

Vostro 3020 Small 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.

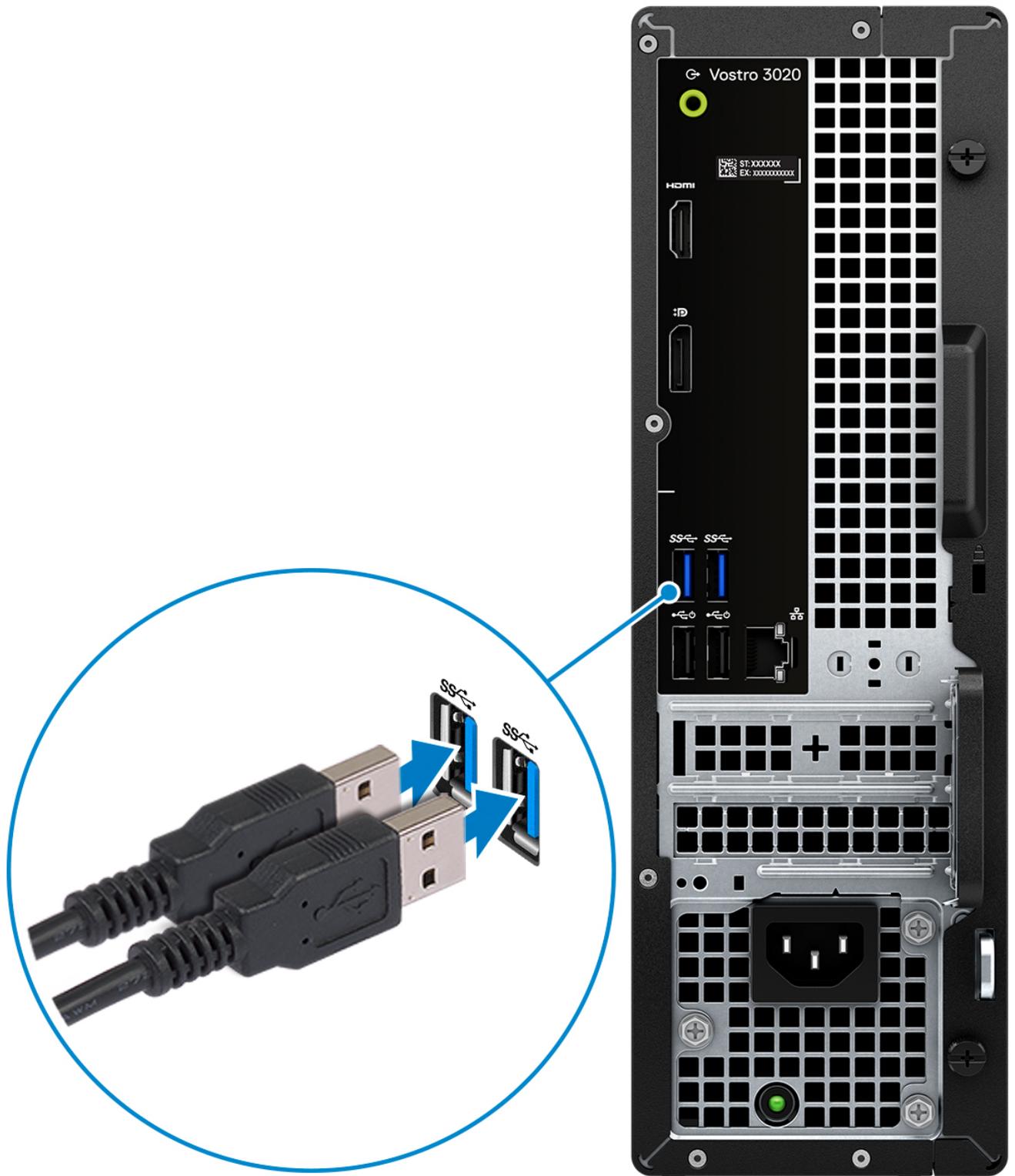
 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

Contents

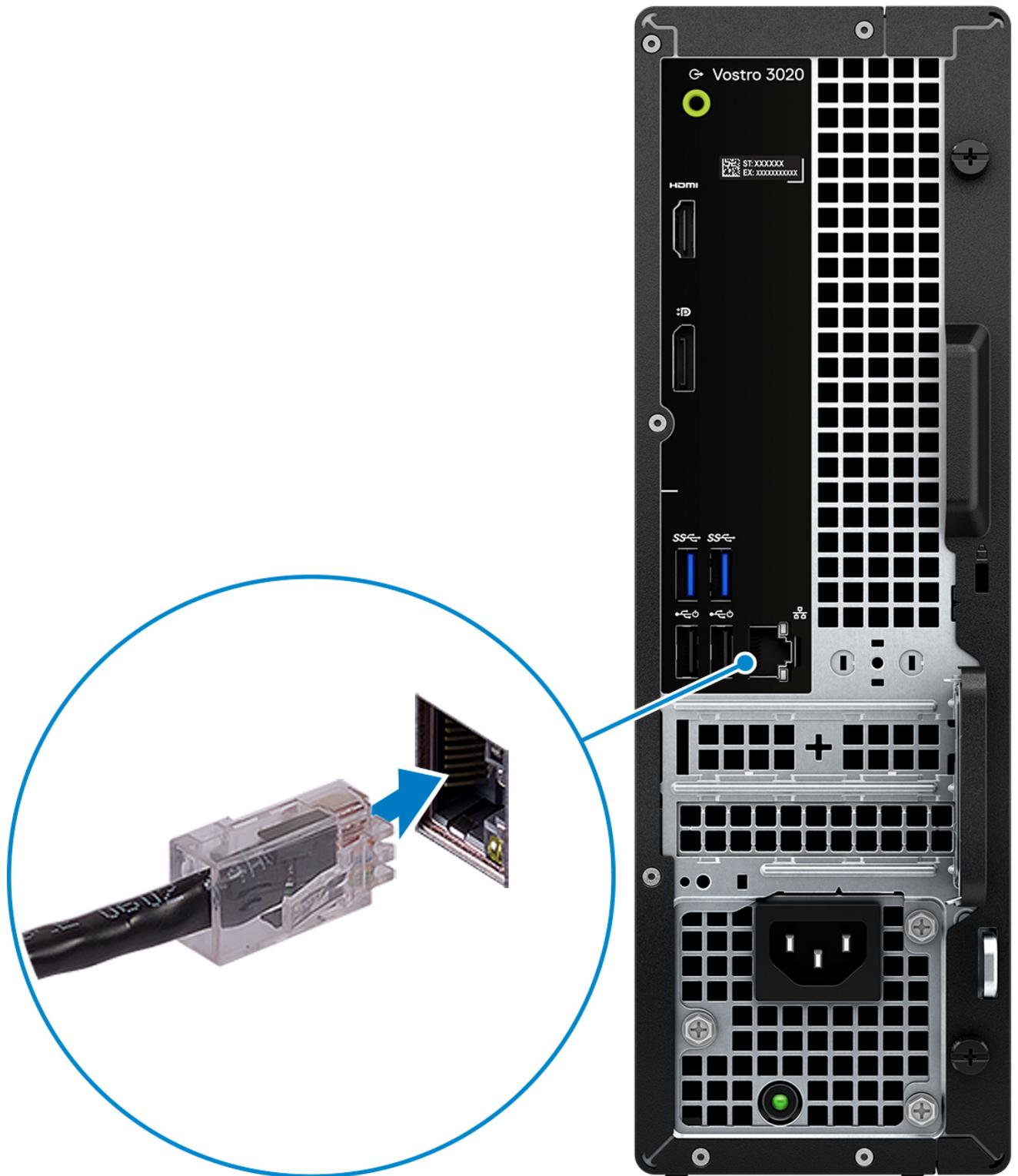
Chapter 1: Set up your computer	4
Chapter 2: Views of Vostro 3020 Small Desktop	11
Front.....	12
Back.....	14
Service Tag.....	15
Chapter 3: Specifications of Vostro 3020 Small Desktop	17
Dimensions and weight.....	17
Processor.....	17
Chipset.....	18
Operating system.....	18
Memory.....	18
Memory matrix.....	19
Ports and connectors.....	19
Ethernet.....	20
Wireless module.....	20
Audio.....	21
Storage.....	21
Power ratings.....	22
GPU—Integrated.....	22
Multiple display support matrix.....	22
Hardware security.....	23
Environmental.....	23
Energy Star and Trusted Platform Module (TPM).....	23
Regulatory compliance.....	24
Operating and storage environment.....	24
Chapter 4: Getting help and contacting Dell	25

Set up your computer

1. Connect the keyboard and mouse.



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

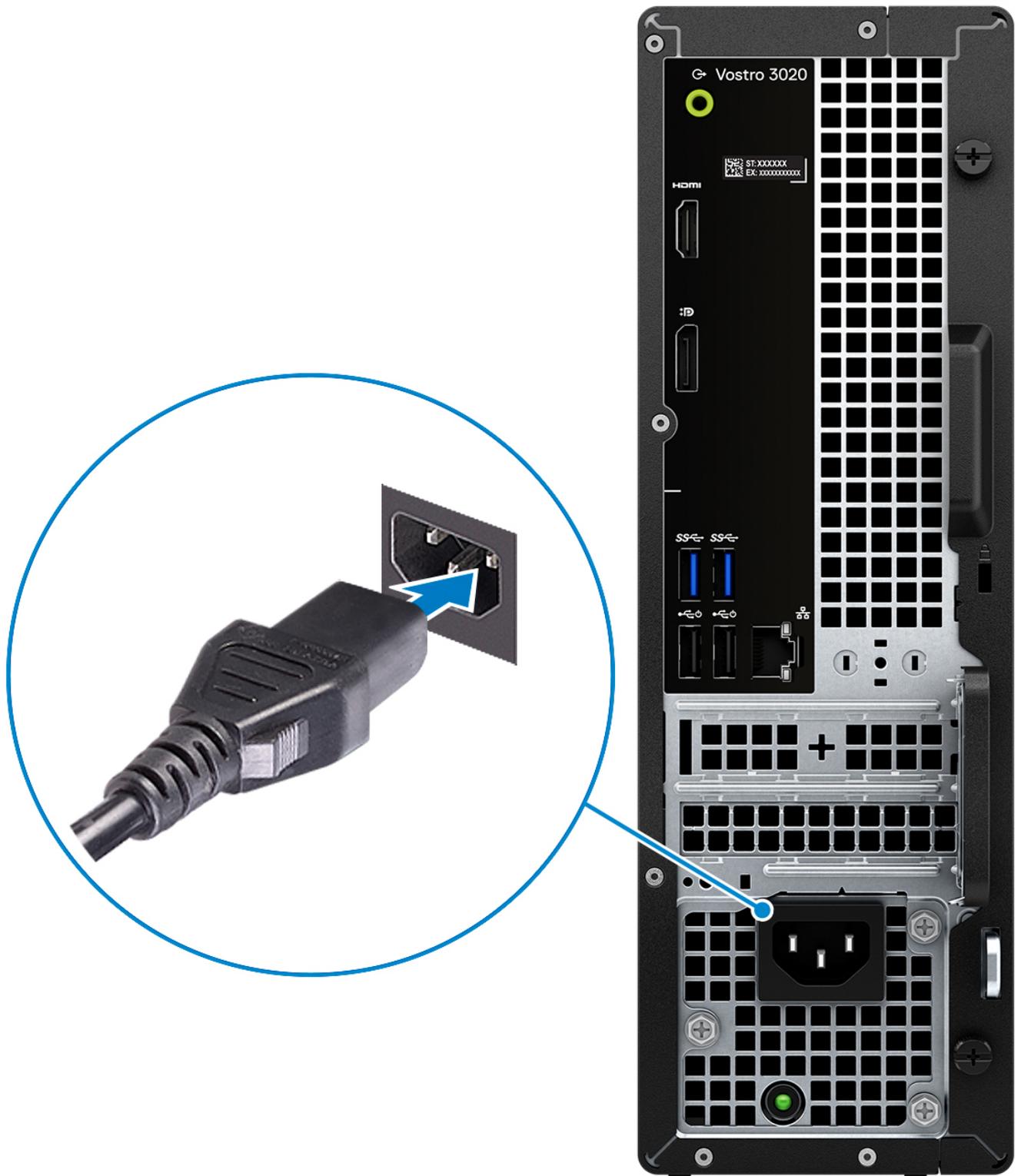


3. Connect the display.



NOTE: 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.



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.
 - ① **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.

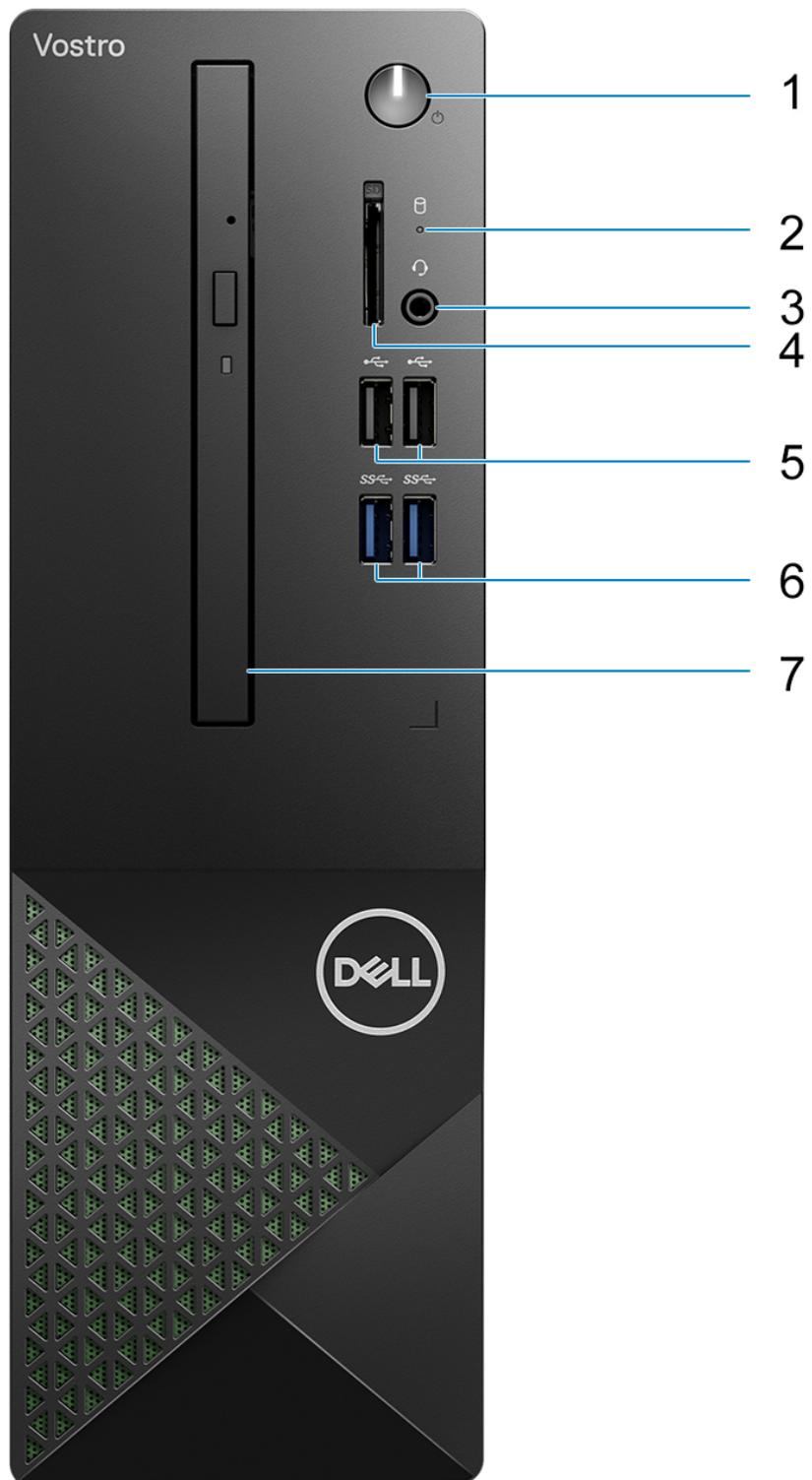
7. Locate and use Dell apps from the Windows Start menu—Recommended

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.
	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 . ① 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 Vostro 3020 Small Desktop

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

2. **Hard-drive activity light**

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

3. **Headset (headphone and microphone combo) port**

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

4. **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)

5. **Two USB 2.0 ports**

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

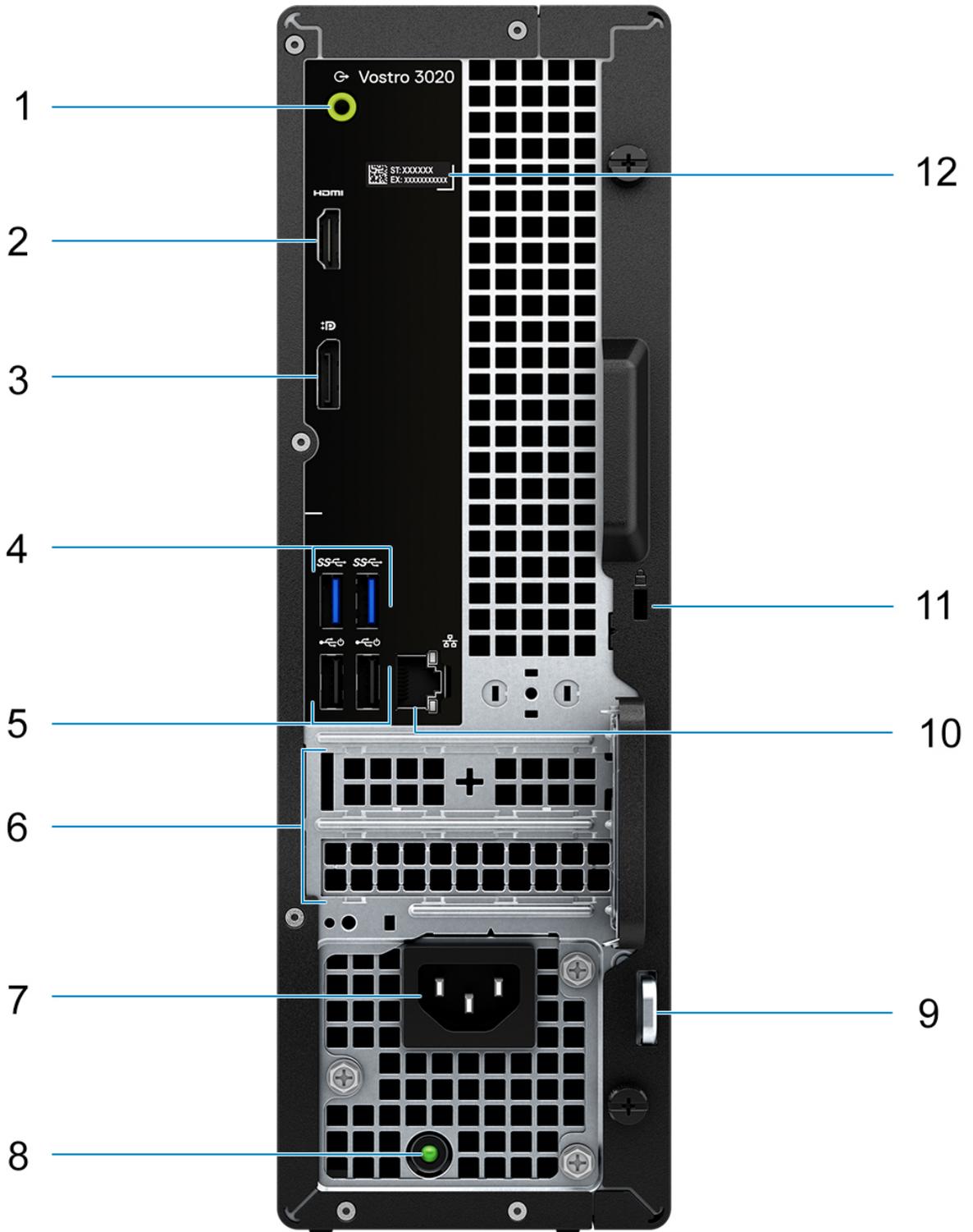
6. **Two USB 3.2 Gen 1 ports**

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

7. **Slim optical drive (optional)**

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

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: The maximum resolution supported by HDMI 1.4b port is 1920 x 1200.

3. DisplayPort 1.4 port

Connect an external display or a projector.

4. Two USB 3.2 Gen 1 ports

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

5. Two USB 2.0 ports with Smart Power on

Connect devices such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps. Wake from standby with the keyboard or mouse connected to this port.

6. PCI-Express x1 slot (half-height) and PCI-Express X16 slot (half-height)

Connect a PCI-express card such as an audio or network card to enhance the capabilities of your computer.

7. Power cable connector

Connect a power cable to provide power to your computer.

8. Power-supply diagnostics light

Indicates the power-supply state.

9. Padlock rings

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

10. Network port

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

11. Security-cable slot

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

12. 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.

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Specifications of Vostro 3020 Small Desktop

Dimensions and weight

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

Table 2. Dimensions and weight

Description	Values
Height	11.42 in. (290.00 mm)
Width	3.65 in. (92.6 mm)
Depth	11.53 in. (292.86 mm)
Weight  NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	10.25 lb (4.65 kg)

Processor

The following table lists the details of the processors supported by your Vostro 3020 Small Desktop.

Table 3. Processor

Description	Option one	Option two	Option three	Option four	Option five	Option six
Processor type	13 th Generation Intel Core i3-13100	13 th Generation Intel Core i5-13400	13 th Generation Intel Core i5-13500 vPro	13 th Generation Intel Core i7-13700 vPro	Intel Pentium Gold G7400	Intel Celeron G6900
Processor wattage	60 W	65 W	65 W	65 W	46 W	46 W
Processor core count	4	10	14	16	2	2
Processor thread count	8	16	20	24	4	2
Processor speed	3.40 GHz to 4.50 GHz	2.50 GHz to 4.60 GHz	2.50 GHz to 4.80 GHz	2.10 GHz to 5.20 GHz	3.70 GHz	3.40 GHz
Processor cache	12 MB	20 MB	24 MB	30 MB	6 MB	4 MB
Integrated graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics

Chipset

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

Table 4. Chipset

Description	Values
Chipset	Intel B660
Processor	<ul style="list-style-type: none">● 13th Generation Intel Core i3/i5/i7● Intel Pentium Gold● Intel Celeron
DRAM bus width	64-bit
Flash EPROM	32 MB + 16 MB
PCIe bus	Up to Gen3

Operating system

Your Vostro 3020 Small Desktop supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit
- Windows 11 Home National Education, 64-bit
- Windows 11 Pro National Education, 64-bit
- Windows 10 Home with Windows 11 Home license, 64-bit
- Windows 10 Pro with Windows 11 Pro license, 64-bit
- Ubuntu Linux 22.04 LTS, 64-bit

Memory

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

Table 5. Memory specifications

Description	Values
Memory slots	Two UDIMM 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, 12 GB, 16 GB, or 32 GB
Memory configurations supported	<ul style="list-style-type: none">● 4 GB, 1 x 4 GB, DDR4, 3200 MHz, UDIMM● 8 GB, 2 x 4 GB, DDR4, 3200 MHz, UDIMM, dual-channel● 12 GB, 1 x 4 GB + 1 x 8 GB, DDR4, 3200 MHz, UDIMM,● 16 GB, 2 x 8 GB, DDR4, 3200 MHz, UDIMM, dual-channel● 16 GB, 1 x 16 GB, DDR4, 3200 MHz, UDIMM

Table 5. Memory specifications (continued)

Description	Values
	<ul style="list-style-type: none"> • 32 GB, 1 x 32 GB, DDR4, 3200 MHz, UDIMM • 32 GB, 2 x 16 GB, DDR4, 3200 MHz, UDIMM, dual-channel • 64 GB, 2 x 32 GB, DDR4, 3200 MHz, UDIMM, dual-channel

Memory matrix

The following table lists the memory configurations supported on your Vostro 3020 Small Desktop.

Table 6. Memory matrix

Configuration	Slot	
	DIMM1	DIMM2
4 GB DDR4	4 GB	N/A
8 GB DDR4	8 GB	N/A
8 GB DDR4	4 GB	4 GB
12 GB DDR4	4 GB or 8 GB	8 GB or 4 GB
16 GB DDR4	16 GB	N/A
16 GB DDR4	8 GB	8 GB
32 GB DDR4	32 GB	N/A
32 GB DDR4	16 GB	16 GB
64 GB DDR4	32 GB	32 GB

Ports and connectors

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

Table 7. Ports and connectors

Description	Values
External:	
Network	One RJ-45 Ethernet port
USB	<ul style="list-style-type: none"> • Four USB 3.2 Gen 1 ports • Two USB 2.0 ports • Two USB 2.0 ports with Smart Power On
Audio	<ul style="list-style-type: none"> • One headset (headphone and microphone combo) port • One audio line-out port
Video	<ul style="list-style-type: none"> • One DisplayPort 1.4 port • One HDMI 1.4b port <p> NOTE: HDMI port resolution is up to 1920 x 1200.</p>
Media-card reader	One SD-card slot (optional)
Power port	One AC power-supply port

Table 7. Ports and connectors (continued)

Description	Values
Security	<ul style="list-style-type: none"> One security-cable slot (wedge-shaped) One padlock ring slot
Internal:	
PCIe expansion card slots	<ul style="list-style-type: none"> One PCIe x16 half-height expansion card slot, Gen3 One PCIe x1 half-height slot, Gen3
mSATA	Not supported
SATA	<ul style="list-style-type: none"> One SATA 2.0 slot for slim optical drive One SATA 3.0 slot for 3.5-inch/2.5-inch hard drive
M.2	<ul style="list-style-type: none"> One M.2 2230 slot for WiFi and Bluetooth combo card, Gen3 One M.2 2230/2280 slot for solid-state drive, Gen3 <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 Small Desktop.

Table 8. Ethernet specifications

Description	Values
Model number	Realtek RTL8111KD
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module specifications of your Vostro 3020 Small Desktop.

Table 9. Wireless module specifications

Description	Option one	Option two	Option three
Model number	Intel AX210	Realtek RTL8852BE	Realtek RTL8821CE
Transfer rate	Up to 2400 Mbps	Up to 433 Mbps	Up to 433 Mbps
Frequency bands supported	2.4 GHz/5 GHz/6 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	<ul style="list-style-type: none"> Wi-Fi 802.11 a/b/g Wi-Fi 4 (WiFi 802.11n) Wi-Fi 5 (WiFi 802.11ac) Wi-Fi 6E (WiFi 802.11ax) 	<ul style="list-style-type: none"> Wi-Fi 802.11 a/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

Table 9. Wireless module specifications (continued)

Description	Option one	Option two	Option three
Bluetooth	Bluetooth 5.2	Bluetooth 5.3	Bluetooth 5.0

Audio

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

Table 10. Audio specifications

Description	Values
Audio type	Cirrus Logic
Audio controller	CS8409, CS42L42 (headphone codec)
Internal audio interface	High definition audio interface
External audio interface	<ul style="list-style-type: none"> One headset (headphone and microphone combo) port One Line-out port (rear) <p>NOTE: 3.5 mm Global headset jack functionality varies by model configuration. For best results, use Dell recommended audio accessories.</p>

Storage

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

Table 11. Storage matrix

Storage		2.5-inch hard drive	3.5-inch hard drive	M.2 2230/2280 socket
M.2 solid-state drive		N	N	Y
M.2 solid-state drive	3.5-inch hard drive	N	Y	Y
M.2 solid-state drive	2.5-inch hard drive	Y	N	Y

Table 12. Storage specifications

Storage type	Interface type	Capacity
2.5-inch hard-disk drive, 7200 RPM	SATA AHCI, up to 6 Gbps	Up to 1 TB
3.5-inch hard-disk drive, 7200 RPM	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 2280 solid-state drive, QLC	PCIe NVMe, up to 32 Gbps, QLC	Up to 1 TB
M.2 2230 solid-state drive, QLC	PCIe NVMe, up to 64 Gbps, QLC	Up to 1 TB
9.5 mm 16x slimline DVD-RW drive (optional)	SATA AHCI, up to 1.5 Gbps	Not applicable

Power ratings

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

Table 13. Power ratings

Description		Option one
Type		180 W internal Power Supply Unit (PSU), 85% Efficient, 80 PLUS Bronze
Input voltage		90 VAC–264 VAC
Input frequency		47 Hz–63 Hz
Input current (maximum)		3 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
Rated output voltage		<ul style="list-style-type: none"> • 12 VA • 12 VB
Temperature range:		
	Operating	5°C to 45°C (41°F to 113°F)
	Storage	-40°C to 70°C (-40°F to 158°F)

GPU—Integrated

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

Table 14. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel UHD Graphics	<ul style="list-style-type: none"> • One DisplayPort 1.4 port • One HDMI 1.4b port <p>NOTE: HDMI port resolution is up to 1920 x 1200.</p>	Shared system memory	<ul style="list-style-type: none"> • 13th Generation Intel Core i3/i5/i7 • Intel Pentium Gold • Intel Celeron

Multiple display support matrix

The following table lists the multiple display support matrix for your Vostro 3020 Small Desktop.

Table 15. Integrated graphics card

Graphics Card	Intel UHD Graphics
Video ports on Integrated Graphics Card	<ul style="list-style-type: none"> • One DisplayPort 1.4 port • One HDMI 1.4b port

Table 15. Integrated graphics card (continued)

Graphics Card	Intel UHD Graphics
	 NOTE: HDMI port resolution is up to 1920 x 1200.
Number of displays supported	2

Hardware security

Table 16. Hardware security options

Kensington lock slot
Padlock ring
Local hard drive data wipe through BIOS (Secure Erase)
Microsoft Windows Bitlocker
BIOS Data Port On/Off - Data port disablement
Firmware Trusted Platform Module (TPM) 2.0

Environmental

Table 17. Environmental specifications

Feature	Vostro 3020 Small Desktop
Recyclable packaging	Yes
BFR/PVC—free chassis	No
Multi-Pack 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.

Energy Star and Trusted Platform Module (TPM)

Table 18. Energy Star and TPM

Features	Specifications
Energy Star 8.0	Compliant configurations available
Firmware-TPM (Discrete TPM disabled)	Optional

 **NOTE:** TPM is not available in all countries.

Regulatory compliance

The following table lists the regulatory compliance of your Vostro 3020 Small Desktop.

Table 19. 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 Vostro 3020 Small Desktop.

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

Table 20. Computer environment

Description	Operating	Storage
Temperature range	10°C – 35°C (32°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)	40 G†	105 G†
Altitude range	-15.2 m - 3048 m (-49.86 ft -10,000 ft)	-15.2 m - 10,668 m (-49.86 ft - 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.

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 21. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
Tips	
Contact Support	In Windows search, type <code>Contact Support</code> , 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	<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.