

# XPS 8920

## 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.

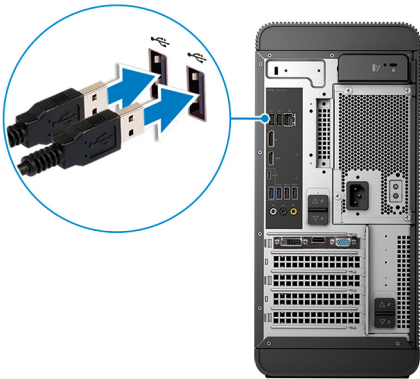
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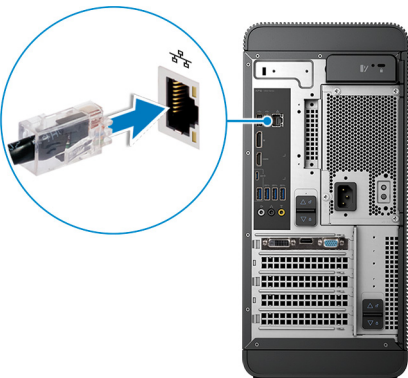
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# Set up your computer

1. Connect the keyboard and mouse.



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

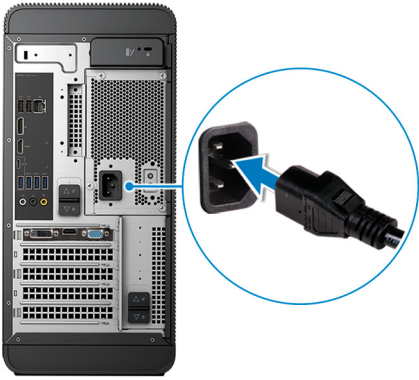


3. Connect the display.



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

4. Connect the power cable.



5. Press the power button.







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.
  - ⓘ **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><b>My Dell</b></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><b>SupportAssist</b></p> <p>Pro-actively checks the health of your computer's hardware and software. The SupportAssist OS Recovery tool troubleshoots issues with the operating system. For more information, see the SupportAssist documentation at <a href="http://www.dell.com/support">www.dell.com/support</a>.</p> <p>ⓘ <b>NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.</b></p>
	<p><b>Dell Update</b></p> <p>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 <a href="https://www.dell.com/support">SLN305843</a> at <a href="http://www.dell.com/support">www.dell.com/support</a>.</p>
	<p><b>Dell Digital Delivery</b></p>

## Resources

## Description

Download software applications, which are purchased but not pre-installed on your computer. For more information about using Dell Digital Delivery, see the knowledge base article [153764](#) at [www.dell.com/support](http://www.dell.com/support).

8. Create recovery drive for Windows.

 **NOTE: It is recommended to create a recovery drive to troubleshoot and fix problems that may occur with Windows.**

For more information, see [Create a USB recovery drive for Windows](#).

# Create a USB recovery drive for Windows

Create a recovery drive to troubleshoot and fix problems that may occur with Windows. An empty USB flash drive with a minimum capacity of 16 GB is required to create the recovery drive.

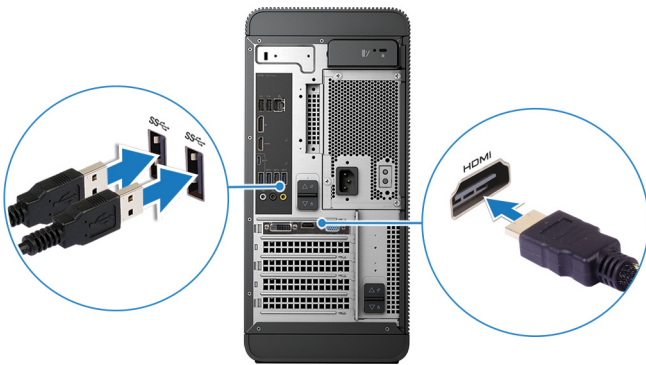
**NOTE:** This process may take up to an hour to complete.

**NOTE:** The following steps may vary depending on the version of Windows installed. Refer to the [Microsoft support site](#) for latest instructions.

1. Connect the USB flash drive to your computer.
2. In Windows search, type *Recovery*.
3. In the search results, click **Create a recovery drive**.  
The **User Account Control** window is displayed.
4. Click **Yes** to continue.  
The **Recovery Drive** window is displayed.
5. Select **Back up system files to the recovery drive** and click **Next**.
6. Select the **USB flash drive** and click **Next**.  
A message appears, indicating that all data in the USB flash drive will be deleted.
7. Click **Create**.
8. Click **Finish**.  
For more information about reinstalling Windows using the USB recovery drive, see the *Troubleshooting* section of your product's *Service Manual* at [www.dell.com/support/manuals](http://www.dell.com/support/manuals).

## Setting up the Virtual Reality (VR) headset — optional

1. Download and run the setup tools for your VR headset at [www.dell.com/VRsupport](http://www.dell.com/VRsupport).
2. Connect the VR headset to the designated USB 3.1 Gen 1 ports on the back of your computer and HDMI port on the graphics card on your computer, when prompted.

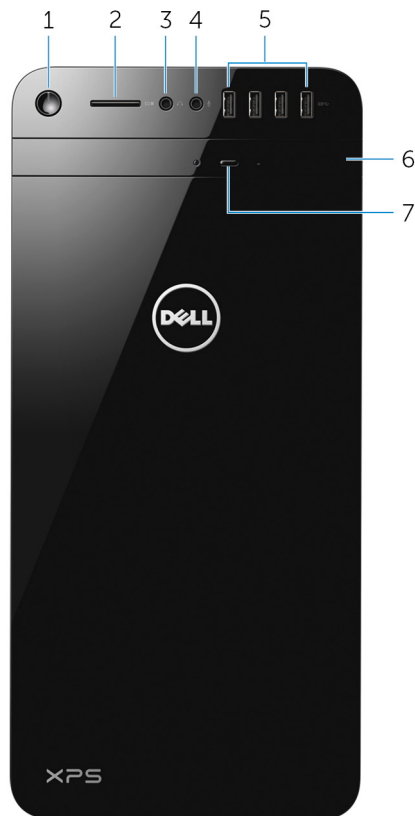


**i** **NOTE:** If you connect the VR headset to the HDMI port on your computer, the performance will be optimum.

3. Follow the instructions on the screen to complete the setup.



## 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 for 4 seconds to force shut-down the computer.

**i** **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](http://www.dell.com/support/manuals).

### 2. SD-card slot

Reads from and writes to the SD card.

### 3. Headphone/speaker port

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

### 4. Microphone port

Connect an external microphone to provide sound input.

### 5. USB 3.0 ports (4)

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

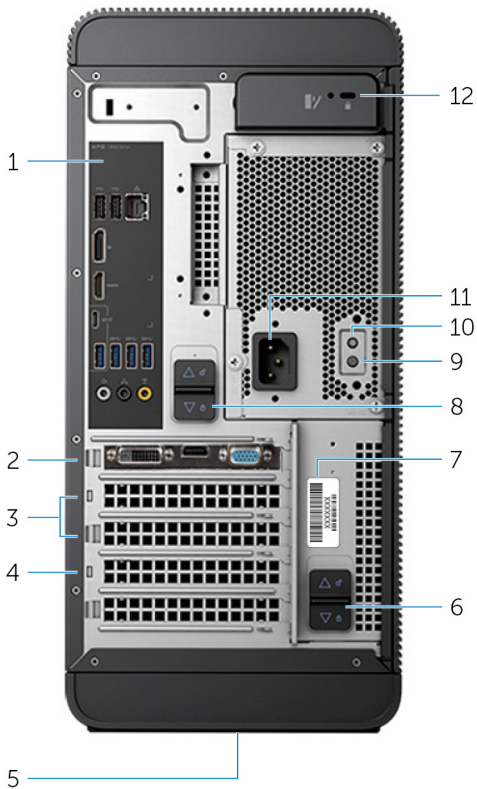
### 6. Optical drive

Reads from and writes to CDs and DVDs.

### 7. Optical-drive eject button

Press to open the optical drive tray.

# Back



**1. Back panel**

Connect USB, audio, video and other devices.

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

Connect a PCI-Express card such as graphics, audio, or network card to enhance the capabilities of your computer.  
For optimal graphics performance, use this slot for connecting the graphics card.

**3. PCI-Express x1 slots (2)**

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

**4. PCI-Express x4 slot**

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

**5. Regulatory label**

Contains regulatory information about your computer.

**6. Bottom power-supply cage release-latch**

Allows you to remove the power supply unit from your computer.

**7. Service Tag label**

Provides the Service Tag and Express Service Code needed when contacting Dell.

**8. Top power-supply cage release-latch**

Allows you to remove the power supply unit from your computer.

**9. Power supply light**

Indicates the power-supply state.

**10. Power-supply diagnostic button**

Press to check the power-supply state.

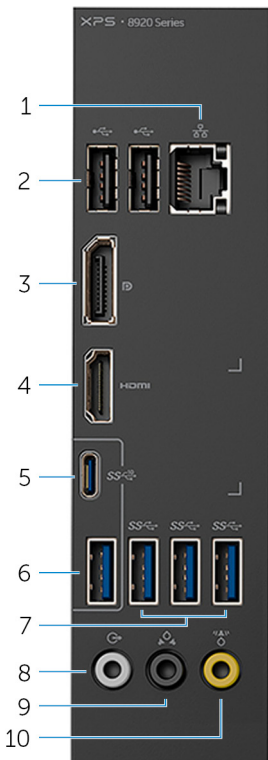
**11. Power port**

Connect a power cable to provide power to your computer.

**12. Security-cable slot**

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

# Back panel



## 1. Network port

Connect an Ethernet (RJ45) 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.

## 2. USB 2.0 ports (2)

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

## 3. DisplayPort

Connect an external display or a projector.

**NOTE:** If you ordered your computer with a discrete graphics card, the DisplayPort on the back panel of your computer is covered. Connect the display to the discrete graphics card of your computer.

## 4. HDMI port

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

**NOTE:** If you ordered your computer with a discrete graphics card, the HDMI port on the back panel of your computer is covered. Connect the display to the discrete graphics card of your computer.

## 5. USB 3.1 Type-C port

Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 10 Gbps.

## 6. USB 3.1 port

Connect peripherals, such as storage devices and printers. Provides data transfer speeds up to 10 Gbps.

## 7. USB 3.0 ports (3)

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

## 8. Front L/R surround line-out port

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

## 9. 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.

## 10. Center/subwoofer LFE surround port

Connect the subwoofer.

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

# Specifications

## Computer model

**Table 2. Computer model**

Computer model	XPS 8920
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## System information

**Table 3. System information**

Processor	<ul style="list-style-type: none"> <li>7<sup>th</sup> Generation Intel Core i5/i5k</li> <li>7<sup>th</sup> Generation Intel Core i7/i7k</li> </ul>
Chipset	<ul style="list-style-type: none"> <li>Intel H270</li> <li>Intel Z270</li> </ul>

## Operating system

**Table 4. Operating system**

Operating systems supported	<ul style="list-style-type: none"> <li>Windows 10 Pro 64-bit</li> <li>Windows 10 Home 64-bit</li> </ul>
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## Dimensions and weight

**Table 5. Dimensions and weight**

Height	389 mm (15.32 in)
Width	180 mm (7.09 in)
Depth	356 mm (14.02 in)
Weight (maximum)	10 kg (22 lbs)

**NOTE:** The weight of your computer varies depending on the configuration ordered and the manufacturing variability.

## Memory

**Table 6. Memory specifications**

Slots	Four DIMM slots
Type	<ul style="list-style-type: none"> <li>UDIMM</li> <li>DDR4</li> </ul>
Speed	2400 MHz
Configurations supported	8 GB, 16 GB, 24 GB, 32 and 64 GB

The following table lists the available memory configuration matrix:

**Table 7. Memory configuration matrix**

Configuration	Slot			
	DIMM1	DIMM2	DIMM3	DIMM4
8 GB	4 GB	4 GB		
8 GB	8 GB			
16 GB	8 GB	8 GB		
16 GB	16 GB			
24 GB	8 GB	8 GB	4 GB	4 GB
32 GB	8 GB	8 GB	8 GB	8 GB
64 GB	16 GB	16 GB	16 GB	16 GB

## Intel Optane memory

Intel Optane memory functions as a storage accelerator. It accelerates the computer and any type of SATA-based storage media such as hard drives and solid-state drives (SSDs).

**NOTE:** Intel Optane memory is supported on computers that meet the following requirements:

- 7<sup>th</sup> generation or higher Intel Core i3/i5/i7 processor
- Windows 10 64-bit version or higher(Anniversary Update)
- Intel Rapid Storage Technology driver version 15.5.xxxx or higher

**Table 8. Intel Optane memory**

Interface	PCIe NVMe 3.0 x2
Connector	M.2
Configurations supported	16 GB

**NOTE:** For more information about enabling or disabling the Intel Optane memory, see [Enabling Intel Optane memory or Disabling Intel Optane memory](#).

## Ports and connectors

**Table 9. Ports and connectors**

Back panel ports	
Network	One RJ45 port
USB	<ul style="list-style-type: none"> <li>• Two USB 2.0 ports</li> <li>• Three USB 3.0 ports</li> <li>• One USB 3.1 Type-A port</li> <li>• One USB 3.1 Type-C port</li> </ul>
Video/Audio	<ul style="list-style-type: none"> <li>• One Surround Front Stereo port</li> <li>• One Surround Rear Stereo port</li> <li>• One Surround Center/Subwoofer port</li> <li>• One HDMI port for integrated graphics</li> <li>• One DisplayPort for integrated graphics</li> </ul>

**Table 10. Ports and connectors**

**Front panel ports:**

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Audio	<ul style="list-style-type: none"><li>• One Stereo Headphone jack</li><li>• One Microphone jack</li></ul>
USB	Four USB 3.0 ports
Card Reader	One 3-in-1 Card reader, supporting: <ul style="list-style-type: none"><li>• Secure Digital (SD)</li><li>• Secure Digital Extended Capacity (SDXC)</li><li>• Secure Digital High Capacity (SDHC) Classes 2, 4, and 6</li></ul>

**Table 11. Ports and connectors**

**Internal ports:**

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PCIe Slots	<ul style="list-style-type: none"><li>• One PCIe x16 card slot</li><li>• Two PCIe x1 card slots</li><li>• One PCIe x4 card slot</li></ul>
M.2 Card	<ul style="list-style-type: none"><li>• One M.2 card slot for SSD (SATA or PCIe/NVMe)</li><li>• One M.2 card slot for Wi-Fi and Bluetooth combo card</li></ul>

## Communications

**Table 12. Supported Communications**

Ethernet	10/100/1000 Mbps Ethernet controller integrated on system board
Wireless	<ul style="list-style-type: none"><li>• Wi-Fi 802.11a/b/g/n</li><li>• Wi-Fi 802.11ac</li><li>• Bluetooth 4.0</li></ul>

## Wireless module

**Table 13. Wireless module specifications**

Transfer rate	Up to 867 Mbps (max)
Frequency bands supported	Dual band 2.4 GHz/5 GHz
Encryption	<ul style="list-style-type: none"><li>• 64-bit and 128-bit WEP</li><li>• TKIP</li><li>• AES-CCMP</li></ul>

## Audio

**Table 14. Audio specifications**

Controller	Integrated Realtek ALC3861 High Definition Audio with Waves MaxxAudio Pro
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# Storage

**Table 15. Storage specifications**

Interface	<ul style="list-style-type: none"> <li>• SATA 6 Gbps for optical drive</li> <li>• SATA 6 Gbps for hard drive</li> <li>• M.2 for SSD (SATA or PCIe/NVMe)</li> </ul>
Hard drive	Three 3.5-inch hard drives
Solid-state drive	One M.2 slot
Optical drive (optional)	One Slimline DVD+/-RW
Capacity:	
Hard drive	Up to 4 TB
SSD	PCIe/NVMe: Up to 1 TB

# Video

**Table 16. Video specifications**

	Integrated	Discrete
Controller	Intel HD Graphics 630	<ul style="list-style-type: none"> <li>• NVIDIA GT 730</li> <li>• NVIDIA GTX 745</li> <li>• NVIDIA GTX 1050 Ti</li> <li>• NVIDIA GTX 1070</li> <li>• NVIDIA GTX 1080</li> <li>• AMD Radeon RX 460</li> <li>• AMD Radeon RX 470</li> <li>• AMD Radeon RX 480</li> </ul>
Memory	Shared system memory	Up to 8 GB GDDR5X

# Power ratings

**Table 17. Power ratings**

Type	460 W APFC	460 W Bronze
Input current	8 A	8 A
Output current	3.3V/17A, 5V/25A, 12VA/18A, 12VB/16A, 12VC/8A, 5Vaux/3A	3.3V/17A, 5V/25A, 12VA/18A, 12VB/16A, 12VC/8A, 5Vaux/3A
Rated output voltage	3.3V, 5V, 12VA, 12VB, 12VC, 5Vaux	3.3V, 5V, 12VA, 12VB, 12VC, 5Vaux
Input voltage	100 VAC–240 VAC	
Input frequency	50 Hz–60 Hz	
Temperature range: Operating	5°C to 50°C (41°F to 122°F)	
Temperature range: Storage	–40°C to 70°C (–40°F to 158°F)	

# Computer Environment

**Airborne contaminant level:** G2 or lower as defined by ISA-S71.04-1985



**Table 18. Computer environment**

	<b>Operating</b>	<b>Storage</b>
Temperature range	5°C to 35°C (41°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)*	0.26 GRMS	1.37 GRMS
Shock (maximum)	40 G for 2 ms with a change in velocity of 20 in/s (51 cm/s)†	105 G for 2 ms with a change in velocity of 52.5 in/s (133 cm/s)‡
Altitude (maximum)	-15.20 m to 3048 m (-50 ft to 10,000 ft)	-15.20 m to 10,668 m (-50 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.

# Intel Optane memory

## Enabling Intel Optane memory

1. On the taskbar, click the search box, and then type `Intel Rapid Storage Technology`.
2. Click **Intel Rapid Storage Technology**.  
The **Intel Rapid Storage Technology** window is displayed.
3. On the **Status** tab, click **Enable** to enable the Intel Optane memory.
4. On the warning screen, select a compatible fast drive, and then click **Yes** to continue enabling Intel Optane memory.
5. Click **Intel Optane memory** > **Reboot** to complete enabling your Intel Optane memory.

 **NOTE:** Applications may take up to three subsequent launches after enablement to see the full performance benefits.

## Disabling Intel Optane memory

 **CAUTION:** After disabling Intel Optane memory, do not uninstall the driver for Intel Rapid Storage Technology as it will result in a blue screen error. The Intel Rapid Storage Technology user interface can be removed without uninstalling the driver.

 **NOTE:** Disabling Intel Optane memory is required before removing the SATA storage device accelerated by the Intel Optane memory module from the computer.

1. On the taskbar, click the search box, and then type `Intel Rapid Storage Technology`.
2. Click **Intel Rapid Storage Technology**.  
The **Intel Rapid Storage Technology** window is displayed.
3. On the **Intel Optane memory** tab, click **Disable** to disable the Intel Optane memory.

 **NOTE:** For computers in which Intel Optane memory acts as a primary storage, do not disable the Intel Optane memory. The **Disable** option will be grayed out.



4. Click **Yes** if you accept the warning.  
The disabling progress is displayed.
5. Click **Reboot** to complete disabling your Intel Optane memory and restart your computer.

# 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 19. Self-help resources**

Self-help resources	Resource location
Information about Dell products and services	<a href="http://www.dell.com">www.dell.com</a>
My Dell app	
Tips	
Contact Support	In Windows search, type <code>Contact Support</code> , and press Enter.
Online help for operating system	<a href="http://www.dell.com/support/windows">www.dell.com/support/windows</a>
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.	<a href="http://www.dell.com/support">www.dell.com/support</a>
Dell knowledge base articles for a variety of computer concerns.	<ol style="list-style-type: none"> <li>1. Go to <a href="http://www.dell.com/support">www.dell.com/support</a>.</li> <li>2. Type the subject or keyword in the <b>Search</b> box.</li> <li>3. Click <b>Search</b> to retrieve the related articles.</li> </ol>
Learn and know the following information about your product:	See <i>Me and My Dell</i> at <a href="http://www.dell.com/support/manuals">www.dell.com/support/manuals</a> .
<ul style="list-style-type: none"> <li>• Product specifications</li> <li>• Operating system</li> <li>• Setting up and using your product</li> <li>• Data backup</li> <li>• Troubleshooting and diagnostics</li> <li>• Factory and system restore</li> <li>• BIOS information</li> </ul>	<p>To locate the <i>Me and My Dell</i> relevant to your product, identify your product through one of the following:</p> <ul style="list-style-type: none"> <li>• Select <b>Detect Product</b>.</li> <li>• Locate your product through the drop-down menu under <b>View Products</b>.</li> <li>• Enter the <b>Service Tag number</b> or <b>Product ID</b> in the search bar.</li> </ul>

## Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see [www.dell.com/contactdell](http://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 on your purchase invoice, packing slip, bill, or Dell product catalog.