

Vostro 3020 Tower Desktop

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.

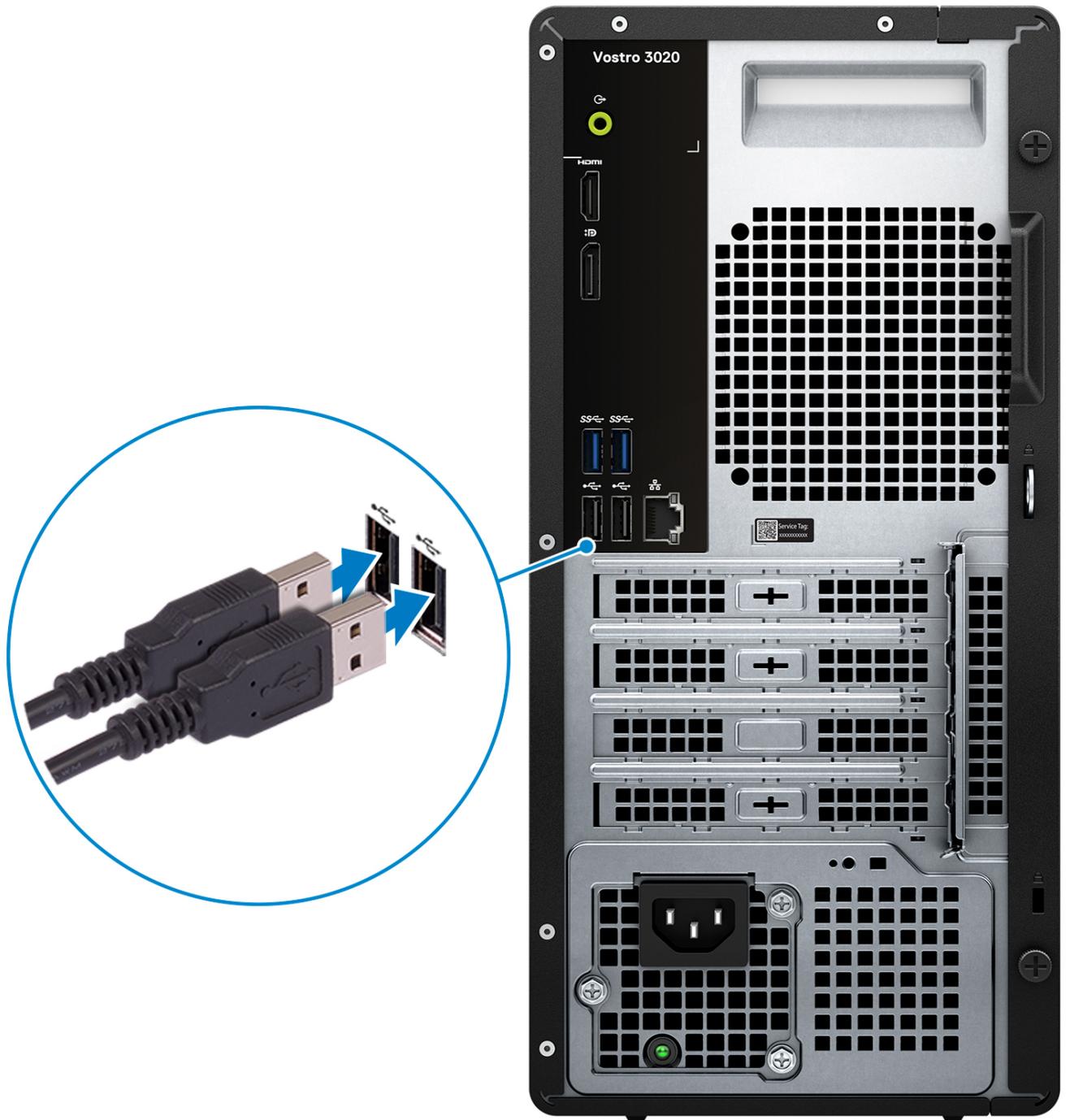
 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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Set up your computer

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

1. Connect the keyboard and mouse to the USB ports on the computer. If you have a wireless keyboard and mouse, see the documentation that shipped with the wireless keyboard and mouse for instructions.

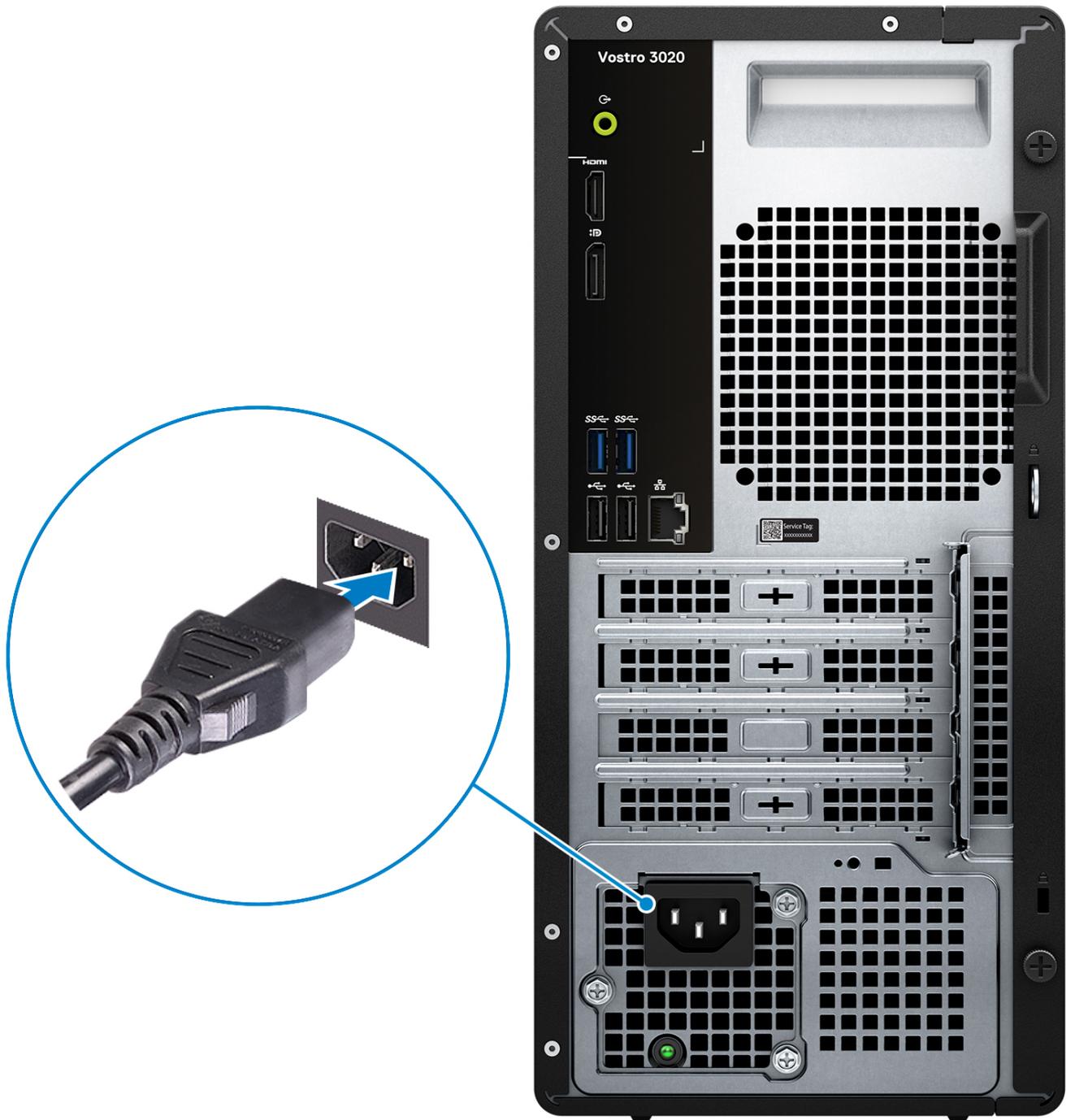


2. Connect to your network using an Ethernet cable. Alternatively, connect to an available wireless network when setting up the operating system.



NOTE: The location to connect the display cable can vary if your computer has a discrete graphics card installed. For optimal graphics performance, ensure to connect the display cable to the graphics card if there is one installed.

4. Connect the power cable to the computer and then connect it to the wall outlet.



5. Press the power button at the front of the computer to turn it on. If required, press the power button on the display to turn it on.



i **NOTE:** For instructions on how to connect speakers, a printer and other accessories, see *Me and My Dell* at www.dell.com/manuals.

6. Finish Windows setup.

Follow the on-screen instructions to complete the setup. When setting up, Dell recommends that you:

- Connect to a network for Windows updates.

i **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.

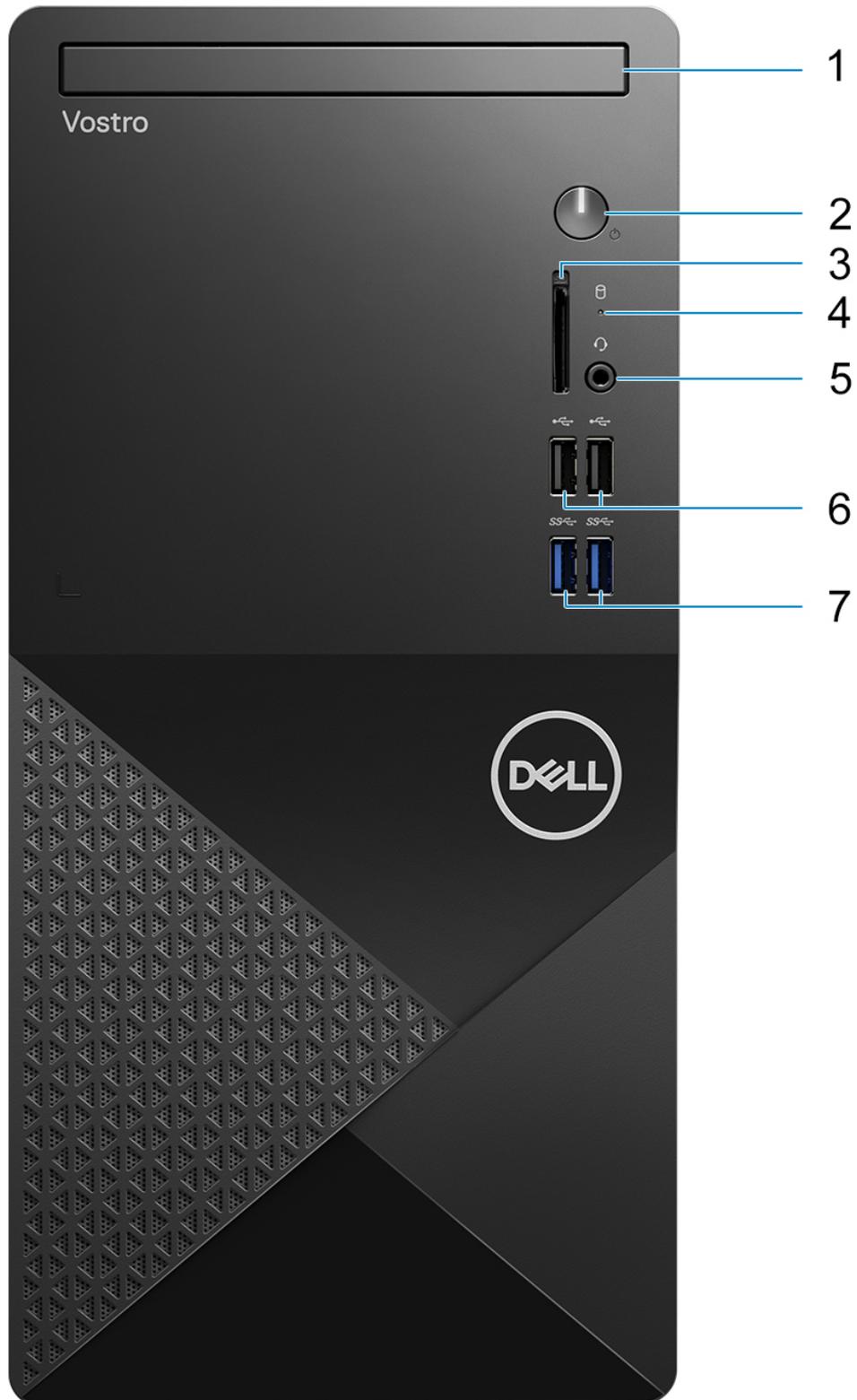
7. Locate and use Dell apps from the Windows Start menu—Recommended.

Table 1. Locate Dell apps

Resources	Description
	<p>My Dell</p> <p>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.</p>
	<p>SupportAssist</p> <p>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.</p> <p>NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.</p>
	<p>Dell Update</p> <p>Updates your computer with critical fixes and latest device drivers as they become available. For more information on using Dell Update, search in the Knowledge Base Resource at www.dell.com/support.</p>
	<p>Dell Digital Delivery</p> <p>Download software applications, which are purchased but not preinstalled on your computer. For more information on using Dell Digital Delivery, search in the Knowledge Base Resource at www.dell.com/support.</p>

Views of Vostro 3020 Tower Desktop

Front



1. Slim optical drive (optional)

The optical drive reads from and writes to CDs and DVDs.

2. 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 Windows. For more information, see *Me and My Dell* at www.dell.com/support/manuals.

3. SD-card slot (optional)

Reads from and writes to the SD card. The computer supports the following card types:

- Secure Digital (SD)
- Secure Digital High Capacity (SDHC)
- Secure Digital Extended Capacity (SDXC)

4. Hard-drive activity light

The activity light turns on when the computer reads from or writes to the hard drive.

5. Headset (headphone and microphone combo) port

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

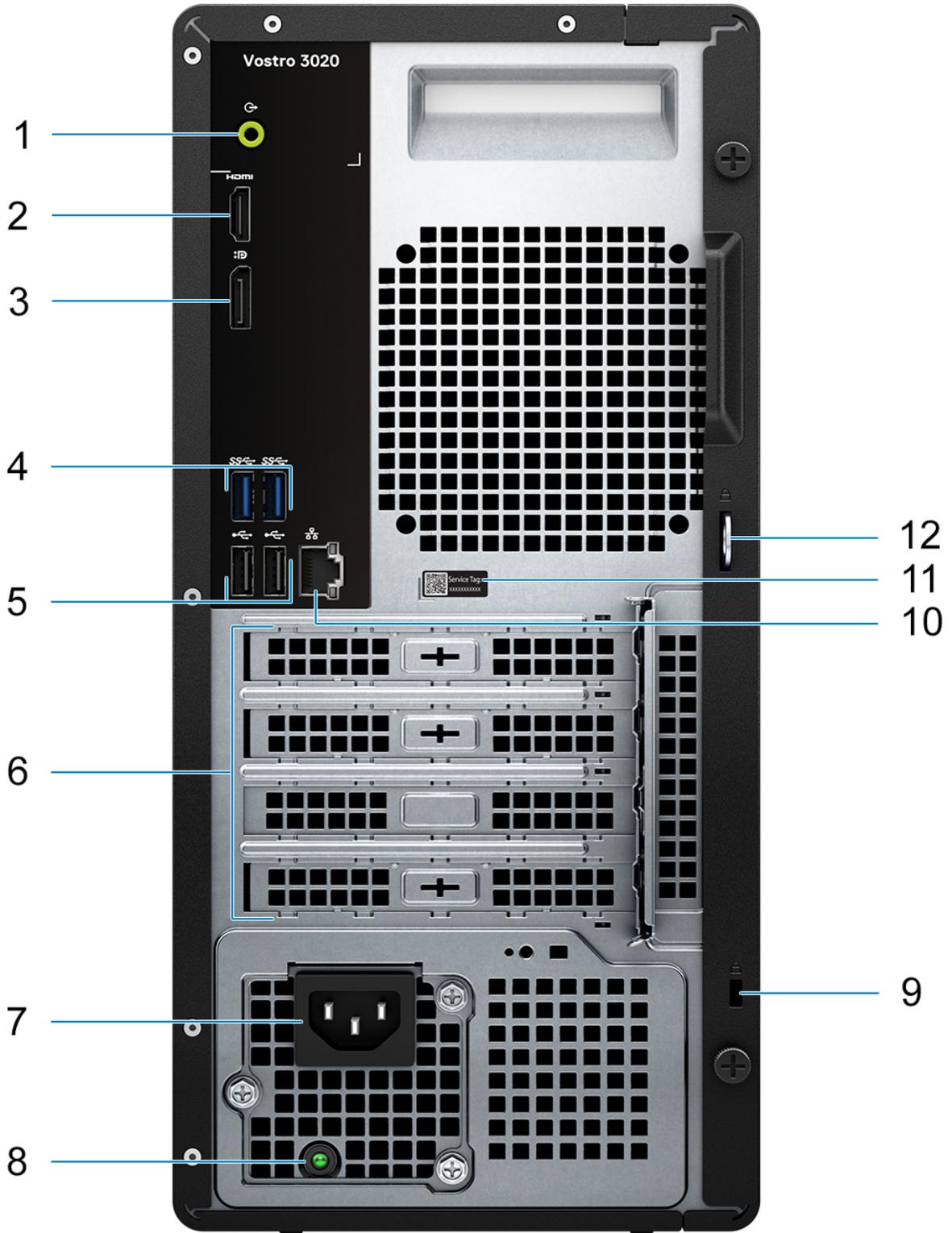
6. USB 2.0 ports (2)

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

7. USB 3.2 Gen 1 ports (2)

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

Back



1. Line-out port

Connect speakers.

2. HDMI 1.4b port

Connect to a TV, external display or another HDMI-in enabled device. Provides video and audio output.

 **NOTE:** HDMI port resolution is up to 1920 x 1200.

 **NOTE:** This port is only available on computers shipped with Intel UHD Graphics integrated processor.

3. Dual-Mode DisplayPort 1.4

Connect an external display or a projector.

 **NOTE:** Besides a DisplayPort connector, this port can also provide display output to a DVI or HDMI connector with a DisplayPort 1.4 adapter (sold separately).

 **NOTE:** This port is only available on computers shipped with Intel UHD Graphics integrated processor.

4. USB 3.2 Gen 1 ports (2)

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

5. USB 2.0 ports (2)

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

6. Expansion card slots

Connect a PCI-express or PCI-32 card to enhance the capabilities of your computer.

7. Power port

Connect a power cable to provide power to your computer.

8. Power-supply diagnostics light

Indicates the power-supply state.

9. Security-cable slot

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

10. Network port (with lights)

Connect an Ethernet (RJ-45) cable from a router or a broadband modem for network or Internet access.

The two lights next to the connector indicate the connectivity status and network activity.

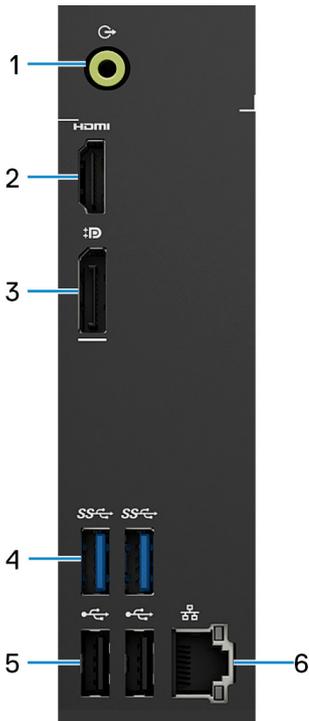
11. Service Tag label

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.

12. Padlock rings

Attach a standard padlock to prevent unauthorized access to the interior of your computer.

Back panel



1. Line-out port

Connect speakers.

2. HDMI 1.4b port

Connect to a TV, external display or another HDMI-in enabled device. Provides video and audio output.

3. Dual-Mode DisplayPort 1.4

Connect an external display or a projector.

i NOTE: Besides a DisplayPort connector, this port can also provide display output to a DVI or HDMI connector with a DisplayPort 1.4 adapter (sold separately).

i NOTE: This port is only available on computers shipped with a Intel UHD Graphics integrated graphics processor.

4. USB 3.2 Gen 1 ports (2)

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

5. USB 2.0 ports (2)

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

6. Network port (with lights)

Connect an Ethernet (RJ-45) cable from a router or a broadband modem for network or Internet access.

The two lights next to the connector indicate the connectivity status and network activity.

Specifications of Vostro 3020 Tower Desktop

Dimensions and weight

The following table lists the height, width, depth, and weight of your Vostro 3020 Tower Desktop.

Table 2. Dimensions and weight

Description	Values
Height	324.30 mm (12.77 in.)
Width	154 mm (6.06 in.)
Depth	292 mm (11.50 in.)
Weight  NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	7.46 kg (16.46 lb)

Processor

The following table lists the details of the processors that are supported by your Vostro 3020 Tower Desktop .

Table 3. Processor

Description	Option one	Option two	Option three	Option four	Option five	Option six	Option seven	Option eight
Processor type	13 th Generation Intel Core i3-13100	13 th Generation Intel Core i5-13400	13 th Generation Intel Core i5-13400F	13 th Generation Intel Core i5-13500	13 th Generation Intel Core i7-13700	13 th Generation Intel Core i7-13700F	Intel Pentium Gold G7400	Intel Celeron G6900
Processor wattage	65 W	65 W	65 W	65 W	65 W	65 W	46 W	46 W
Processor core count	4	10	14	14	12	12	2	2
Processor thread count	8	20	20	20	20	20	4	2
Processor speed	Up to 3.40 GHz	Up to 4.40 GHz	Up to 5.10 GHz	Up to 4.60 GHz	Up to 2.10 GHz	Up to 2.10 GHz	Up to 3.70 GHz	Up to 3.40 GHz
Processor cache	12 MB	20 MB	20 MB	24 MB	30 MB	30 MB	6 MB	2 MB
Integrated graphics	Intel UHD Graphics	Intel UHD Graphics	None	Intel UHD Graphics	Intel UHD Graphics	None	Intel UHD Graphics	Intel UHD Graphics

Chipset

The following table lists the details of the chipset supported by your Vostro 3020 Tower Desktop.

Table 4. Chipset

Description	Values
Chipset	B660
Processor	<ul style="list-style-type: none">13th Generation Intel Core i3/i5/i5F/i7/i7FIntel Pentium GoldIntel Celeron
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen3.0

Operating system

Your Vostro 3020 Tower Desktop supports the following operating systems:

- Windows 11 Home
- Windows 11 Pro
- Windows 11 National Academic
- Ubuntu 22.04 LTS

Memory

The following table lists the memory specifications of your Vostro 3020 Tower Desktop.

Table 5. Memory specifications

Description	Values
Memory slots	Two U-DIMM slots
Memory type	Dual-channel DDR4
Memory speed	3200 MHz
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	<ul style="list-style-type: none">4 GB, 1 x 4 GB, DDR4, 3200 MHz8 GB, 1 x 8 GB, DDR4, 3200 MHz8 GB, 2 x 4 GB, dual-channel DDR4, 3200 MHz16 GB, 1 x 16 GB, DDR4, 3200 MHz16 GB, 2 x 8 GB, dual-channel DDR4, 3200 MHz32 GB, 1 x 32 GB, DDR4, 3200 MHz32 GB, 2 x 16 GB, dual-channel DDR4, 3200 MHz64 GB, 2 x 32 GB, dual-channel DDR4, 3200 MHz

Ports and connectors

The following table lists the external and internal ports available on your Vostro 3020 Tower Desktop.

Table 6. Ports and connectors

Description	Values
External:	
Network	One RJ-45 Ethernet port
USB	<ul style="list-style-type: none"> Two USB 3.2 Gen 1 ports (Front) Two USB 2.0 ports (Front) Two USB 3.2 Gen 1 ports (Rear) Two USB 2.0 ports with Smart Power On (Rear)
Audio	<ul style="list-style-type: none"> One global headset jack One audio line-out port
Video	<ul style="list-style-type: none"> One DisplayPort 1.4a port (HBR2) One HDMI 1.4b port (1920 x 1200 @60Hz max resolution)
Media-card reader	One SD-card slot (optional)
Power port	One AC power-supply port
Security	<ul style="list-style-type: none"> One padlock ring slot One security-cable slot (wedge-shaped)
Internal:	
PCIe expansion card slots	<p>Worldwide Shipping</p> <ul style="list-style-type: none"> One PCIe x16 full-height expansion card slot, Gen3 Two PCIe x1 full-height slot, Gen3 One PCI-32 slot <p>China Only</p> <ul style="list-style-type: none"> One PCIe x16 full-height expansion card slot, Gen3 One PCIe x1 full-height slot, Gen3
mSATA	None
SATA	Three SATA 3.0 slots
M.2	<ul style="list-style-type: none"> One M.2 2230 slot for WiFi and Bluetooth combo card One M.2 2230/2280 slot for solid-state drive <p>NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article 000144170.</p>

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Vostro 3020 Tower Desktop.

Table 7. Ethernet specifications

Description	Values
Model number	Realtek RTL8111HD

Table 7. 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 Vostro 3020 Tower Desktop.

Table 8. Wireless module specifications

Description	Option one	Option two	Option three
Model number	Realtek RTL8821CE	Intel AX201	Realtek RTL8852BE
Transfer rate	Up to 433 Mbps	Up to 2400 Mbps	Up to 433 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	<ul style="list-style-type: none"> • WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) 	<ul style="list-style-type: none"> • WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6 (WiFi 802.11ax) 	<ul style="list-style-type: none"> • WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac)
Encryption	<ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP 	<ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP 	<ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth	Bluetooth 5.0	Bluetooth 5.2	Bluetooth 5.3

Storage

This section lists the storage options on your Vostro 3020 Tower Desktop.

Your Vostro 3020 supports one of the following storage configurations:

- One 2.5-inch or 3.5-inch hard drive + one M.2 2230/2280 solid-state drive
- One M.2 2230/2280 solid-state drive

The primary drive of your Vostro 3020 varies with the storage configuration. For computers:

- With a M.2 drive, the M.2 drive is the primary drive

Table 9. Storage specifications

Storage type	Interface type	Capacity
2.5-inch hard-disk drive	SATA AHCI, up to 6 Gbps	Up to 1 TB
3.5-inch hard-disk drive	SATA AHCI, up to 6 Gbps	Up to 2 TB
M.2 2230 solid-state drive	PCIe NVMe, up to 64 Gbps	Up to 1 TB
M.2 2280 solid-state drive	PCIe NVMe, up to 64 Gbps	Up to 1 TB
M.2 2230 solid-state drive, QLC	PCIe NVMe, up to 64 Gbps. QLC	Up to 1 TB
M.2 2280 solid-state drive, QLC	PCIe NVMe, up to 32 Gbps. QLC	Up to 1 TB

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Vostro 3020 Tower Desktop.

Table 10. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel UHD Graphics i NOTE: Intel UHD Graphics not available for computers shipped with 13th Generation Intel Core i5-13400F and 13th Generation Intel Core i7-13700F processors.	<ul style="list-style-type: none"> One DisplayPort 1.4a (HBR2) One HDMI 1.4b 	Shared system memory	<ul style="list-style-type: none"> 13th Generation Intel Core i3/i5/i7 Intel Pentium Gold Intel Celeron

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Vostro 3020 Tower Desktop.

Table 11. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA RTX 3050	8 GB	GDDR6
NVIDIA GeForce GTX 1660 TI	6 GB	GDDR5
NVIDIA GeForce GTX 1660 SUPER	6 GB	GDDR6

Audio

The following table lists the audio specifications of your Vostro 3020 Tower Desktop.

Table 12. Audio specifications

Description	Values
Audio type	Integrated 5.1 Channel High Definition audio
Audio controller	Cirrus Logic CS8409 + CS42L42
Internal audio interface	High definition audio interface
External audio interface	<ul style="list-style-type: none"> One global headset jack One audio line-out port

Power ratings

The following table lists the power rating specifications of Vostro 3020 Tower Desktop.

Table 13. Power ratings

Description	Option one	Option two	Option three
Type	180 W internal Power Supply Unit (PSU), 85% Efficient, 80 PLUS Bronze	300 W internal PSU, 85% Efficient, 80 PLUS Bronze	460 W internal PSU, 85% Efficient, 80 PLUS Bronze
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)	3 A	4.60 A	5 A
Output current (continuous)	Operating: <ul style="list-style-type: none"> ● 12 VA - 15 A ● 12 VB - 14 A Standby: <ul style="list-style-type: none"> ● 12 VA - 1.50 A ● 12 VB - 3.30 A 	Operating: <ul style="list-style-type: none"> ● 12 VA - 16.50 A ● 12 VB - 15 A ● 12 VC - 12 A Standby: <ul style="list-style-type: none"> ● 12 VA - 1.50 A ● 12 VB - 3.30 A ● 12 VC - 0 A 	Operating: <ul style="list-style-type: none"> ● 12 VA - 16.50 A ● 12 VB - 15 A ● 12 VC - 12 A Standby: <ul style="list-style-type: none"> ● 12 VA - 1.50 A ● 12 VB - 3.30 A ● 12 VC - 0 A
Rated output voltage	<ul style="list-style-type: none"> ● 12 VA ● 12 VB 	<ul style="list-style-type: none"> ● 12 VA ● 12 VB ● 12 VC 	<ul style="list-style-type: none"> ● 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)
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)

Operating and storage environment

This table lists the operating and storage specifications of your Vostro 3020 Tower Desktop.

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

Table 14. Computer environment

Description	Operating	Storage
Temperature range	0°C to 35°C (32°F to 95°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	110 G†	160 G†
Altitude range	-15.2 m to 3048 m (-49.87 ft to 10000 ft)	-15.2 m to 10668 m (-49.87 ft to 35000 ft)

Table 14. Computer environment (continued)

Description	Operating	Storage
 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.

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 15. 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 <code>Contact Support</code> , 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 on your computer .
Dell knowledge base articles for a variety of computer concerns	<ol style="list-style-type: none"> 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.