OptiPlex 5000 Small Form Factor

Setup and Specifications

Regulatory Model: D17S Regulatory Type: D17S002 March 2022 Rev. A00



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.

© 2022 Dell Inc. or its subsidiaries. All rights reserved. Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

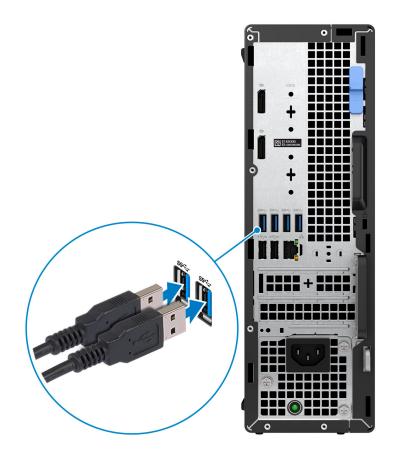
Contents

Chapter 2: Views of OptiPlex 5000 Small Form Factor	
Front	
Back	
Inside view of your computer	10
Chapter 3: Specifications of OptiPlex 5000 Small Form Factor	11
Dimensions and weight	
Processor	
Chipset	
Operating system	
Memory	13
Memory matrix	13
External ports	14
Internal slots	14
Ethernet	
Wireless module	15
Audio	
Storage	
RAID (Redundant Array of Independent Disks)	
Media-card reader	
Power ratings	
Power supply connector	18
GPU—Integrated	
Multiple display support matrix	19
GPU—Discrete	
Multiple display support matrix	
Hardware security	20
Environmental	
Regulatory compliance	22
Operating and storage environment	22
Dell Support policy	

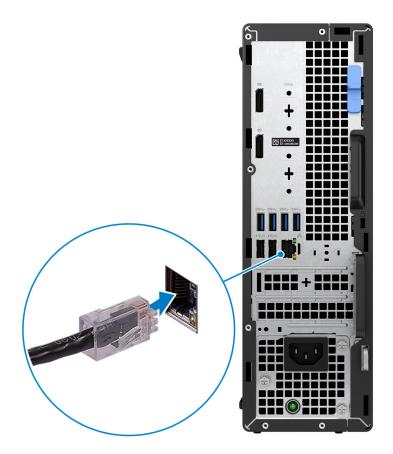


Set up your computer

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 operating system setup.

For Ubuntu:

Follow the on-screen instructions to complete the setup. For more information about installing and configuring Ubuntu, see the knowledge base articles 000131655 and 000131676 at www.dell.com/support.

For Windows:

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.

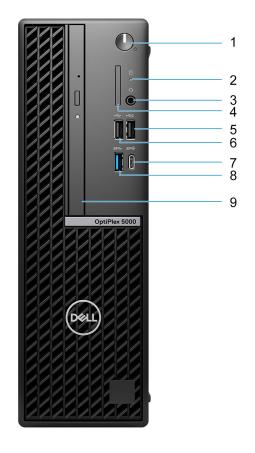
Table 1. Locate Dell apps (continued)

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 .
J	Dell Update Updates your computer with critical fixes and latest device drivers as they become available. For more information about using Dell Update, see the knowledge base article 000149088 at www.dell.com/support.
	Dell Digital Delivery Download software applications, which are purchased but not preinstalled on your computer. For more information about using Dell Digital Delivery, see the knowledge base article 000129837 at www.dell.com/support.

2

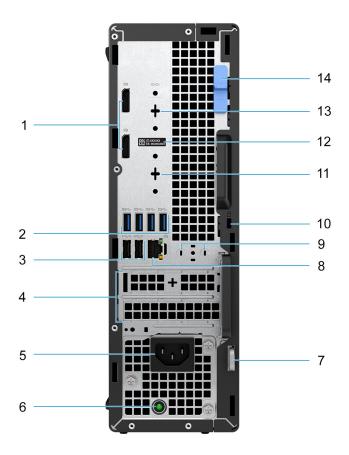
Views of OptiPlex 5000 Small Form Factor

Front



- 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 2 Type-C port
- 8. USB 3.2 Gen 1 port
- 9. Slim optical drive (optional)

Back



- 1. Two DisplayPort 1.4 ports
- 2. Four USB 3.2 Gen 1 ports
- 3. Two USB 2.0 ports with Smart Power On
- 4. Two expansion card slots
- 5. Power port
- 6. Power-supply diagnostics light
- 7. Padlock ring
- 8. RJ45 Ethernet port
- 9. External antenna slot
- 10. Kensington security-cable slot
- 11. HDMI 2.0b/DisplayPort 1.4/VGA/USB 3.2 Gen 2 type-C port with DisplayPort Alt Mode (optional)
- 12. Service Tag label
- 13. Serial/PS2 port (optional)
- 14. Release latch

Inside view of your computer

- 1. 1.
- 10 Views of OptiPlex 5000 Small Form Factor



Specifications of OptiPlex 5000 Small Form Factor

Dimensions and weight

The following table lists the height, width, depth, and weight of your OptiPlex 5000 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 (i) NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	 Minimum: 3.84 kg (8.47 lb) Maximum: 5.16 kg (11.38 lb)

Processor

The following table lists the details of the processors that are supported by your OptiPlex 5000 Small Form Factor .

Table 3. Processor

Description	Processor type	Processor wattage	Processor core count	Processor thread count	Processor speed	Processor cache	Integrated graphics
Option one	12 th Generation Intel Core i3-12100	60 W	4	8	3.30 GHz to 4.30 GHz	12 MB	Intel UHD Graphics 730
Option two	12 th Generation Intel Core i3-12300	60 W	4	8	3.50 GHz to 4.40 GHz	12 MB	Intel UHD Graphics 730
Option three	12 th Generation Intel Core i5-12400	65 W	6	12	2.50 GHz to 4.40 GHz	18 MB	Intel UHD Graphics 730
Option four	12 th Generation Intel Core i5-12500, vPro	65 W	6	12	3.00 GHz to 4.60 GHz	18 MB	Intel UHD Graphics 770
Option five	12 th Generation	65 W	6	12	3.30 GHz to 4.80 GHz	18 MB	Intel UHD Graphics 770

Table 3. Processor (continued)

Description	Processor type	Processor wattage	Processor core count	Processor thread count	Processor speed	Processor cache	Integrated graphics
	Intel Core i5-12600, vPro						
Option six	12 th Generation Intel Core i7-12700, vPro	65 W	12	20	2.10 GHz to 4.80 GHz	25 MB	Intel UHD Graphics 770
Option seven	Intel Pentium Gold G7400	46 W	2	4	Up to 3.70 GHz	6 MB	Intel UHD Graphics 710

Chipset

The following table lists the details of the chipset supported by your OptiPlex 5000 Small Form Factor.

Table 4. Chipset

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

Operating system

Your OptiPlex 5000 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
- 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 5000 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
Memory size per slot	4 GB, 8 GB, 16 GB, and 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
	• 16 GB, 4 x 4 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 for your OptiPlex 5000 Small Form Factor.

Table 6. Memory matrix

Configurati	Slot					
on	UDIMM1	UDIMM2	UDIMM3	UDIMM4		
4 GB DDR4	4G					
8 GB DDR4	4G	4G				
8 GB DDR4	8G					
16 GB DDR4	8G	8G				
16 GB DDR4	16G					
32 GB DDR4	8G	8G	8G	8G		
32 GB DDR4	16G	16G				

Table 6. Memory matrix (continued)

32 GB DDR4	32G			
64 GB DDR4	16G	16G	16G	16G
64 GB DDR4	32G	32G		
128 GB DDR4	32G	32G	32G	32G

External ports

The following table lists the external ports of your OptiPlex 5000 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 1 port (front) One USB 3.2 Gen 2 Type-C port (front) Four USB 3.2 Gen 1 ports (rear) Two USB 2.0 ports with Smart Power On (rear)
Audio port	One Universal audio port (front)
Video port	 Two DisplayPort 1.4 ports One HDMI 2.0b/DisplayPort 1.4/VGA/USB 3.2 Gen 2 type-C port with DisplayPort Alt Mode (optional)
Media-card reader	One SD-card 4.0 slot (front, optional)
Power-adapter port	Not supported
Security-cable slot	One Kensington lock slotOne Padlock ring

Internal slots

The following table lists the internal slots of your OptiPlex 5000 Small Form Factor.

Table 8. Internal slots

Description	Values
PCle Expansion	 One Half-height Gen4 PCle x16 slot One Half-height Gen3 PCle 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 One M.2 2230/2280 slot for 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 5000 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 5000 Small Form Factor.

Table 10. Wireless module specifications

Description	Option one	Option two	Option three
Model number	Intel AX211	Realtek RTL8821CE	Realtek RTL8822CE
Transfer rate	Up to 2400 Mbps	Up to 433 Mbps	Up to 867 Mbps
Frequency bands supported	2.4 GHz/5/6 GHz (i) NOTE: The 6 GHz frequency is supported on computers installed with Windows 11 operating system only.	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	 WiFi 802.11a/b/g Wi-Fi 4 (WiFi 802.11n) Wi-Fi 5 (WiFi 802.11ac) Wi-Fi 6 (WiFi 802.11ax) 	 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)
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	5.0 (j) NOTE: BIOSCOnnect via WLAN not supported.	5.0

Audio

The following table lists the audio specifications of your OptiPlex 5000 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)	

Storage

This section lists the storage options on your OptiPlex 5000 Small Form Factor.

Table 12. Storage matrix

Storage		1 st 2.5- inch hard drive	2 nd 2.5- inch hard drive	3.5-inch hard drive	1 st M.2 socket (2230/22 80)	2 nd M.2 socket (2230)	1 st Bootable Device
2.5-inch hard drive	2.5-inch hard drive		No	No	No	No	1 st 2.5- inch hard drive
Dual 2.5-inch hard drive		Yes	Yes	No	No	No	1 st 2.5- inch hard drive
3.5-inch hard drive		No	No	Yes	No	No	3.5-inch hard drive
M.2 solid-state drive		No	No	No	Yes	No	1 st M.2 solid-state drive
M.2 solid-state drive	3.5-inch hard drive	No	No	Yes	Yes	No	1 st M.2 solid-state drive
M.2 solid-state drive	2.5-inch hard drive/ solid-state drive	Yes	No	No	Yes	No	1 st M.2 solid-state drive
M.2 solid-state drive	Dual 2.5-inch hard drive	Yes	Yes	No	Yes	No	1 st M.2 solid-state drive
Dual M.2 solid-state drive		No	No	No	Yes	Yes	1 st M.2 solid-state drive
Dual M.2 solid-state drive	3.5-inch hard drive	No	No	Yes	Yes	Yes	1 st M.2 solid-state drive
Dual M.2 solid-state drive	2.5-inch hard drive/ solid-state drive	Yes	No	No	Yes	Yes	1 st M.2 solid-state drive

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
2.5-inch, 7200 RPM, Self-Encrypting, Opal 2.0, FIPS	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, SSD, Class 35	PCle NVMe Gen3 x4	Up to 1 TB
M.2 2230, SSD, Class 35, Self- Encrypting, Opal 2.0, FIPS	PCle NVMe Gen3 x4	256 GB
M.2 2280, SSD, Class 40	PCle NVMe Gen4 x4	Up to 2 TB
M.2 2280, SSDClass 40, Self-Encrypting, Opal 2.0, FIPS	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 5000 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 5000 Small Form Factor.

Table 14. Media-card reader specifications

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

Power ratings

The following table lists the power rating specifications of OptiPlex 5000 Small Form Factor.

Table 15. Power ratings

Description	Option one	Option two	Option three
Туре	240 W (85% Efficient, 80 PLUS Bronze)	260 W (85% Efficient, 80 PLUS Bronze)	300 W (92% Efficient, 80 Plus Platinum)
Input voltage	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
Input current (maximum)	4 A	4.2 A	4.2 A
Output current (continuous)	 12 VA/18 A 12 VB/15 A Standby mode: 12 VA/1.5 A 12 VB/2.5 A 	 12 VA/18 A 12 VB/16 A Standby mode: 12 VA/1.5 A 12 VB/3.3 A 	 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 	 +12 VA +12 VB 	 +12 VA +12 VB
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)
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)

Power supply connector

The following table lists the Power supply connector specifications of your OptiPlex 5000 Small Form Factor.

Table 16. Power supply connector

240 W (80 PLUS Bronze)	Two 4 pin connectors for processorOne 8 pin connector for system board

Table 16. Power supply connector (continued)

260 W (80 PLUS Bronze)	Two 4 pin connectors for processorOne 8 pin connector for system board
300 W (80 PLUS Platinum)	Two 4 pin connectors for processorOne 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 5000 Small Form Factor.

Table 17. 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 processor
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
Intel UHD Graphics 770	Three DisplayPort 1.4 ports	Shared system memory	12 th Generation Intel Core i5-12500, i5-12600 and i7-12700 processors

Multiple display support matrix

The following table lists the multiple display support matrix for your OptiPlex 5000 Small Form Factor.

Table 18. Multiple display support matrix

Description	Option 1	Option 2	Option 3
Integrated Graphics Card	Intel UHD Graphics 710	Intel UHD Graphics 730	Intel UHD Graphics 770
Optional Module	Option card with VGA (1920x1200 @ 60 Hz) Option card with DP1.4 (5120x3200 @60 Hz) Option card with HDMI 2.0 (4096x2160 @ 60 Hz) Option card with Type-C (5120x3200 @ 60 Hz)	Option card with VGA (1920x1200 @ 60 Hz) Option card with DP1.4 (5120x3200 @60 Hz) Option card with HDMI 2.0 (4096x2160 @ 60 Hz) Option card with Type-C (5120x3200 @ 60 Hz)	Option card with VGA (1920x1200 @ 60 Hz) Option card with DP1.4 (5120x3200 @60 Hz) Option card with HDMI 2.0 (4096x2160 @ 60 Hz) Option card with Type-C (5120x3200 @ 60 Hz)
Supported 4K Displays	DP1.4 HBR2, 4096 x 2304 @ 60 Hz	DP1.4 HBR2, 4096 x 2304 @ 60 Hz	DP1.4 HBR2, 4096 x 2304 @ 60 Hz
Supported 5K Displays	5K tiled resolution (5120x2880) support on DP panels. NOTE: Needs two DP cables driven through two separate DDIs from the source, and using DP-SST (Single Stream Transport) mechanism.	5K tiled resolution (5120x2880) support on DP panels. NOTE: Needs two DP cables driven through two separate DDIs from the source, and using DP-SST (Single Stream Transport) mechanism.	5K tiled resolution (5120x2880) support on DP panels. NOTE: Needs two DP cables driven through two separate DDIs from the source, and using DP-SST (Single Stream Transport) mechanism.

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your OptiPlex 5000 Small Form Factor.

Table 19. 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

Multiple display support matrix

The following table lists the multiple display support matrix for your OptiPlex 5000 Small Form Factor.

Table 20. Multiple display support matrix

Graphics Card	Radeon RX 640	Radeon 550	Radeon 540
Memory	4 GB	2 GB	1 GB
Ports	 2 x Mini-DP 1.4 ports 1 x DP 1.4 port 	• 2 x DP 1.4 port	• 2 x DP 1.4 port
Supported external displays with Direct Connect	3	2	2
Supported external displays with DP Multi-Stream	4	4	4
Supported 4K Displays	DP1.4 HBR2, 4096 x 2304 @ 60 Hz	DP1.4 HBR2, 4096 x 2304 @ 60 Hz	DP1.4 HBR2, 4096 x 2304 @ 60 Hz
Supported 5K Displays	5K tiled resolution (5120x2880) support on DP panels. NOTE: Needs two DP cables driven through two separate DDIs from the source, and using DP-SST (Single Stream Transport) mechanism.	5K tiled resolution (5120x2880) support on DP panels. NOTE: Needs two DP cables driven through two separate DDIs from the source, and using DP- SST (Single Stream Transport) mechanism.	5K tiled resolution (5120x2880) support on DP panels. NOTE: Needs two DP cables driven through two separate DDIs from the source, and using DP-SST (Single Stream Transport) mechanism.
Resolution	5120 x 2880 @60 Hz	5120 x 2880 @60 Hz	5120 x 2880 @60 Hz
Total Power	50 W	50 W	50 W

Hardware security

The following table lists the hardware security of your OptiPlex 5000 Small Form Factor.

Table 21. Hardware security

Hardware security	
Kensington security-cable slot	

Table 21. Hardware security (continued)

Hardware security	
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	
China TPM	

Environmental

The following table lists the environmental specifications of your OptiPlex 5000 Small Form Factor.

Table 22. Environmental

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

(i) 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 5000 Small Form Factor.

Table 23. 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 5000 Small Form Factor.

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-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 40.20 cm/sec (20 in./sec)	105G half-sine pulse with a change in velocity of 105.20 cm/sec (52.5 in./sec)
Altitude range	-15.2 m to 3048 m (4.64 ft to 10,000 ft)	-15.2 m to 10,668 m (4.64 ft to 35,000 ft)

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.

Dell Support policy

For more information on support policy, see the knowledge base articles 000181418, 000043920 and 000046323.

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	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.