two DisplayPort 1.4 ports	2	2	1	1	5120 x 2880 @60 Hz	50 W
AMD Radeon RX640	4 GB GDDR5	<ul style="list-style-type: none"> <li>Two Mini-DisplayPort 1.4 ports</li> <li>One DisplayPort 1.4 port</li> </ul>	3	1	2	1	5120 x 2880 @60 Hz	50 W
NVIDIA RTX 3070	8 GB GDDR6	<ul style="list-style-type: none"> <li>Three DisplayPort 1.4 ports</li> <li>One HDMI 2.1 port</li> </ul>	4	3	3	1	<ul style="list-style-type: none"> <li>DisplayPort - 5120 x 2880 @60 Hz</li> <li>HDMI-4096 x 2160 @ 120 Hz</li> </ul>	220 W

# Hardware security

The following table lists the hardware security of your OptiPlex 7000 Tower.

**Table 21. Hardware security**

Hardware security
Kensington security-cable slot
Padlock ring
Chassis lock slot support
Chassis intrusion switch
Lockable cable covers
Supply chain tamper alerts
SafelD including Trusted Platform Module (TPM) 2.0
Smart card keyboard (FIPS)
Microsoft Windows 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
China TPM
Intel Secure Boot
Intel Authenticate
SafeBIOS: includes Dell Off-host BIOS Verification, BIOS Resilience, BIOS Recovery, and additional BIOS Controls

# Environmental

The following table lists the environmental specifications of your OptiPlex 7000 Tower.

**Table 22. Environmental**

Feature	Values
Recyclable packaging	Yes
BFR/PVC—free chassis	No
Vertical orientation packaging support	Yes
Multi-Pack packaging	Yes (optional)
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 7000 Tower.

**Table 23. Regulatory compliance**

<b>Regulatory compliance</b>
<a href="#">Product Safety, EMC and Environmental Datasheets</a>
<a href="#">Dell Regulatory Compliance Home page</a>
<a href="#">Dell and the Environment</a>

## Operating and storage environment

This table lists the operating and storage specifications of your OptiPlex 7000 Tower.

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

**Table 24. Computer environment**

Description	Operating	Storage
Temperature range	10°C-35°C (50°F-95°F)	-40°C-70°C (-40°F-158°F)
Relative humidity (maximum)	20% to 80% (non-condensing) (non-condensing, Max dew point temperature = 26°C)	0% to 95% (non-condensing) 5% to 95% (non-condensing, Max dew point temperature = 33°C)
Vibration (maximum)*	0.26 GRMS random at 5 Hz-350 Hz	1.37 GRMS random at 5 Hz-350 Hz
Shock (maximum)	Bottom/Right half-sine pulse 40G, 2 ms	105G, 2 ms half-sine pulse
Altitude range	-15.2 m to 3048 m (-49.8 ft to 10,000 ft)	-15.2 m to 10,668 m (-49.8 ft to 35,000 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.

# 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 25. Self-help resources**

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

## Contacting Dell

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

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

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