Inspiron 27 7000 All-in-One

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.
Set up your computer

1. Set up the stand.
   - **Pedestal stand**

   ![Pedestal stand images]

   **NOTE:** If you have purchased an articulating stand with your computer, it is pre-installed from the factory.

2. Set up the keyboard and mouse.
   - **NOTE:** See the documentation that shipped with the keyboard and mouse.

3. Route the cable through the stand, then connect the power cable.
   - **Pedestal stand**

   ![Pedestal stand images]
4 Press the power button.

5 Finish operating system setup.

**For Ubuntu:**
Follow the on-screen instructions to complete the setup. For more information about configuring the Ubuntu install, see the knowledge base article SLN151664 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.

6 Locate and use Dell apps from the Windows Start menu—Recommended.
Table 1. Locate Dell apps

**Dell Product Registration**
Register your computer with Dell.

**Dell Help & Support**
Access help and support for your computer.

**SupportAssist**
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 [www.dell.com/support](http://www.dell.com/support).

| 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.

**Dell Digital Delivery**
Download software applications, which are purchased but not pre-installed on your computer.

7 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](http://www.dell.com/support).
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.
Views

Front

1. Retractable-camera assembly
   Enables you to video-chat, capture photos, and record videos. This camera assembly can be retracted to protect your privacy.

2. Left speaker
   Provides audio output.

3. Microphones (4)
   Provide digital sound input for audio recording, voice calls, and so on.

4. Right speaker
   Provides audio output.

5. 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.

   **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).
Retractable-camera assembly

1 | Infrared emitter
   Emits infrared light, which enables the infrared camera to sense and track motion.

2 | Infrared camera
   Enhances security when paired with Windows Hello face authentication.

3 | Camera
   Enables you to video chat, capture photos, and record videos.

4 | Infrared emitter
   Emits infrared light, which enables the infrared camera to sense and track motion.

5 | Camera-status light
   Turns on when the camera is in use.

1  2  3  4  5

NOTE: The retractable-camera assembly may vary depending on the configuration ordered.
1 **SD-card slot**
Reads from and writes to the SD card.

2 **USB 3.1 Gen 1 (Type-C) port**
Connect to external storage devices. Provides data transfer speeds up to 5 Gbps.

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

3 **Headset port**
Connect headphones or a headset (headphone and microphone combo).

4 **USB 3.1 Gen 1 port with PowerShare**
Connect peripherals such as external storage devices and printers.
Provides data transfer speeds up to 5 Gbps. PowerShare enables you to charge your USB devices even when your computer is turned off.

   **NOTE:** PowerShare functionality is disabled by default, enable this feature in the BIOS setup program.

   **NOTE:** Certain USB devices may not charge when the computer is turned off or in sleep state. In such cases, turn on the computer to charge the device.
**Right**

1. **Hard-drive activity light**
   
   Turns on when the computer reads from or writes to the hard drive.

**Back**

1. **Back panel**

   Connect USB, audio, video, and other devices.
Back panel

1. **HDMI-in port (for computers shipped with discrete graphics)**
   Connect a gaming console, Blu-ray player, or other HDMI-out enabled devices.

2. **HDMI-out port (for computers shipped with discrete graphics)**
   Connect a TV or another HDMI-in enabled device. Provides video and audio output.

3. **HDMI-out port (for computers shipped with integrated graphics)**
   Connect a TV or another HDMI-in enabled device. Provides video and audio output.

4. **HDMI-in port (for computers shipped with integrated graphics)**
   Connect a gaming console, Blu-ray player, or other HDMI-out enabled devices.

5. **Network port**
   Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or Internet access.

6. **USB 2.0 ports with Power On/Wake-up support (2)**
   Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps. Wake the computer from standby with the keyboard or mouse connected to this port.

7. **USB 3.1 Gen 1 ports (2)**
   Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

8. **Audio-out port**
   Connect audio-output devices such as speakers, amplifiers, and so on.

9. **Power-adapter port**
   Connect a power adapter to provide power to your computer.

Bottom

1. **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.
Display Built-in Self Test button/Input-source selection button

This button has two functions:

- When the computer is on, use this button to select the video input-source. Press the button to switch the display between the internal system display and HDMI input.
- When the computer is off (there is no power; neither is it in sleep state nor hibernate state), use this button to run the built-in self-test for the display. Press and hold down this button, and then press the power button to turn on the computer. The built-in color pattern for the LCD monitor will appear on the screen.

For more information, see the Troubleshooting section in the Service Manual at www.dell.com/support/manuals.

Tilt

Pedestal stand
Articulating stand

Transform

Articulating stand
Accessing the retractable-camera assembly

**NOTE:** Extend the camera while using any camera function so that the camera is not blocked.
Specifications

Computer model
Inspiron 27-7777

System information

Table 2. System information
Processor: 8th Generation Intel Core i3/i5/i7
Chipset: Intel H310

Dimensions and weight

Table 3. Dimensions and weight
Height: 389 mm (15.31 in)
Width: 614 mm (24.17 in)
Depth: 58 mm (2.28 in)

Weight without stand (maximum)
- Touch: 8.28 kg (18.28 lb)
- Non-touch: 8.07 kg (17.79 lb)

Weight without stand (minimum)
- Touch: 8.12 kg (17.90 lb)
- Non-touch: 7.90 kg (17.42 lb)

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

Stand

Table 4. Stand specifications
<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Pedestal</th>
<th>Articulating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>320.10 mm (12.60 in)</td>
<td>330.20 mm (13 in)</td>
</tr>
<tr>
<td>Width</td>
<td>234 mm (9.21 in)</td>
<td>254.30 mm (10.01 in)</td>
</tr>
<tr>
<td>Depth</td>
<td>205.4 mm (8.09 in)</td>
<td>253.85 mm (9.99 in)</td>
</tr>
</tbody>
</table>
Operating system

- Ubuntu
- Windows 10 Home 64-bit
- Windows 10 Professional 64-bit

Memory

Table 5. Memory specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slots</td>
<td>Two SODIMM slots</td>
</tr>
<tr>
<td>Type</td>
<td>DDR4</td>
</tr>
<tr>
<td>Speed</td>
<td>Up to 2666 MHz</td>
</tr>
</tbody>
</table>

Configurations supported:

- Per memory module slot: 4 GB, 8 GB, and 16 GB
- Total memory: 4 GB, 8 GB, 12 GB, 16 GB, 24 GB, and 32 GB

Ports and connectors

Table 6. Ports and connectors specifications

External:

Left

USB

- One USB 3.1 Gen 1 port with PowerShare
- One USB 3.1 Gen 1 (Type-C) port

Audio

- One headset port

Back

Network

- One RJ45 port

USB

- Two USB 2.0 ports with Power on/Wake-up support
- Two USB 3.1 Gen 1 ports

Audio/Video

- One HDMI-in 1.4 port (FHD display)/One HDMI-in 2.0 port (UHD display)
- One HDMI-out 1.4 port (integrated graphics)/One HDMI-out 2.0 port (discrete graphics)
- Audio-out port

Table 7. Ports and connectors specifications

Internal:

M.2 card

- One M.2 slot for solid-state drive
- One M.2 slot for Wireless and Bluetooth combo card
Communications

**Table 8. Communication specifications**

<table>
<thead>
<tr>
<th>Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet</td>
<td>10/100/1000 Mbps Ethernet controller integrated on system board</td>
</tr>
<tr>
<td>Wireless</td>
<td>• Wi-Fi 802.11a/b/g/n/ac</td>
</tr>
<tr>
<td></td>
<td>• Bluetooth 4.2</td>
</tr>
</tbody>
</table>

Wireless

**Table 9. Wireless**

<table>
<thead>
<tr>
<th>Transfer rate</th>
<th>867 Mbps (maximum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency bands</td>
<td>2.4 GHz/5 GHz</td>
</tr>
<tr>
<td>Encryption</td>
<td>• 64-bit/128-bit WEP</td>
</tr>
<tr>
<td></td>
<td>• AES-CCMP</td>
</tr>
<tr>
<td></td>
<td>• TKIP</td>
</tr>
</tbody>
</table>

Audio

**Table 10. Audio specifications**

<table>
<thead>
<tr>
<th>Controller</th>
<th>Realtek ALC3289-CG with Waves MaxxAudio Pro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speakers</td>
<td>Two</td>
</tr>
<tr>
<td>Speaker output</td>
<td>• Average: 5 W</td>
</tr>
<tr>
<td></td>
<td>• Peak: 6 W</td>
</tr>
<tr>
<td>Microphone</td>
<td>Digital-array microphones</td>
</tr>
</tbody>
</table>

Storage

**Table 11. Storage specifications**

<table>
<thead>
<tr>
<th>Type</th>
<th>Interface</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>One 2.5-inch Hard-Disk Drive (HDD)</td>
<td>SATA AHCI, Up to 6 Gbps</td>
<td>Up to 2 TB</td>
</tr>
<tr>
<td>One 2.5-inch Solid-State Hybrid Drive (SSHD)</td>
<td>SATA AHCI, Up to 6 Gbps</td>
<td>Up to 1 TB</td>
</tr>
<tr>
<td>One M.2 2280 Solid-State Drive (SSD)</td>
<td>• SATA AHCI, Up to 6 Gbps</td>
<td>• Up to 512 GB</td>
</tr>
<tr>
<td></td>
<td>• PCIe 3 x4 NVME, Up to 32 Gbps</td>
<td>• Up to 2 TB</td>
</tr>
<tr>
<td>One M.2 2230 Solid-State Drive (SSD)</td>
<td>PCIe 3x2 NVMe, up to 16 Gbps</td>
<td>Up to 512 GB</td>
</tr>
</tbody>
</table>
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:
- 7th Generation or higher Intel Core i3/i5/i7 processor
- Windows 10 64-bit version or higher (Anniversary Update)
- Intel Rapid Storage Technology driver version 15.9 or higher

Table 12. Intel Optane memory

<table>
<thead>
<tr>
<th>Interface</th>
<th>PCIe Gen 3 x2, NVMe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector</td>
<td>M.2</td>
</tr>
<tr>
<td>Configurations supported</td>
<td>16 GB</td>
</tr>
</tbody>
</table>

NOTE: For more information about enabling or disabling the Intel Optane memory, see Enabling Intel Optane memory or Disabling Intel Optane memory.

Media-card reader

Table 13. Media-card reader specifications

<table>
<thead>
<tr>
<th>Type</th>
<th>One 3-in-1 slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cards supported</td>
<td></td>
</tr>
<tr>
<td>- SD card</td>
<td></td>
</tr>
<tr>
<td>- SD High Capacity (SDHC)</td>
<td></td>
</tr>
<tr>
<td>- SD Extended Capacity (SDXC)</td>
<td></td>
</tr>
</tbody>
</table>

Camera

Table 14. Camera specifications

<table>
<thead>
<tr>
<th>Resolution:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera</td>
<td>Still Image: 2 MP</td>
</tr>
<tr>
<td></td>
<td>Video: 1920 x 1080 at 30 FPS</td>
</tr>
<tr>
<td>Infrared camera</td>
<td>Still Image: 0.3 MP</td>
</tr>
<tr>
<td></td>
<td>Video: 640 x 480 at 30 FPS</td>
</tr>
</tbody>
</table>

Diagonal viewing angle:
| Camera                     | 88 degrees |
| Infrared camera            | 82.9 degrees |
**Power adapter**

### Table 15. Power adapter specifications

<table>
<thead>
<tr>
<th></th>
<th>130 W</th>
<th>180 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input current</td>
<td>1.80 A</td>
<td>2.34 A</td>
</tr>
<tr>
<td>(maximum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output current</td>
<td>6.70 A</td>
<td>9.23 A</td>
</tr>
<tr>
<td>(continuous)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input Voltage</td>
<td>100 VAC to 240 VAC</td>
<td>100 VAC to 240 VAC</td>
</tr>
<tr>
<td>Input frequency</td>
<td>50 Hz to 60 Hz</td>
<td>50 Hz to 60 Hz</td>
</tr>
<tr>
<td>Rated output voltage</td>
<td>19.50 VDC</td>
<td>19.50 VDC</td>
</tr>
<tr>
<td>Temperature range:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td>0°C to 40°C (32°F to 104°F)</td>
<td>0°C to 40°C (32°F to 104°F)</td>
</tr>
<tr>
<td>Storage</td>
<td>−40°C to 70°C (−40°F to 158°F)</td>
<td>−40°C to 70°C (−40°F to 158°F)</td>
</tr>
</tbody>
</table>

**Display**

### Table 16. Display specifications

<table>
<thead>
<tr>
<th></th>
<th>27-inch FHD non-touchscreen</th>
<th>27-inch FHD touchscreen</th>
<th>27-inch UHD non-touchscreen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution (maximum)</td>
<td>1920 x 1080</td>
<td>1920 x 1080</td>
<td>3840 x 2160</td>
</tr>
<tr>
<td>Panel technology</td>
<td>IPS</td>
<td>IPS</td>
<td>IPS</td>
</tr>
<tr>
<td>Viewing angle</td>
<td>89/89/89/89 degrees</td>
<td>89/89/89/89 degrees</td>
<td>89/89/89/89 degrees</td>
</tr>
<tr>
<td>Pixel pitch</td>
<td>0.3114</td>
<td>0.3114</td>
<td>0.1554</td>
</tr>
<tr>
<td>Refresh rate</td>
<td>60 Hz</td>
<td>60 Hz</td>
<td>60 Hz</td>
</tr>
<tr>
<td>Controls</td>
<td>Program menus</td>
<td>Program menus</td>
<td>Program menus</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height (excluding bezel)</td>
<td>597.89 mm (23.54 in)</td>
<td>597.89 mm (23.54 in)</td>
<td>596.74 mm (23.49 in)</td>
</tr>
<tr>
<td>Width (excluding bezel)</td>
<td>336.31 mm (13.24 in)</td>
<td>336.31 mm (13.24 in)</td>
<td>335.66 mm (13.21 in)</td>
</tr>
<tr>
<td>Diagonal (excluding bezel)</td>
<td>686.00 mm (27 in)</td>
<td>686.00 mm (27 in)</td>
<td>684.70 mm (27 in)</td>
</tr>
</tbody>
</table>

**Video**

### Table 17. Video specifications

<table>
<thead>
<tr>
<th></th>
<th>Integrated</th>
<th>Discrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controller</td>
<td>Intel UHD Graphics 630</td>
<td>NVIDIA GTX GeForce 1050</td>
</tr>
<tr>
<td>Memory</td>
<td>Shared system memory</td>
<td>4 GB GDDR5</td>
</tr>
</tbody>
</table>
## Computer environment

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

### Table 18. Computer environment

<table>
<thead>
<tr>
<th></th>
<th>Operating</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Temperature range</strong></td>
<td>5°C to 35°C (41°F to 95°F)</td>
<td>–40°C to 65°C (–40°F to 149°F)</td>
</tr>
<tr>
<td><strong>Relative humidity (maximum)</strong></td>
<td>20% to 80% (non-condensing)</td>
<td>5% to 95% (non-condensing)</td>
</tr>
</tbody>
</table>

**NOTE:** Maximum dew point temperature = **26°C**

**NOTE:** Maximum dew point temperature = **33°C**

<table>
<thead>
<tr>
<th></th>
<th>Operating</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vibration (maximum)</strong></td>
<td>0.26 GRMS</td>
<td>1.37 GRMS</td>
</tr>
<tr>
<td><strong>Shock (maximum)</strong></td>
<td>40 G†</td>
<td>105 G‡</td>
</tr>
<tr>
<td><strong>Altitude (maximum)</strong></td>
<td>3048 m (10,000 ft)</td>
<td>10,668 m (35,000 ft)</td>
</tr>
</tbody>
</table>

* 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.

‡ Measured using a 2 ms half-sine pulse when the hard-drive head is in parked position.
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.
Self-help resources

You can get information and help on Dell products and services using these self-help resources:

Table 19. Self-help resources

<table>
<thead>
<tr>
<th>Self-help resources</th>
<th>Resource location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information about Dell products and services</td>
<td><a href="http://www.dell.com">www.dell.com</a></td>
</tr>
<tr>
<td>Dell Help &amp; Support app</td>
<td></td>
</tr>
<tr>
<td>Tips</td>
<td></td>
</tr>
<tr>
<td>Contact Support</td>
<td>In Windows search, type Contact Support, and press Enter.</td>
</tr>
<tr>
<td>Online help for operating system</td>
<td><a href="http://www.dell.com/support/windows">www.dell.com/support/windows</a></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.dell.com/support/linux">www.dell.com/support/linux</a></td>
</tr>
<tr>
<td>Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.</td>
<td><a href="http://www.dell.com/support">www.dell.com/support</a></td>
</tr>
<tr>
<td>Dell knowledge base articles for a variety of computer concerns.</td>
<td></td>
</tr>
</tbody>
</table>

Learn and know the following information about your product:

- Product specifications
- Operating system
- Setting up and using your product
- Data backup
- Troubleshooting and diagnostics
- Factory and system restore
- BIOS information

See Me and My Dell at www.dell.com/support/manuals.

To locate the Me and My Dell relevant to your product, identify your product through one of the following:

- Select Detect Product.
- Locate your product through the drop-down menu under View Products.
- Enter the Service Tag number or Product ID in the search bar.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.

1 | NOTE: Availability varies by country and product, and some services may not be available in your country. 

2 | 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.