G5 5000

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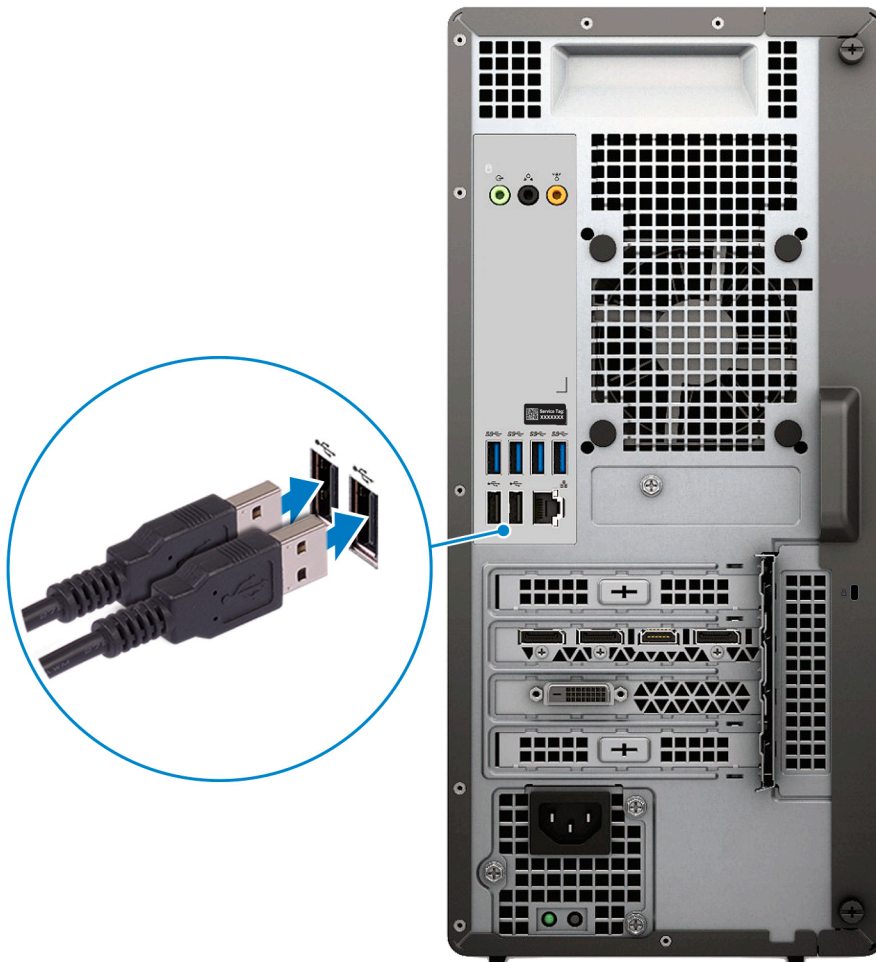
WARNING: A WARNING indicates a potential for property damage, personal injury, or death.
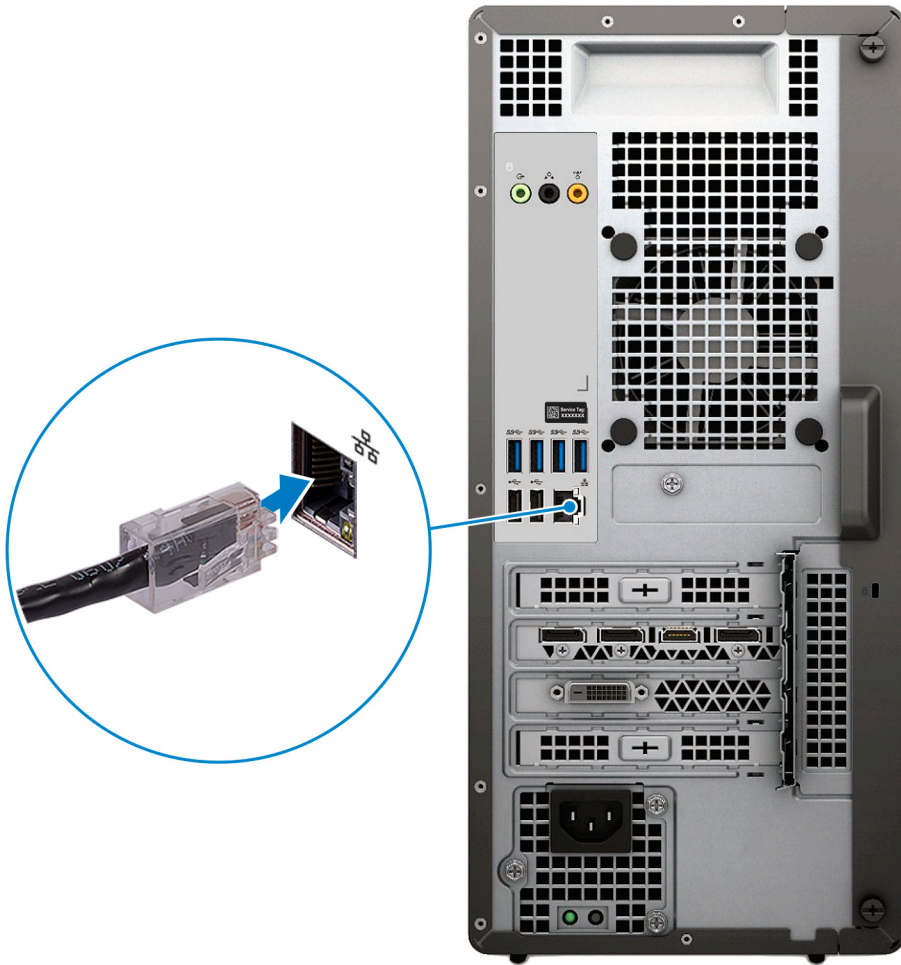
Contents

Set up your computer

1. Connect the keyboard and mouse.

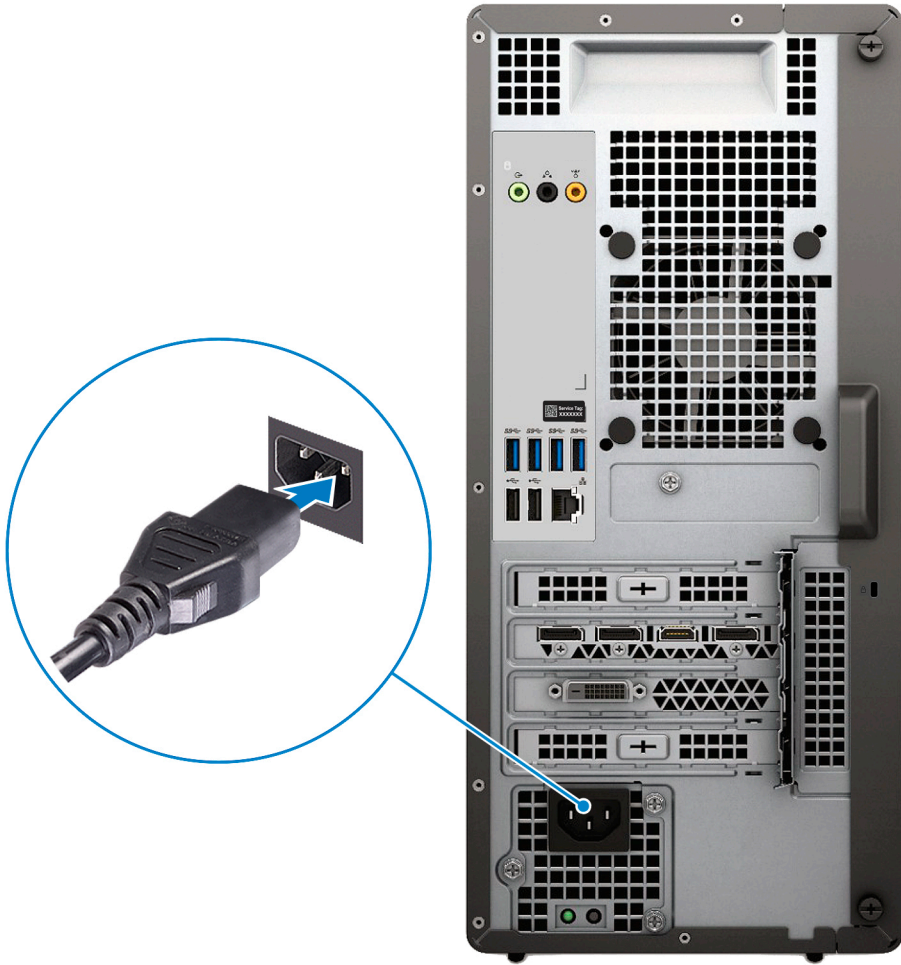2. Connect to your network using a cable, or connect to a wireless network.

3. Connect the display.

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

4. Connect the power cable.

5. Press the power button.

Views of G5 5000

Front
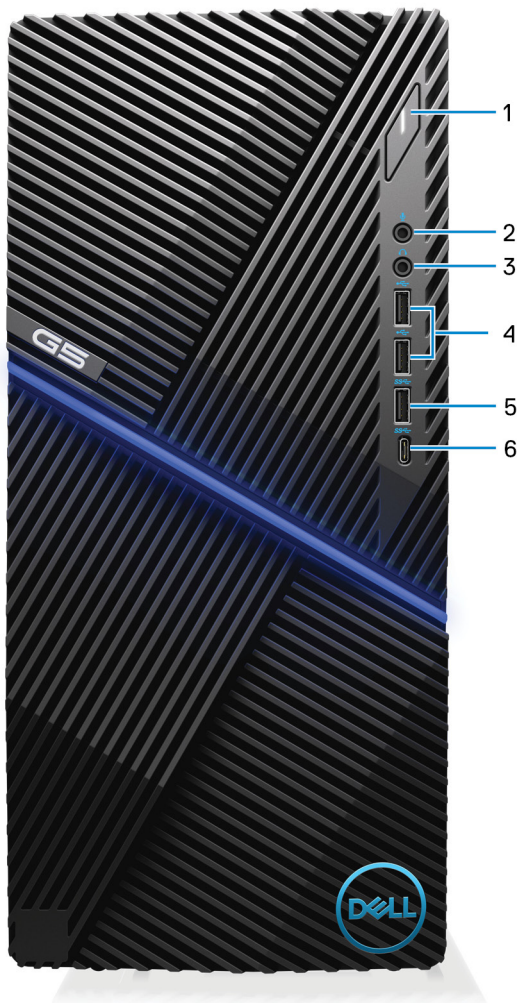
1. **Power button**

   Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

   Press to put the computer in sleep state if it is turned on.

   Press and hold to force shut-down the computer.

   ⓘ **NOTE:** You can customize the power-button behavior in Power Options. For more information, see *Me and My Dell* at www.dell.com/support/manuals.

2. **Microphone port**

   Connect an external microphone to provide sound input.

3. **Headset port**

Connect headphones or a headset (headphone and microphone combo).

4. **USB 2.0 ports (2)**

   Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

5. **USB 3.1 Gen 1 port**

   Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

6. **USB 3.1 Gen 1 (Type-C) port**

   Connect to external storage devices. Provides data transfer speeds up to 5 Gbps.

   (i) **NOTE:** This port does not support video/audio streaming.

Back
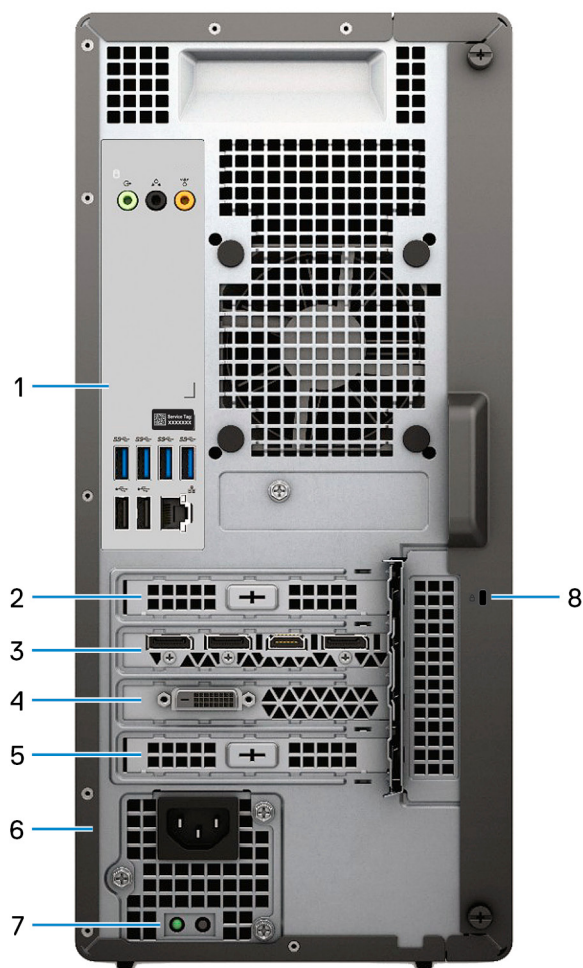
1. **Back panel**

   Connect USB, audio, video, and other devices.

2. **PCI-Express x1 slot**

   Connect a PCI-Express card such as graphics, audio, or network card to enhance the capabilities of your computer.

3. **PCI-Express x16 (graphics) slot 1**

   Connect a PCI-Express graphics card to enhance the capabilities of your computer.

4. **Expansion slot for dual-width graphics card**

   This expansion slot seats the bottom half of a dual-width graphics card if it is installed in the PCI-Express x16 slot.

5. **PCI-Express x4 slot**

   Connect a PCI-Express card such as graphics, audio, or network card to enhance the capabilities of your computer.

6. **Power port**

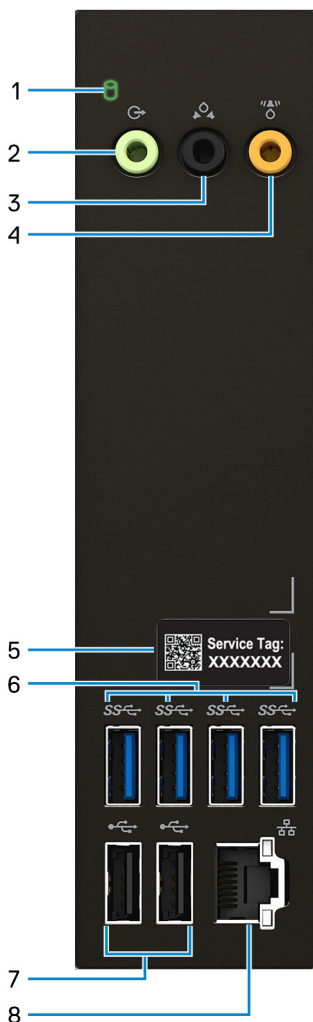   Connect a power cable to provide power to your computer.

7. **Power-supply diagnostics light**

   Indicates the power-supply state.

8. **Security-cable slot (wedge-shaped)**

   Connect a security cable to prevent unauthorized movement of your computer.

Back panel

1. **Hard-drive activity light**

   Turns on when the computer reads from or writes to the hard drive.

2. **Line-out port**

   Connect speakers.

3. **Rear L/R surround port**

   Connect audio-output devices such as speakers and amplifiers. In a 5.1 speaker channel setup, connect the rear-left and rear-right speakers.

4. **Center/subwoofer LFE surround port**

   Connect the subwoofer.

   ⓘ **NOTE:** For more information about speaker setup, refer to the documentation that shipped with the speakers.

5. **Service Tag label**

   The Service Tag is a unique alphanumeric identifier that enables Dell service technicians to identify the hardware components in your computer and access warranty information.

6. **USB 3.1 Gen 1 ports (4)**

   Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

7. **USB 2.0 ports (2)**

   Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

8. **Network port**

   Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or Internet access, with a transfer rate of 10/100/1000 Mbps.

Specifications of G5 5000

Dimensions and weight

The following table lists the height, width, depth, and weight of your G5 5000.

Table 1. Dimensions and weight

Description	Values
Height:	
Front height	367 mm (14.45 in.)
Rear height	367 mm (14.45 in.)
Width	169 mm (6.65 in.)
Depth	308 mm (12.13 in.)
Weight (maximum)	• Minimum: 7.62 kg (16.80 lb) • Maximum: 8.20 kg (18.07 lbs) � **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.

Processors

The following table lists the details of the processors supported by your G5 5000.

Table 2. Processors

Processors	Wattage	Core count	Thread count	Speed	Cache
10th Generation Intel Core i3-10100	65 W	4	8	Up to 4.30 GHz	6 MB
10th Generation Intel Core i5-10400	65 W	6	12	Up to 4.30 GHz	12 MB
10th Generation Intel Core i5-10400F	65 W	6	12	Up to 4.30 GHz	12 MB
10th Generation Intel Core i5-10600K	125 W	6	12	Up to 4.80 GHz	12 MB
10th Generation Intel Core i5-10600KF	125 W	6	12	Up to 4.80 GHz	12 MB
10th Generation Intel Core i7-10700	65 W	8	16	Up to 4.80 GHz	16 MB

Table 2. Processors (continued)

Processors	Wattage	Core count	Thread count	Speed	Cache
10th Generation Intel Core i7-10700K	125 W	8	16	Up to 5.10 GHz	16 MB
10th Generation Intel Core i7-10700F	65 W	8	16	Up to 4.80 GHz	16 MB
10th Generation Intel Core i7-10700KF	125 W	8	16	Up to 5.10 GHz	16 MB
10th Generation Intel Core i9-10900	65 W	10	20	Up to 5.20 GHz	20 MB
10th Generation Intel Core i9-10900K	125 W	10	20	Up to 5.30 GHz	20 MB
10th Generation Intel Core i9-10900F	65 W	10	20	Up to 5.20 GHz	20 MB
10th Generation Intel Core i9-10900KF	125 W	10	20	Up to 5.30 GHz	20 MB

Chipset

The following table lists the details of the chipset supported by your G5 5000.

Table 3. Chipset

Description	Values
Chipset	H470
Processor	● 10th Generation Intel Core i3 ● 10th Generation Intel Core i5/i5K/i5F/i5KF ● 10th Generation Intel Core i7/i7K/i7F/i7KF ● 10th Generation Intel Core i9/i9K/i9F/i9KF
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen3.0

Operating system

Your G5 5000 supports the following operating systems:

● Windows 10 Home (64-bit)
● Windows 10 Pro (64-bit)

Memory

The following table lists the memory specifications of your G5 5000.

Table 4. Memory specifications

Description	Values
Memory slots	Four-UDIMM slots
Memory type	DDR4
Memory speed	2666 MHz/2933 MHz
Maximum memory configuration	128 GB
Minimum memory configuration	8 GB
Memory size per slot	4 GB, 8 GB, 16 GB, 32 GB
Memory configurations supported	8 GB, 2 x 4 GB, DDR4, 2666 MHz/2933 MHz, UDIMM, dual-channel 8 GB, 1 x 8 GB, DDR4, 2666 MHz/2933 MHz, UDIMM 16 GB, 2 x 8 GB, DDR4, 2666 MHz/2933 MHz, UDIMM, dual-channel 16 GB, 1 x 16 GB, DDR4, 2666 MHz/2933 MHz, UDIMM 32 GB, 1 x 32 GB, DDR4, 2666 MHz/2933 MHz, UDIMM 32 GB, 2 x 16 GB, DDR4, 2666 MHz/2933 MHz, UDIMM, dual-channel 64 GB, 2 x 32 GB, DDR4, 2666 MHz/2933 MHz, UDIMM, dual-channel 64 GB, 4 x 16 GB, DDR4, 2666 MHz/2933 MHz, UDIMM, dual-channel 128 GB, 4 x 32 GB, DDR4, 2666 MHz/2933 MHz, UDIMM, dual-channel **NOTE:** The computer is shipped with 3200 MHz memory. However, the memory speed is limited to 2666 MHz in computers shipped with Intel Core i3/i5 processors and 2933 MHz in computers shipped with Intel Core i7/i9 processors.

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.

(i) **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 5. Intel Optane memory

Description	Values
Type	Storage accelerator
Interface	PCIe 3.0 x2

Table 5. Intel Optane memory (continued)

Description	Values
Connector	M.2 2280
Configurations supported	32 GB
Capacity	32 GB

Ports and connectors

The following table lists the external and internal ports available on your G5 5000.

Table 6. Ports and connectors

Description	Values
External:	
Network	One RJ-45 port
USB	- Five USB 3.1 Gen 1 ports - Four USB 2.0 ports - One USB 3.1 Gen 1 (Type-C) port
Audio	- One microphone port - One headset port - One audio line-out port - One rear L/R-surround audio-out port - One center/subwoofer LFE surround audio-out port
Video	ⓘ **NOTE:** Depending on the graphics card(s) installed on your computer, the video ports on your computer may vary.
Media-card reader	Not supported
Power port	Power cord connector
Security	One security-cable slot (wedge-shaped)
Internal:	
PCIe expansion card slots	- One PCIe x16 - One PCIe x1 - One PCIe x4
mSATA	Not supported
SATA	- Two SATA slots for a 2.5-inch hard drive - One SATA slot for a 3.5-inch hard drive
M.2	- One M.2 2230 slot for WiFi and Bluetooth combo card - One M.2 slot for 2230/2280 solid-state drive/2280 Intel Optane memory ⓘ **NOTE:** To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your G5 5000.

Table 7. Ethernet specifications

Description	Values
Model number	Rivet Networks E2500 PCIe Gigabit Ethernet controller
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules supported on your G5 5000.

Table 8. Wireless module specifications

Description	Option one	Option two
Model number	Qualcomm QCA9377 (DW1810)	Killer AX1650i
Transfer rate	Up to 433 Mbps	Up to 2400 Mbps
Frequency bands supported	2.40 GHz/5 GHz	2.40 GHz/5 GHz
Wireless standards	- WiFi 802.11a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac)	- WiFi 802.11a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac) - Wi-Fi 6 (WiFi 802.11ax)
Encryption	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP
Bluetooth	Bluetooth 5.0	Bluetooth 5.1

Audio

The following table lists the audio specifications of your G5 5000.

Table 9. Audio specifications

Description	Values
Audio type	Integrated 5.1 Channel High Definition audio
Audio controller	Realtek ALC3861
Internal audio interface	High definition audio interface
External audio interface	- One microphone port - One headphone port - One audio line-out port - One rear L/R-surround audio-out port - One center/subwoofer LFE surround audio-out port

Storage

This section lists the storage options on your G5 5000.

Your computer supports one of the following configurations:

- One 3.5-inch hard drive
- One M.2 2230/2280 solid-state drive
- One 3.5-inch hard drive and one M.2 2230/2280 solid-state drive

(i) **NOTE:** This computer is shipped with two empty 2.5-inch hard-drive cages and one SATA extension cable.

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

- For computers with a M.2 solid-state drive, the M.2 solid-state drive is the primary drive.
- For computers without a M.2 drive, the 3.5-inch hard drive is the primary drive.

Table 10. Storage specifications

Storage type	Interface type	Capacity
3.5-inch hard drive	SATA AHCI, up to 6 Gbps	Up to 2 TB
M.2 2230/2280 solid-state drive	PCIe Gen3 x4 NVMe, up to 32 Gbps	Up to 2 TB

Power ratings

The following table lists the power rating specifications of G5 5000.

Table 11. Power ratings

Description		Option one	Option two
Type		360 W	500 W
Input voltage		90 VAC–264 VAC	90 VAC–264 VAC
Input frequency		47 Hz–63 Hz	47 Hz–63 Hz
Input current (maximum)		5 A	7 A
Output current (continuous)		18 A	18 A
Rated output voltage		12 VDC	12 VDC
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)

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your G5 5000.

Table 12. GPU — Discrete

Controller	External display support	Memory size	Memory type
NVIDIA GeForce GTX 1030	- One Single-link DVI-D port - One HDMI 2.0 port	2 GB	DDR5

Table 12. GPU — Discrete (continued)

Controller	External display support	Memory size	Memory type
NVIDIA GeForce GTX 1650 SUPER	● One Dual-link DVI-D port ● One HDMI 2.0 port ● One DisplayPort 1.4	4 GB	DDR5
NVIDIA GeForce GTX 1660 SUPER	● One Dual-link DVI-D port ● One HDMI 2.0 port ● One DisplayPort 1.4	6 GB	DDR5
NVIDIA GeForce GTX 1660 Ti	● One Dual-link DVI-D port ● One HDMI 2.0 port ● One DisplayPort 1.4	6 GB	DDR6
NVIDIA GeForce RTX 2060	● One Dual-link DVI-D port ● One HDMI 2.0 port ● One DisplayPort 1.4	6 GB	DDR6
NVIDIA GeForce RTX 2060 SUPER	● One Dual-link DVI-D port ● One HDMI 2.0 port ● One DisplayPort 1.4	8 GB	DDR6
NVIDIA GeForce RTX 2070 SUPER	● One HDMI 2.0 port ● Three DisplayPort 1.4	8 GB	DDR6
AMD Radeon RX 5600 XT	● One HDMI 2.0 port ● Three DisplayPort 1.4	6 GB	DDR6

Operating and storage environment

This table lists the operating and storage specifications of your G5 5000.

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

Table 13. Computer environment

Description	Operating	Storage
Temperature range	10°C to 35°C (50°F to 95°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	20% to 80% (non-condensing)	5% to 95% (non-condensing)
Vibration (maximum)*	0.26 GRMS	1.37 GRMS
Shock (maximum)	40 G†	105 G†
Altitude (maximum)	-15.20 m to 3,048 m (-49.87 ft to 10,000 ft)	-15.20 m to 10,668 m (-49.87 ft to 35,000 ft)

* 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.

Alienware Command Center

Alienware Command Center (AWCC) provides a single interface to customize and enhance the gaming experience. The AWCC dashboard displays most recently played or added games, and provides game-specific information, themes, profiles, and access to computer settings. You can quickly access settings such as game-specific profiles and themes, lighting, macros, and audio that are critical to the gaming experience.

AWCC also supports AlienFX 2.0. AlienFX enables you to create, assign, and share game-specific lighting maps to enhance the gaming experience. It also enables you to create your own individual lighting effects and apply them to the computer or attached peripherals. AWCC embeds Peripheral Controls to ensure a unified experience and the ability to link these settings to your computer or game.

AWCC supports the following features:

- FX: Create and manage the AlienFX zones.
- Fusion: Includes the ability to adjust game-specific Power Management, Sound Management, and Thermal Management features.
- Peripheral Management: Enables peripherals to appear in and be managed in Alienware Command Center. Supports key peripheral settings and associates with other functions such as profiles, macros, AlienFX, and game library.

AWCC also supports Sound Management, Thermal Controls, CPU, GPU, Memory (RAM) monitoring. For more information about AWCC, see the *Alienware Command Center Online Help* or the knowledge base article SLN128904 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 14. 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
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 for your Dell Laptop.
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.