OptiPlex 7090 Tower

Setup and Specifications

Regulatory Model: D28M
Regulatory Type: D28M005
May 2021
Rev. A00

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

1

Set up your OptiPlex 7090 Tower

The images in this document may differ from your computer depending on the configuration you ordered.

Steps

1. Connect the keyboard and mouse.

2. Connect to your network using a cable, or connect to a wireless network.

3. Connect the display.

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 Technologies recommends:

   - 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

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

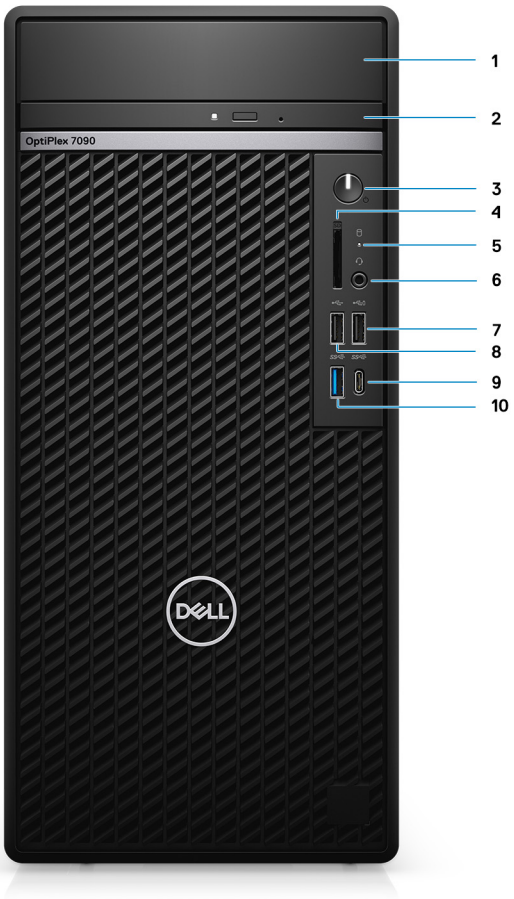
Table 1. Locate Dell apps (continued)

Dell apps	Details
	**SupportAssist** SupportAssist is the smart technology that keeps your computer running at its best by optimizing settings, detecting issues, removing viruses and notifies when you must make system updates. SupportAssist proactively checks the health of your system's hardware and software. When an issue is detected, the necessary system state information is sent to Dell to begin troubleshooting. SupportAssist is preinstalled on most of the Dell devices running Windows operating system. For more information, see SupportAssist for Business PCs User's Guide on www.dell.com/serviceabilitytools.
	**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.

2

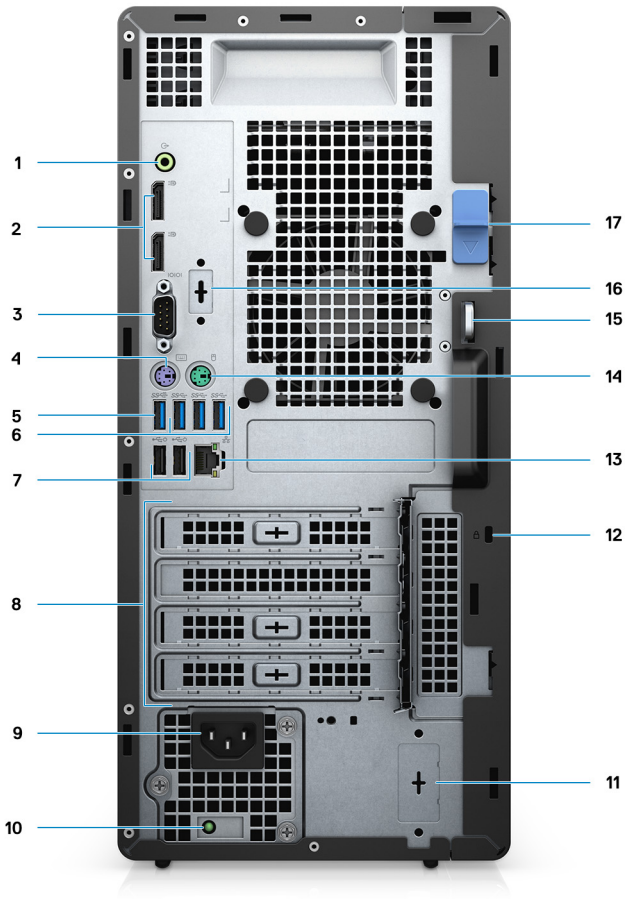
Views of OptiPlex 7090 Tower

Front



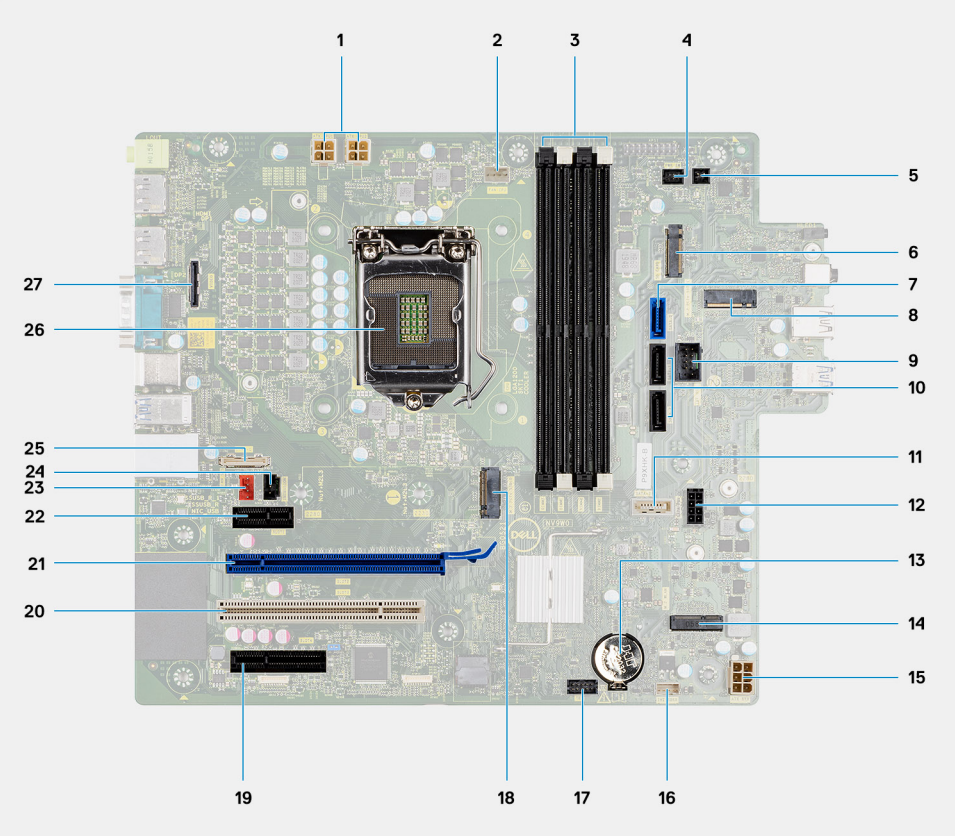
1. Hard-disk drive cover
2. Optical Disk Drive (optional)
3. Power button with diagnostic LED
4. SD 4.0 card reader (optional)
5. Hard-disk drive activity light
6. Universal audio jack port
7. USB 2.0 port with PowerShare
8. USB 2.0 port
9. USB 3.2 Gen2x2 capable Type-C port with PowerDelivery
10. USB 3.2 Gen 2 port

Back



1. Line-out re-tasking Line-in audio port
2. Two DisplayPort 1.4 ports
3. Serial port
4. PS/2 port for keyboard
5. One USB 3.2 Gen 2 port
6. Three USB 3.2 Gen 1 ports
7. Two USB 2.0 ports with Smart Power On
8. Expansion card slots
9. Power connector port
10. Power supply diagnostic light
11. Knock out slot (optional SMA connector)
12. Kensington security-cable slot
13. RJ-45 port 10/100/1000 Mbps
14. PS/2 port for mouse
15. Padlock loop
16. VGA/DisplayPort 1.4/HDMI 2.0b/USB 3.2 Gen2 Type-C Port with Alt-mode (optional)
17. Release latch

System board Layout



1. CPU power connector
2. Processor fan connector
3. Memory module connector
4. Power button connector
5. Remote power switch connector
6. SD card reader connector
7. SATA0 connector (blue)
8. M.2 PCIe SSD connector
9. Internal USB connector
10. Two SATA1/2 connector (black)
11. SATA3 connector (white)
12. SATA power cable connector
13. Coin-cell battery
14. M.2 WLAN connector
15. System power connector
16. Internal speaker connector
17. Thunderbolt header
18. M.2 PCIe SSD connector
19. PCIe x4 (Slot4)
20. PCI (Slot3)
21. PCIe x16 (Slot2)
22. PCIE x1 (Slot1)
23. System fan connector
24. Chassis Intrusion Detection connector
25. Type-C connector
26. Processor socket
27. Video connector

3

Specifications of OptiPlex 7090 Tower

Dimensions and weight

The following table lists the height, width, depth, and weight of your OptiPlex 7090 Tower.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	367.00 mm (14.45 in.)
Rear height	367.00 mm (14.45 in.)
Width	169.00 mm (6.65 in.)
Depth	300.80 mm (11.84 in.)
Weight **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.	• Minimum - 6.56 kg (14.46 lb) • Maximum - 10.22 kg (22.53 lb)

Processors

The following table lists the details of the processors supported by your OptiPlex 7090 Tower

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 10 Enterprise 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.

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
10th Generation	65 W	4	8	3.70 GHz to 4.40 GHz	6 MB	Intel UHD Graphics	No	Yes

Table 3. Processors (continued)

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics	GSP	DG/CG Ready
Intel Core i3-10105								
10th Generation Intel Core i3-10305	65 W	4	8	3.80 GHz to 4.50 GHz	8 MB	Intel UHD Graphics	No	Yes
10th Generation Intel Core i5-10400	65 W	6	12	2.90 GHz to 4.30 GHz	12 MB	Intel UHD Graphics	Yes	Yes
10th Generation Intel Core i5-10500	65 W	6	12	3.10 GHz to 4.50 GHz	12 MB	Intel UHD Graphics	Yes	Yes
10th Generation Intel Core i5-10505	65 W	6	12	3.20 GHz to 4.60 GHz	12 MB	Intel UHD Graphics	No	Yes
10th Generation Intel Core i5-10600	65 W	6	12	3.30 GHz to 4.80 GHz	12 MB	Intel UHD Graphics	Yes	Yes
10th Generation Intel Core i7-10700	65 W	8	16	2.90 GHz to 4.80 GHz	16 MB	Intel UHD Graphics	Yes	Yes
10th Generation Intel Core i9-10900	65 W	10	20	2.80 GHz to 5.20 GHz	20 MB	Intel UHD Graphics	Yes	Yes
10th Generation Intel Core i7-10700K	125 W	8	16	3.80 GHz to 5.00 GHz	16 MB	Intel UHD Graphics	Yes	Yes
10th Generation Intel Core i9-10900K	125 W	10	20	3.70 GHz to 5.30 GHz	20 MB	Intel UHD Graphics	Yes	Yes
11th Generation Intel Core i5-11400	65 W	6	12	2.60 GHz to 4.40 GHz	12 MB	Intel UHD Graphics	Yes	Yes
11th Generation Intel Core i5-11500	65 W	6	12	2.70 GHz to 4.60 GHz	12 MB	Intel UHD Graphics	Yes	Yes

Table 3. Processors (continued)

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics	GSP	DG/CG Ready
11th Generation Intel Core i5-11600	65 W	6	12	2.80 GHz to 4.80 GHz	12 MB	Intel UHD Graphics	Yes	Yes
11th Generation Intel Core i7-11700	65 W	8	16	2.50 GHz to 4.90 GHz	16 MB	Intel UHD Graphics	Yes	Yes
11th Generation Intel Core i9-11900	65 W	8	16	2.50 GHz to 5.20 GHz	16 MB	Intel UHD Graphics	Yes	Yes
11th Generation Intel Core i9-11700K	125 W	8	16	3.60 GHz to 5.00 GHz	16 MB	Intel UHD Graphics	Yes	Yes
11th Generation Intel Core i9-11900K	125 W	8	16	3.50 GHz to 5.30 GHz	16 MB	Intel UHD Graphics	Yes	Yes

Chipset

The following table lists the details of the chipset supported by your OptiPlex 7090 Tower

Table 4. Chipset

Description	Option one	Option two
Processors	10th Generation Intel Core i3/i5	11th Generation Intel Core i5/i7/i9
Chipset	Intel Q570	Intel Q570
DRAM bus width	64-bit (for single channel)	64-bit (for single channel)
Flash EPROM	32 MB	32 MB
PCIe bus	Up to Gen 3.0	Up to Gen 3.0

Operating system

Your OptiPlex 7090 Tower supports the following operating systems:

- Windows 10 Home, 64-bit
- Windows 10 Pro, 64-bit
- Windows 10 Pro National Academic, 64-bit
- Ubuntu Linux 20.04 LTS, 64-bit
- NeoKylin 7.0 (China only)

Memory

The following table lists the memory specifications of your OptiPlex 7090 Tower.

Table 5. Memory specifications

Description	Values
Memory slots	Four DIMM slots
Memory type	DDR4
Memory speed	2666/2933/3200 MHz
Maximum memory configuration	128 GB
Minimum memory configuration	4 GB
Memory size per slot	4 GB, 8 GB, 16 GB, 32 GB
Memory configurations supported	• 4 GB, 1 x 4 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 3200 MHz for 11th Generation Intel Core i5/i7/i9 processors • 8 GB, 1 x 8 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 3200 MHz for 11th Generation Intel Core i5/i7/i9 processors • 8 GB, 2 x 4 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 3200 MHz for 11th Generation Intel Core i5/i7/i9 processors • 16 GB, 1 x 16 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 3200 MHz for 11th Generation Intel Core i5/i7/i9 processors • 16 GB, 2 x 8 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 3200 MHz for 11th Generation Intel Core i5/i7/i9 processors • 32 GB, 1 x 32 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 3200 MHz for 11th Generation Intel Core i5/i7/i9 processors • 32 GB, 2 x 16 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 3200 MHz for 11th Generation Intel Core i5/i7/i9 processors • 32 GB, 4 x 8 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 3200 MHz for 11th Generation Intel Core i5/i7/i9 processors • 64 GB, 2 x 32 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 3200 MHz for 11th Generation Intel Core i5/i7/i9 processors • 64 GB, 4 x 16 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 3200 MHz for 11th Generation Intel Core i5/i7/i9 processors • 128 GB, 4 x 32 GB, 2666 MHz for 10th Generation Intel Core i3/i5 processors, 2933 MHz for 11th Generation Intel Core i5/i7/i9 processors

Memory configuration matrix

Table 6. Memory configuration matrix

Configuration	Slot			
	XMM1	XMM2	XMM3	XMM4
4 GB DDR4	4 GB			
8 GB DDR4	4 GB	4 GB		
8 GB DDR4	8 GB			
16 GB DDR4	8 GB	8 GB		
16 GB DDR4	16 GB			
32 GB DDR4	8 GB	8 GB	8 GB	8 GB
32 GB DDR4	16 GB	16 GB		
32 GB DDR4	32 GB			
64 GB DDR4	16 GB	16 GB	16 GB	16 GB
64 GB DDR4	32 GB	32 GB		
64 GB DDR4	64 GB			
128 GB DDR4	32 GB	32 GB	32 GB	32 GB

Intel Optane memory

Intel Optane memory functions only as a storage accelerator. It neither replaces nor adds to the memory (RAM) installed on your computer.

NOTE: Intel Optane memory is supported on computers that meet the following requirements:

- 7th Generation or higher Intel Core i3/i5/i7 processor
- Windows 10 64-bit version or higher (Anniversary Update)
- Latest version of Intel Rapid Storage Technology driver

Table 7. Intel Optane memory

Description	Values
Type	Memory/Storage/Storage accelerator
Interface	Gen 3 PCIe x4 NVMe
Connector	M.2 2280
Configurations supported	32 GB + 512 GB SDD
Capacity	32 GB

External ports

The following table lists the external ports of your OptiPlex 7090 Tower.

Table 8. External ports

Description	Values
Network port	One RJ-45 port 10/100/1000 Mbps (rear)
USB ports	• One USB 2.0 port with PowerShare (front) • One USB 3.2 Gen 2 port (front) • One USB 3.2 Gen2x2 capable Type-C port with PowerDelivery (front) • One USB 2.0 port (front) • One USB 3.2 Gen 2 port (rear) • Two USB 2.0 ports with Smart Power On (rear) • Three USB 3.2 Gen 1 ports (rear) • One USB 3.2 Gen 2 Type-C Alt-Mode (rear) (optional)
Audio port	• One Universal Audio Jack (front) • One Line-out audio port with re-tasking to Line-in (rear)
Video port	• Two DisplayPort 1.4 ports (rear) • One VGA Port/DisplayPort 1.4 Port/HDMI 2.0b Port/ USB 3.2 Gen2 Type-C Port with Alt-mode (optional)
Media-card reader	One SD-card slot (optional)
Power-adapter port	NA
Security-cable slot	One Kensington security-cable slot

Internal slots

The following table lists the internal slots of your OptiPlex 7090 Tower.

Table 9. Internal slots

Description	Values
Expansion	• One full-height Gen 4 PCIe x16 slot • One full-height PCIe x16 (wired x4) slot • One full-height PCIe x1 slots • One full-height PCIe-32 slot
SATA	Four SATA slots for 2.5-inch Hard disk drive/Solid-state drive/Optical Disk Drive
M.2	• One M.2 2230 slot for WiFi and Bluetooth card • One M.2 2230 slot for solid-state drive • One M.2 2230/2280 slot for solid-state drive/Intel Optane **NOTE:** To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626 at www.dell.com/support.

Communications

Ethernet

Table 10. Ethernet specifications

Description	Values
Model number	Intel i219LM
Transfer rate	10/100/1000 Mbps

Wireless module

Table 11. Wireless module specifications

Description	Values		
Model number	Qualcomm QCA61x4a	Qualcomm QCA9377	Intel Wi-Fi 6 AX201
Transfer rate	Up to 867 Mbps	Up to 433 Mbps	Up to 2.4 Gbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	802.11ac	802.11ac	802.11ax (Wi-Fi 6)
Encryption	• 64-bit and 128-bit WEP • 128-bit AES-CCMP • TKIP	• 64-bit and 128-bit WEP • 128-bit AES-CCMP • TKIP	• 64-bit and 128-bit WEP • 128-bit AES-CCMP • TKIP
Bluetooth	5.0	5.0	5.1

Audio and Speaker

The following table lists the audio specifications of your OptiPlex 7090 Tower.

Table 12. Audio specifications

Description	Values
Type	4 Channel High Definition Audio
Controller	Realtek ALC3246
Stereo conversion	24-bit DAC (Digital-to-Analog) and ADC (Analog-to-Digital)
Internal interface	Intel HDA (high-definition audio)
External interface	• One Universal Audio Jack (front) • One Line-out audio port with re-tasking to Line-in(rear)
Speakers	One (optional)
Internal speaker amplifier	Integrated in ALC3246 (Class-D 2 W)
External volume controls	Keyboard shortcut controls.

Table 12. Audio specifications (continued)

Description	Values
Speaker output average	2 W
Speaker output peak	2.5 W
Subwoofer output	Not supported
Microphone	Not supported

Storage

This section lists the storage options on your OptiPlex 7090 Tower.

Your computer supports one of the following configurations:

Table 13. 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 2280 socket	1st Bootable Device
2.5-inch hard drive		Y	N	N	N	N	N	2.5-inch hard drive
Dual 2.5-inch hard drive		Y	Y	N	N	N	N	1st 2.5-inch hard drive
3.5-inch hard drive		N	N	Y	N	N	N	3.5-inch hard drive
2.5-inch hard drive	3.5-inch hard drive	Y	N	Y	N	N	N	2.5-inch hard drive
3.5-inch hard drive	2.5-inch hard drive	N	Y	Y	N	N	N	3.5-inch hard drive
3.5-inch hard drive	Dual 2.5-inch hard drive	Y	Y	Y	N	N	N	3.5-inch hard drive
Dual 2.5-inch hard drive	3.5-inch hard drive	Y	Y	Y	N	N	N	1st 2.5-inch hard drive
Dual 3.5-inch hard drive	Dual 2.5-inch hard drive	Y	Y	Y	Y	N	N	1st 2.5-inch hard drive
Dual 3.5-inch hard drive	Dual 2.5-inch hard drive	Y	Y	Y	Y	N	N	1st 3.5-inch hard drive
M.2 solid-state drive		N	N	N	N	Y	N	M.2 solid-state drive
Dual M.2 solid-state drive		N	N	N	N	Y	Y	1st M.2 solid-

Table 13. 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 2280 socket	1st Bootable Device
									state drive
M.2 solid-state drive		3.5-inch hard drive	N	N	Y	N	Y	N	M.2 solid-state drive
M.2 solid-state drive		2.5-inch hard drive/ solid-state drive	N	Y	N	N	Y	N	M.2 solid-state drive
M.2 solid-state drive		Dual 2.5-inch hard drive	Y	Y	N	N	Y	N	M.2 solid-state drive
M.2 Intel Optane		2.5-inch hard drive	Y	N	N	N	Y	N	2.5-inch hard drive
M.2 Intel Optane		Dual 2.5-inch hard drive	Y	Y	N	N	Y	N	2.5-inch hard drive
M.2 Intel Optane		3.5-inch hard drive	N	N	Y	N	Y	N	3.5-inch hard drive
M.2 Intel Optane	2.5-inch hard drive	3.5-inch hard drive	Y	N	Y	N	Y	N	2.5-inch hard drive
M.2 Intel Optane	3.5-inch hard drive	2.5-inch hard drive	N	Y	Y	N	Y	N	3.5-inch hard drive

Table 14. 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, FIPS Self Encrypting Opal 2.0, hard-disk drive	SATA 3.0	Up to 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 512 GB
M.2 2280 solid-state drive	PCIe 3 Gen x4 NVMe, Class 40	Up to 2 TB
M.2 2280 Opal Self-Encrypting solid-state drive	PCIe 3 Gen x4 NVMe, Class 40	Up to 1 TB
M.2 2280 Opal Self-Encrypting solid-state drive	PCIe NVMe Gen3 x4, Class 40	Up to 1 TB

Power ratings

Table 15. Power adapter specifications

Description	Values			
Type	260 W typical 92% Efficient PSU, 80 Plus Bronze	300 W typical 85% Efficient PSU, 80 Plus Platinum	360 W typical 92% Efficient PSU, 80 Plus Platinum	500 W typical 92% Efficient PSU, 80 Plus Platinum
Input voltage	90 VAC to 264 VAC	90 VAC to 264 VAC	90 VAC to 264 VAC	90 VAC to 264 VAC
Input frequency	47 Hz to 63 Hz	47 Hz to 63 Hz	47 Hz to 63 Hz	47 Hz to 63 Hz
Input current (maximum)	4.2 A	4.5 A	5 A	7 A
Output current (continuous)	• 12 VA/16.5 A • 12 VB/18 A Standby mode: • 12 VA/1.5 A • 12 VB/2.5 A	• 12 VA/16.5 A • 12 VB/18 A Standby mode: • 12 VA/1.5 A • 12 VB/2.5 A	• 12 VA/18 A • 12 VB/18 A • 12 VC/18 A Standby mode: • 12 VA/1.5 A • 12 VB/2.5 A • 12 VC/0 A	• 12 VA/18 A • 12 VB/18 A • 12 VC/18 A Standby mode: • 12 VA/1.5 A • 12 VB/2.5 A • 12 VC/0 A
Rated output voltage	• +12 VA • +12 VB	• +12 VA • +12 VB	• +12 VA • +12 VB • +12 VC	• +12 VA • +12 VB • +12 VC
Temperature range:				
Operating	5°C to 45°C (41°F to 113°F)	5°C to 45°C (41°F to 113°F)	5°C to 45°C (41°F to 113°F)	5°C to 45°C (41°F to 113°F)
Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

Power Supply power cable specs

Table 16. Power Supply power cable specs

260 W (80 PLUS Bronze)	• Two 4 pin connectors for processor • One 6 pin connector for system board
300 W (80 PLUS Platinum)	• Two 4 pin connectors for processor • One 6 pin connector for system board
360 W (80 PLUS Platinum)	• Two 4 pin connectors for processor • One 6 pin connector for system board
500 W (80 PLUS Platinum)	• Two 4 pin connectors for processor • One 6 pin connector for system board • One 6 pin + 8 pin connector for graphics card

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your OptiPlex 7090 Tower.

Table 17. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel UHD Graphics 630	Two DisplayPort 1.4 ports	Shared system memory	10th Generation Intel Core i3/i5
Intel UHD Graphics 730	Two DisplayPort 1.4 ports	Shared system memory	11th Generation Intel Core i5-11400
Intel UHD Graphics 750	Two DisplayPort 1.4 ports	Shared system memory	11th Generation Intel Core i5/i7/i9

GPU — Discrete

The following table lists the specifications of the discrete graphics processing unit (GPU) supported by your OptiPlex 7090 Tower.

Table 18. GPU — Discrete

Controller	External display support	Memory size	Memory type
NVIDIA GeForce RTX 3070	• Three DisplayPort 1.4 ports • One HDMI 2.0b	8 GB	GDDR6
NVIDIA GeForce GTX 1660 SUPER	• One DisplayPort 1.4 • One HDMI 2.0b • DVI-D	6 GB	GDDR6
AMD Radeon RX 640	• One DisplayPort 1.4 • Two mini DisplayPort (mDP) ports	4 GB	GDDR5
AMD Radeon 550	Two DisplayPort 1.4 ports	4 GB	GDDR5
AMD Radeon 540	Two DisplayPort 1.2 ports	4 GB	GDDR5

Multiple display support matrix

Table 19. Integrated graphics card

Graphics Card	Intel UHD 630
Video ports on Integrated Graphics Card	• 1 x DisplayPort 1.4 port • 1 x DisplayPort 1.4 port (optional) • 1 x VGA (optional) • 1 x HDMI2.0 (optional)
Video port on Option Video module	VGA/ HDMI2.0/ DP++ 1.2/ TypeC w/DP-Alt mode
Number of displays	4

Table 20. Discrete graphics card

Graphics Card	RTX 3070	RTX 1660 SUPER	Radeon RX 640	Radeon RX 550	Radeon RX 540
Memory	8 GB GDDR6	6 GB GDDR6	4 GB GDDR5	4 GB GDDR5	4 GB GDDR5
Video Ports	• 3 x DisplayPort 1.4 ports • 1 x HDMI 2.1 port	• 1 x DisplayPort 1.4 ports • 1 x HDMI 2.0b port • 1 x DVI Dual link	• 2 x Mini DisplayPorts • 1 x DisplayPort	• 2 x Mini DisplayPorts • 1 x DisplayPort	• 1 x HDMI 1.4 port • 1 x DisplayPort
Max Displays (direct connect)	4	3	3	3	3
Max Displays (DP multi-stream)	3	1	1	1	1
Number of displays	4	3	3	3	2
Supported HDMI resolution	• 4 x FHD (1920 x 1080) • 4 x 4 K (3840 x 2160) • 1 x 8 K (7680 x 4320)	• 3 x FHD (1920 x 1080) • 2 x 4 K (3840 x 2160) • 1 x 8 K (7680 x 4320)	• 3 x FHD (1920 x 1080)	• 3 x FHD (1920 x 1080)	• 2 x FHD (1920 x 1080)
Total Power	220 W	125 W	50 W	50 W	50 W

Environmental

The following table lists the environment specifications supported by your OptiPlex 7090 Tower.

Table 21. Environmental specifications

Feature	OptiPlex 7090 Tower
Recyclable packaging	Yes
BFR/PVC—free chassis	No
MultiPack packaging	Yes (US only) (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.

Energy Star, EPEAT and Trusted Platform Module (TPM)

Table 22. Energy Star, EPEAT and TPM

Features	Specifications
Energy Star 8.0	Compliant configurations available
EPEAT	Gold and Silver compliant configurations available
Trusted Platform Module (TPM) 2.0[1,2]	Integrated on system board

Table 22. Energy Star, EPEAT and TPM (continued)

Features	Specifications
Firmware-TPM (Discrete TPM disabled)	Optional

NOTE:

[1]TPM 2.0 is FIPS 140-2 certified.

[2]TPM is not available in all countries.

Operating and storage environment

This table lists the operating and storage specifications of your OptiPlex 7090 Tower.

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

Table 23. Computer environment

Description	Operating	Storage
Temperature range	10 °C–35°C (50 °F–95°F)	-40°C-65°C (-40°F-149°F)
Relative humidity (maximum)	20% to 80% (non-condensing, Max dew point temperature = 26°C)	5% to 95% (non-condensing, Max dew point temperature = 33°C)
Vibration (maximum)*	0.26 GRMS random at 5 Hz to 350 Hz	1.37 GRMS random at 5 Hz to 350 Hz
Shock (maximum)	Bottom half-sine pulse with a change in velocity of 50.8 cm/sec (20 in./sec)	105G half-sine pulse with a change in velocity of 133 cm/sec (52.5 in./sec)
Altitude range	3048 m (10,000 ft)	10,668 m (35,000 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.

* 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.

4

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 24. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell app	
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	1. Go to www.dell.com/support. 2. On the menu bar at the top of the Support page, select **Support** > **Knowledge Base**. 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.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see 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.