OptiPlex 3000 Small Form Factor

Setup and Specifications

D&LL Technologies

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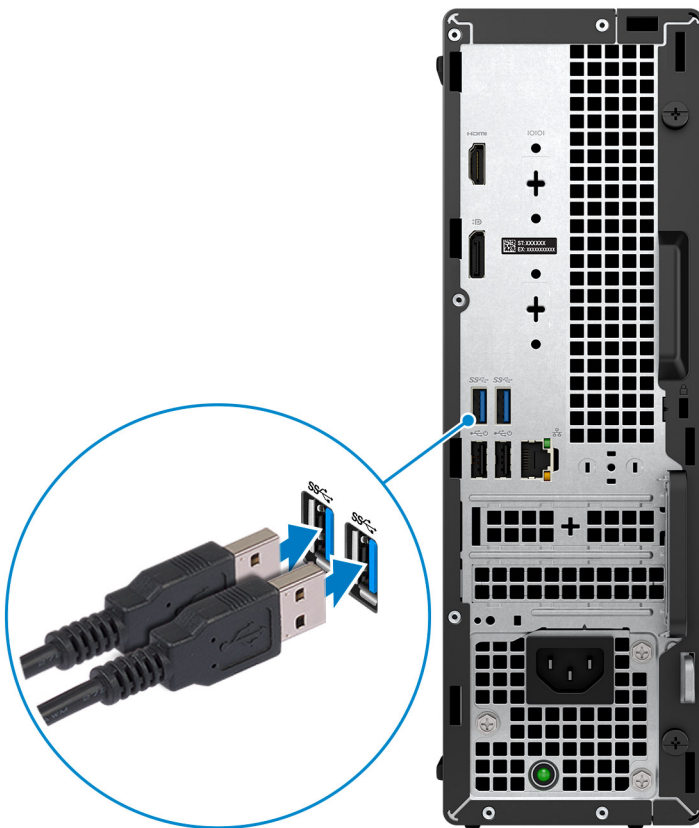
⚠ **WARNING: A WARNING indicates a potential for property damage, personal injury, or death.**

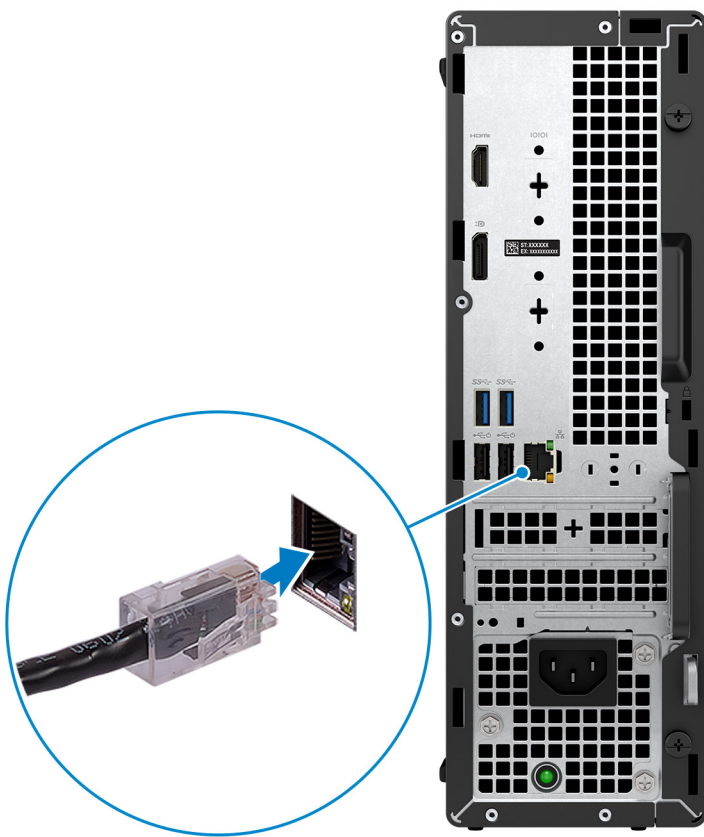# Contents

Set up your computer

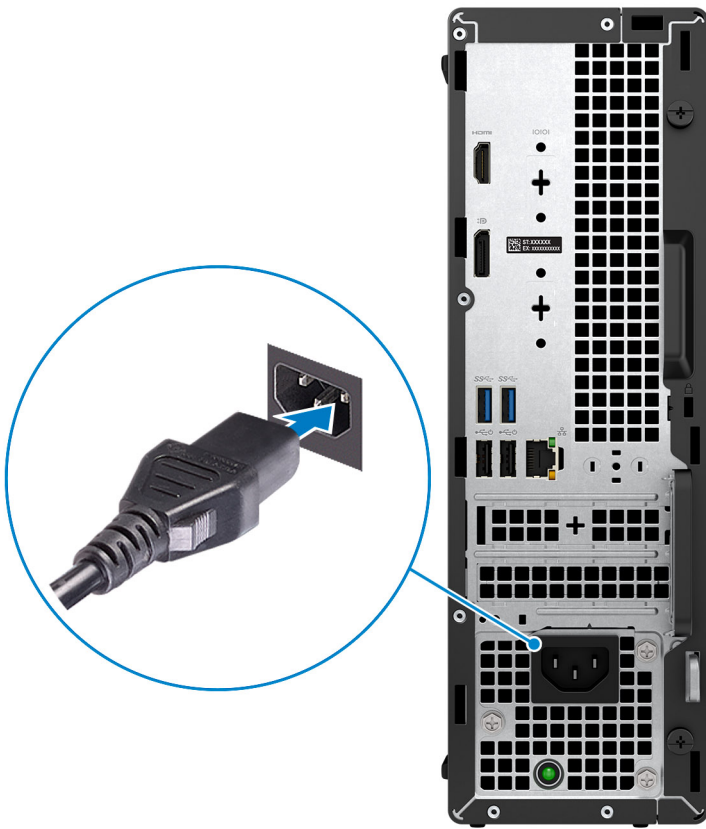1. Connect the keyboard and mouse.

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

Views of OptiPlex 3000 Small Form Factor

Front
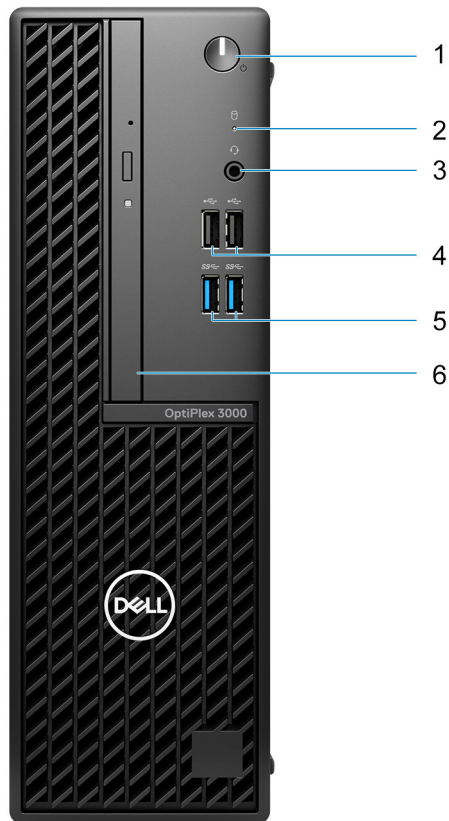
1. Power button

   ⓘ **NOTE:** The LED on the power button also functions as a diagnostic LED.

2. Hard-drive activity light
3. Universal audio port
4. USB 2.0 ports
5. USB 3.2 Gen 1 ports
6. Slim optical drive (optional)

Back
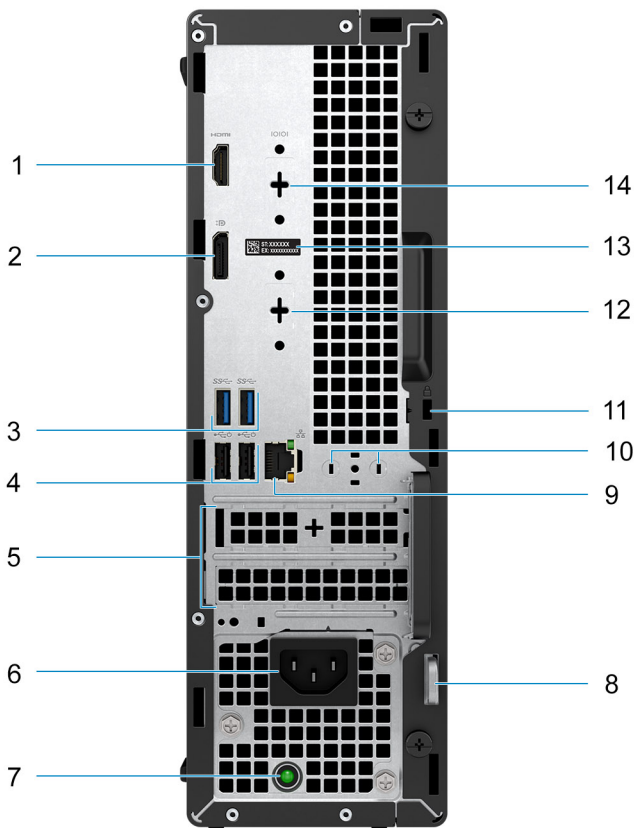
1. HDMI 1.4b port
   ⓘ **NOTE:** The maximum resolution supported is 1920x1080 or 1920x1200.
2. DisplayPort 1.4a port(HBR2)
3. Two USB 3.2 Gen 1 ports
4. Two USB 2.0 ports with Smart Power On
5. Two expansion card slots
6. Power connector port
7. Power-supply diagnostics light
8. Padlock ring
9. RJ45 Ethernet port
10. External antenna slot
11. Kensington security-cable slot
12. HDMI 2.0b/DisplayPort 1.4/VGA port (optional)
13. Service Tag label
14. Serial port (optional)

Specifications of OptiPlex 3000 Small Form Factor

Dimensions and weight

The following table lists the height, width, depth, and weight of your OptiPlex 3000 Small Form Factor.

Table 2. Dimensions and weight

Description	Values
Height	290.00 mm (11.42 in.)
Width	92.71 mm (3.65 in.)
Depth	292.80 mm (11.53 in.)
Weight ⓘ **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.	• Minimum: 3.71 kg (8.18 lb) • Maximum: 5.03 kg (11.09 lb)

Processor

The following table lists the details of the processors that are supported by your OptiPlex 3000 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	12th Generation Intel Core i3-12100	60 W	4	8	3.30 GHz to 4.30 GHz	12 MB	Intel UHD Graphics 730
Option two	12th Generation Intel Core i3-12300	60 W	4	8	3.50 GHz to 4.40 GHz	12 MB	Intel UHD Graphics 730
Option three	12th Generation Intel Core i5-12400	65 W	6	12	2.50 GHz to 4.40 GHz	18 MB	Intel UHD Graphics 730
Option four	12th Generation Intel Core i5-12500	65W	6	12	3.00 GHz to 4.60 GHz	18 MB	Intel UHD Graphics 770
Option five	12th 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						
Option six	Intel Celeron G6900	46 W	2	2	up to 3.40 GHz	4 MB	Intel UHD Graphics 710
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 3000 Small Form Factor.

Table 4. Chipset

Description	Values
Chipset	Intel B660
Processor	12th Generation Intel Core i3/i5, Intel Celeron and Pentium Gold
DRAM bus width	64-bit, dual-channel
Flash EPROM	32 + 16 MB
PCIe bus	Up to Gen 3.0

Operating system

Your OptiPlex 3000 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 3000 Small Form Factor.

Table 5. Memory specifications

Description	Values
Memory slots	Two UDIMM slots

Table 5. Memory specifications (continued)

Description	Values
Memory type	Dual-channel DDR4
Memory speed	3200 MT/s
Maximum memory configuration	64 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 MT/s, single-channel 8 GB, 1 x 8 GB, DDR4, 3200 MT/s, single-channel 8 GB, 2 x 4 GB, DDR4, 3200 MT/s, dual-channel 16 GB, 1 x 16 GB, DDR4, 3200 MT/s, single-channel 16 GB, 2 x 8 GB, DDR4, 3200 MT/s, dual-channel 32 GB, 1 x 32 GB, DDR4, 3200 MT/s, single-channel 32 GB, 2 x 16 GB, DDR4, 3200 MT/s, dual-channel 64 GB, 2 x 32 GB, DDR4, 3200 MT/s, dual-channel

Memory matrix

The following table lists the memory configurations supported on your OptiPlex 3000 Small Form Factor.

Table 6. Memory matrix

Configuration	Slot	
	UDIMM1	UDIMM2
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	16G	16G
32 GB DDR4	32G	
64 GB DDR4	32G	32G

External ports

The following table lists the external ports of your OptiPlex 3000 Small Form Factor.

Table 7. External ports

Description	Values
Network port	One RJ45 Ethernet port (rear)

Table 7. External ports (continued)

Description	Values
USB ports	- Two USB 2.0 ports (front) - Two USB 3.2 Gen 1 ports (front) - Two 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	- One DisplayPort 1.4a (HBR2) port - One HDMI 1.4b port ⓘ **NOTE:** The maximum resolution supported is 1920x1080 or 1920x1200. - One optional video port (HDMI 2.0b/DisplayPort 1.4a (HBR3)/ VGA) ⓘ **NOTE:** Download and install the latest Intel Graphics driver from www.dell.com/support to enable multiple displays.
Media-card reader	Not supported
Power-adapter port	Not supported
Security-cable slot	- One Kensington lock slot - One Padlock ring

Internal slots

The following table lists the internal slots of your OptiPlex 3000 Small Form Factor.

Table 8. Internal slots

Description	Values
PCIe Expansion	- One Half-height Gen3 PCIe x16 slot - One Half-height Gen3 PCIe x1 slot
SATA	Two 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 ⓘ **NOTE:** To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at www.dell.com/support.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your OptiPlex 3000 Small Form Factor.

Table 9. Ethernet specifications

Description	Values
Model number	Realtek RTL8111

Table 9. Ethernet specifications (continued)

Description	Values
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module specifications of your OptiPlex 3000 Small Form Factor.

Table 10. Wireless module specifications

Description	Option one	Option two	Option three
Model number	Intel AX210	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 ⓘ **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 6E (WiFi 802.11ax)	• 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)
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 wireless card	5.2	5.0	5.0
	ⓘ **NOTE:** 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 3000 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 3000 Small Form Factor.

Table 12. Storage matrix

Storage			2.5-inch hard drive	3.5-inch hard drive	1st M.2 socket (2230/2 280)	2nd M.2 socket via PCIe card	1st Bootable Device
2.5-inch hard drive			Yes	No	No	No	2.5-inch hard drive
3.5-inch hard drive			No	Yes	No	No	3.5-inch hard drive
M.2 solid-state drive			No	No	Yes	No	1st M.2 solid-state drive
M.2 solid-state drive	3.5-inch hard drive		No	Yes	Yes	No	1st M.2 solid-state drive
M.2 solid-state drive	2.5-inch hard drive/solid-state drive		Yes	No	Yes	No	1st M.2 solid-state drive
M.2 solid-state drive	M.2 solid-state drive (expansion card)		No	No	Yes	Yes	1st M.2 solid-state drive
M.2 solid-state drive	M.2 solid-state drive (expansion card)	3.5-inch hard drive	No	Yes	Yes	Yes	1st M.2 solid-state drive
M.2 solid-state drive	M.2 solid-state drive (expansion card)	2.5-inch hard drive	Yes	No	Yes	Yes	1st M.2 solid-state drive

Table 13. Storage specifications

Storage type	Interface type	Capacity
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	500 GB
3.5-inch, 7200 RPM, hard-disk drive	SATA 3.0	Up to 2 TB
M.2 2230, SSD, Class 35	PCIe NVMe Gen3 x4	Up to 512 GB
M.2 2230, SSD, Class 35	PCIe NVMe Gen4 x4	512 GB
M.2 2230, SSD, Class 35, Self-Encrypting, Opal 2.0, FIPS	PCIe NVMe Gen3 x4	256 GB
M.2 2280, SSD, Class 40	PCIe NVMe Gen3 x4	Up to 1 TB

Table 13. Storage specifications (continued)

Storage type	Interface type	Capacity
M.2 2280, SSD, Class 40	PCIe NVMe Gen4 x4	Up to 512 GB
M.2 2280, SSD Class 40, Self-Encrypting, Opal 2.0, FIPS	PCIe NVMe Gen4 x4	Up to 1 TB

Power ratings

The following table lists the power rating specifications of OptiPlex 3000 Small Form Factor.

Table 14. Power ratings

Description		Option one	Option two
Type		180 W internal Power Supply Unit (PSU), 85% Efficient, 80 PLUS Bronze	300 W internal PSU, 92% Efficient, 80 PLUS Platinum
Input voltage		90 VAC-264 VAC	90 VAC-264 VAC
Input frequency		47 Hz-63 Hz	47 Hz-63 Hz
Input current (maximum)		3 A	4.2 A
Output current (continuous)		● 12 VA/15 A ● 12 VB/14 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
Temperature range:			
	Operating	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)

Power supply connector

The following table lists the Power supply connector specifications of your OptiPlex 3000 Small Form Factor.

Table 15. Power supply connector

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

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your OptiPlex 3000 Small Form Factor.

Table 16. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel UHD Graphics 710	• One DisplayPort 1.4a (HBR2) • One HDMI 1.4b	Shared-system memory	Intel Celeron G6900 and Intel Pentium Gold G7400 processors
Intel UHD Graphics 730	• One DisplayPort 1.4a (HBR2) • One HDMI 1.4b	Shared-system memory	12th Generation Intel Core i3-12100, i3-12300, and i5-12400 processors
Intel UHD Graphics 770	• One DisplayPort 1.4a (HBR2) • One HDMI 1.4b	Shared-system memory	12th Generation Intel Core i5-12500 and i5-12600 processors

Multiple display support matrix

The following table provides the multiple display support matrix for discrete graphics options on your OptiPlex 3000 Small Form Factor.

Table 17. 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

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your OptiPlex 3000 Small Form Factor.

Table 18. 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 Mini-DisplayPort 1.4 ports ● One DisplayPort 1.4 port	2 GB	GDDR5
AMD Radeon 540	● Two Mini-DisplayPort 1.4 ports ● One DisplayPort 1.4 port	1 GB	GDDR5

Multiple display support matrix

The following table lists the multiple display support matrix for integrated graphics options on your OptiPlex 3000 Small Form Factor.

Table 19. 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 (1920 x 1200 @ 60 Hz) ● Option card with DP1.4a (HBR3) (5120 x 3200 @ 60 Hz) ● Option card with HDMI 2.0b (4096 x 2160 @ 60 Hz)	● Option card with VGA (1920 x 1200 @ 60 Hz) ● Option card with DP1.4a (HBR3) (5120 x 3200 @ 60 Hz) ● Option card with HDMI 2.0b (4096 x 2160 @ 60 Hz)	● Option card with VGA (1920 x 1200 @ 60 Hz) ● Option card with DP1.4a (HBR3) (5120 x 3200 @ 60 Hz) ● Option card with HDMI 2.0b (4096 x 2160 @ 60 Hz)
Supported 4K Displays	● On board integrated DP1.4a (HBR2) ● Option card with DP1.4a (HBR3) ● Option card with HDMI 2.0b	● On board integrated DP1.4a (HBR2) ● Option card with DP1.4a (HBR3) ● Option card with HDMI 2.0b	● On board integrated DP1.4a (HBR2) ● Option card with DP1.4a (HBR3) ● Option card with HDMI 2.0b
Supported 5K Displays	Option card with DP1.4a (HBR3)	Option card with DP1.4a (HBR3)	Option card with DP1.4a (HBR3)

Hardware security

The following table lists the hardware security of your OptiPlex 3000 Small Form Factor.

Table 20. Hardware security

Hardware security
Kensington security-cable slot

Table 20. 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 3000 Small Form Factor.

Table 21. 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 3000 Small Form Factor.

Table 22. Regulatory compliance

Regulatory compliance
Product Safety, EMC and Environmental Datasheets
Dell Regulatory Compliance Home page
Dell and the Environment

Operating and storage environment

This table lists the operating and storage specifications of your OptiPlex 3000 Small Form Factor.

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 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 (-49 ft to 10,000 ft)	-15.2 m to 10,668 m (-49 ft to 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.

Dell Support policy

For information on Dell support policy, search in the Knowledge Base Resource at www.dell.com/support.

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.