




# Alienware Area-51m

## 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.
- 

© 2019 Dell Inc. or its subsidiaries. All rights reserved. Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

2019 - 01

Rev. A01

# Contents

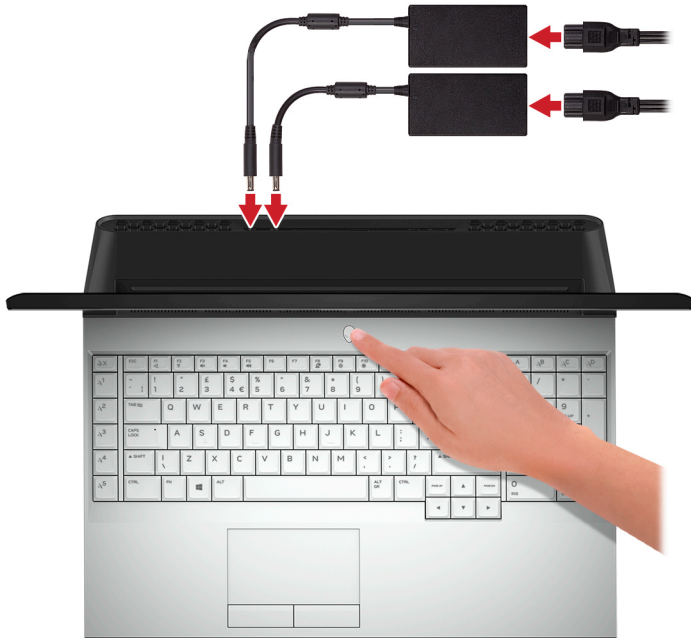
<b>Set up your Alienware Area-51m.....</b>	<b>5</b>
Alienware Graphics Amplifier.....	5
<b>Create a USB recovery drive for Windows.....</b>	<b>6</b>
<b>Views of Alienware Area-51m.....</b>	<b>7</b>
Front.....	7
Right.....	7
Left.....	7
Base.....	8
Display.....	9
Back.....	10
Bottom.....	11
<b>Specifications of Alienware Area-51m.....</b>	<b>12</b>
Dimensions and weight.....	12
Processors.....	12
Chipset.....	12
Operating system.....	13
Memory.....	13
Ports and connectors.....	13
Communications.....	14
Ethernet.....	14
Wireless module.....	14
Audio.....	14
Storage.....	15
Keyboard.....	15
Camera.....	16
Touchpad.....	16
Touchpad gestures.....	16
Power adapter.....	16
Battery.....	17
Display.....	17
Video.....	18
Computer environment.....	18
<b>Keyboard shortcuts.....</b>	<b>20</b>
<b>Alienware Command Center.....</b>	<b>22</b>


<b>Getting help and contacting Alienware.....</b>	<b>23</b>
Self-help resources.....	23
Contacting Alienware.....	23

# Set up your Alienware Area-51m

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

- 1 Connect one or both power adaptors supplied with your computer, then press the power button.



 **NOTE:** Your computer ships with two power adaptors, and it will operate normally with one power adapter connected. For maximum gaming performance, it is recommended to connect two adapters. Only use adapters supplied with your device, or Dell-approved adapters to power your device.

- 2 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](#).

## Alienware Graphics Amplifier

Alienware Graphics Amplifier enables you to connect an external graphics card to your computer.

When using the Virtual Reality (VR) headset, connect the HDMI cable to the graphics card installed on your Alienware Graphics Amplifier. The USB cables from the VR headset can be connected either to your computer or your Alienware Graphics Amplifier.

 **NOTE:** The USB dongle is not required, if you are connecting the USB 3.1 Gen 1 cables on your VR headset to the USB 3.1 Gen 1 Type-A port on your Alienware Graphics Amplifier.

For more information about Alienware Graphics Amplifier, see *Alienware Graphics Amplifier User's Guide* at [www.dell.com/support](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](http://www.dell.com/support/manuals).

# Views of Alienware Area-51m

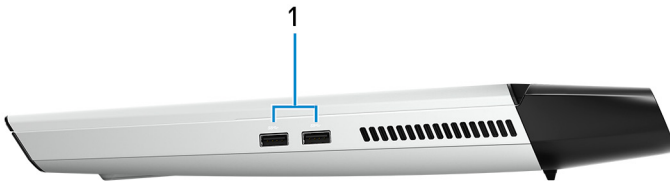
---

## Front



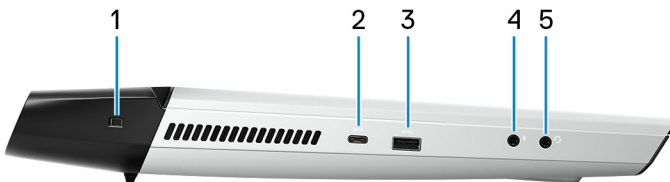
- 1 **Left speaker**  
Provides audio output.
- 2 **Right speaker**  
Provides audio output.


## Right



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

## Left



- 1 **Security-cable slot (wedge-shaped)**  
Connect a security cable to prevent unauthorized movement of your computer.
- 2 **Thunderbolt 3 (USB Type-C) port**  
Supports USB 3.1 Gen 2, DisplayPort 1.2, Thunderbolt 3 and also enables you to connect to an external display using a display adapter.  
Provides data transfer rates up to 10 Gbps for USB 3.1 Gen 2 and up to 40 Gbps for Thunderbolt 3.  
 **NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.**
- 3 **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:** If the charge on your computer's battery is less than 10 percent, you must connect the power adapter to charge your computer, and USB devices connected to the PowerShare port.
- ✎ **NOTE:** If a USB device is connected to the PowerShare port before the computer is turned off or in hibernate state, you must disconnect and connect it again to enable charging.
- ✎ **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.

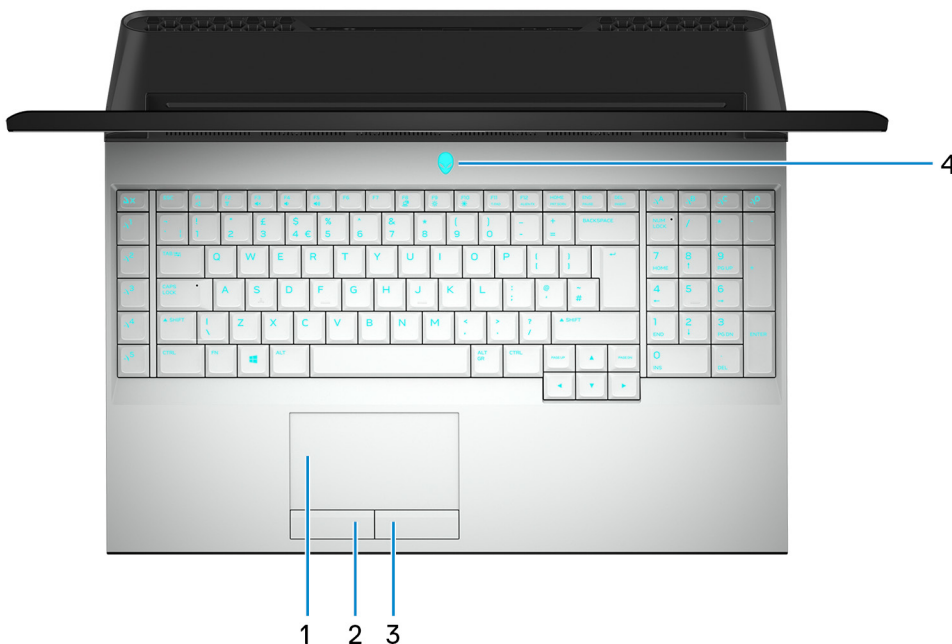
4 **Microphone/headphone port (configurable)**

Connect an external microphone for sound input or headphones for sound output.

5 **Headset port**

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

## Base



1 **Touchpad**

Move your finger on the touchpad to move the mouse pointer. Tap to left-click and two finger tap to right-click.

2 **Left-click button**

Press to left-click.

3 **Right-click button**

Press to right-click.

4 **Power button (Alienhead)**

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.

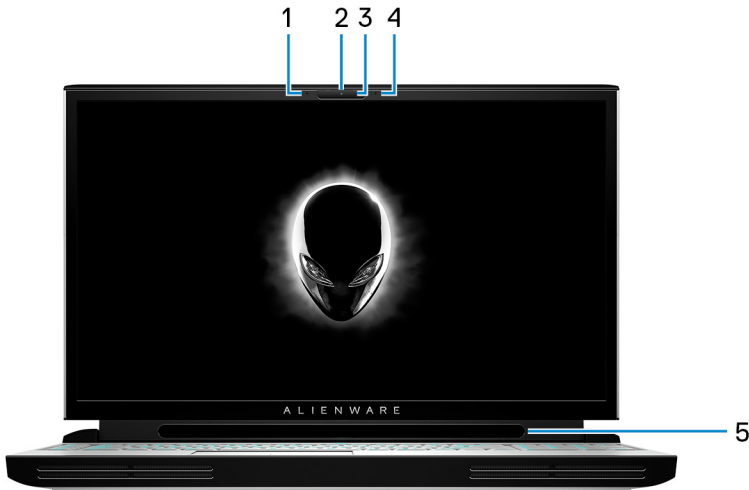
Press and hold for 4 seconds to force shut-down the computer.

- ✎ **NOTE:** You can customize the power-button behavior in Power Options.



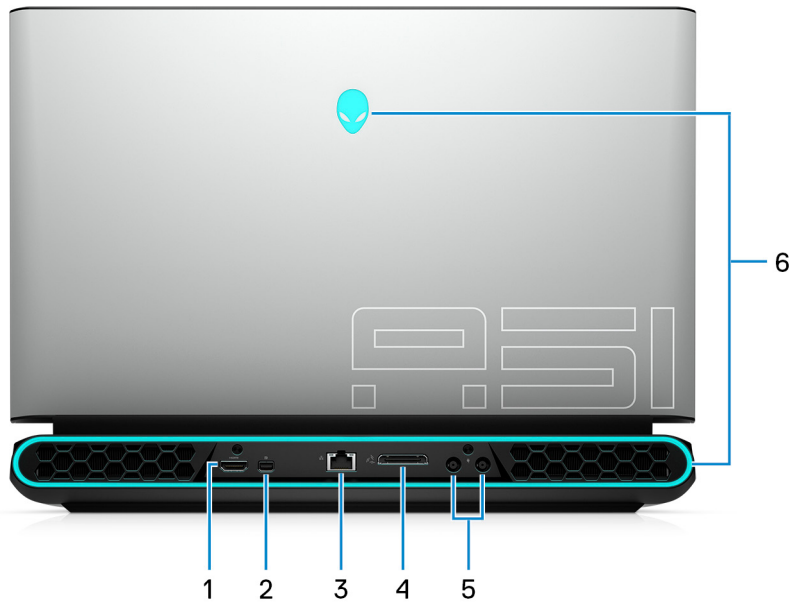
**NOTE:** This computer supports AlienFX, which lets you choose from an array of color and transition effects across multiple zones on the computer, including the keyboard, power button, and touchpad. For more information, see [Alienware Command Center](#).

## Display



- 1 Left microphone**  
Provides digital sound input for audio recording and voice calls.
- 2 Camera**  
Enables you to video chat, capture photos, and record videos.
- 3 Camera-status light**  
Turns on when the camera is in use.
- 4 Right microphone**  
Provides digital sound input for audio recording and voice calls.
- 5 Tobii Eye Tracker**  
Application that enables you to interact with your computer using your eyes.

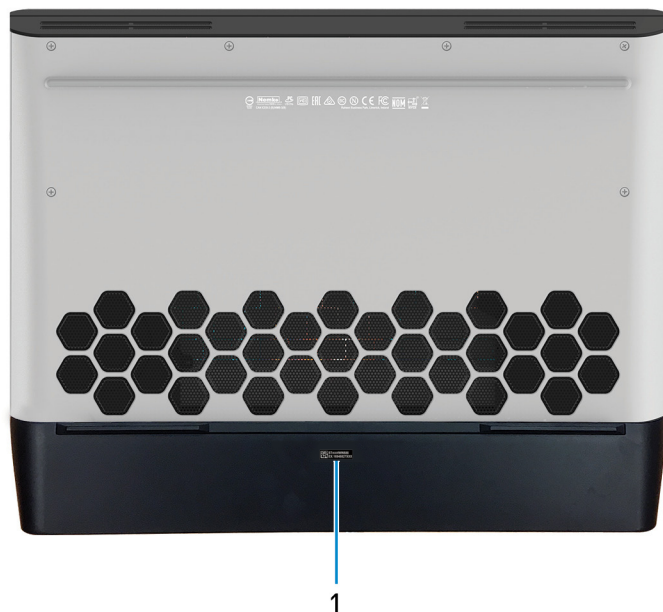
## Back



- 1 **HDMI port**  
Connect to a TV or another HDMI-in enabled device. Provides video and audio output.
- 2 **DisplayPort**  
Connect an external display or a projector.
- 3 **Network port**  
Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or Internet access.
- 4 **External graphics port**  
Connect an Alienware Graphics Amplifier to enhance the graphics performance.
- 5 **Power-adaptor ports (2)**  
Connect a power adapter to provide power to your computer.
- 6 **AlienFX lighting**  
AlienFX lets you choose from an array of color and transition effects across multiple zones on the computer.

 **NOTE: AlienFX is configurable in Alienware Command Center (AWCC). For more information about AWCC, see [Alienware Command Center](#).**

## 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.

# Specifications of Alienware Area-51m

## Dimensions and weight

Table 1. Dimensions and weight

Description	Values
Height:	
Front	27.65 mm (1.09 in.)
Rear	31.2 mm (1.23 in.)
Width	402.6 mm (15.85 in.)
Depth	319.14 mm (12.56 in.)
Weight	3.87 kg (8.54 lbs)



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

## Processors

Table 2. Processors

Description	Values
Processors	<ul style="list-style-type: none"><li>8<sup>th</sup> Generation Intel Core i7</li><li>9<sup>th</sup> Generation Intel Core i7/i9</li></ul>
Wattage	Up to 95 W
Core count	Up to 8
Thread count	Up to 16
Speed	Up to 3.6 GHz Base, 5.0 GHz Boost, 5.20 GHz Overclocked
L2 Cache	Up to 2 MB
L3 Cache	Up to 16 MB
Integrated graphics	Intel UHD Graphics 630

## Chipset

Table 3. Chipset

Description	Values
Chipset	Intel Z390
Processor	<ul style="list-style-type: none"><li>8<sup>th</sup> Generation Intel Core i7</li><li>9<sup>th</sup> Generation Intel Core i7/i9</li></ul>
DRAM bus width	Not supported
Flash EPROM	16 MB
PCIe bus	PCIe Gen3

Description	Values
External bus frequency	100 MHz

## Operating system

- Windows 10 Home (64-bit)
- Windows 10 Professional (64-bit)

## Memory

**Table 4. Memory specifications**

Description	Values
Slots	Four SoDIMM slots
Type	DDR4
Speed	2400 MHz
Maximum memory	64 GB
Minimum memory	8 GB
Memory size per slot	4 GB, 8 GB, and 16 GB
Configurations supported	<ul style="list-style-type: none"> <li>• 8 GB DDR4 at 2400 MHz (1 x 8 GB)</li> <li>• 16 GB DDR4 at 2400 MHz (2 x 8 GB)</li> <li>• 32 GB DDR4 at 2400 MHz (2 x 16 GB)</li> <li>• 64 GB DDR4 at 2400 MHz (4 x 16 GB)</li> </ul>


## Ports and connectors

**Table 5. External ports and connectors**

External:	
Network	One RJ-45 port
USB	<ul style="list-style-type: none"> <li>• One Thunderbolt 3 (USB Type-C) port</li> <li>• One USB 3.1 Gen 1 port with PowerShare</li> <li>• Two USB 3.1 Gen 1 ports</li> </ul>
Audio	<ul style="list-style-type: none"> <li>• One global headset port</li> <li>• One microphone/headphone port (configurable)</li> </ul>
Video	<ul style="list-style-type: none"> <li>• One HDMI 2.0 port</li> <li>• One Mini DisplayPort 1.4</li> <li>• One external graphics port</li> </ul>
Media card reader	Not supported
Docking port	Not supported
Power adapter port	Two power-adapter ports

External:	
Security	Wedge-shaped lock

**Table 6. Internal ports and connectors**

Internal:	
M.2	<ul style="list-style-type: none"> <li>One M.2 slot for WiFi and Bluetooth combo card</li> <li>Two PCIe/SATA M.2 2230/2280 slots for solid-state drive/Intel Optane storage</li> </ul> <p> <b>NOTE:</b> To learn more about the features of different types of M.2 cards, see the knowledge base article <a href="#">SLN301626</a>.</p>

## Communications

### Ethernet

**Table 7. Ethernet specifications**

Description	Values
Model number	Killer E3000 Ethernet controller (integrated on system board)
Transfer rate	2.5 Gbps

### Wireless module

**Table 8. Wireless module specifications**

Description	Values
Model number	Killer 1550
Transfer rate	Up to 1.73 Gbps
Frequency bands supported	Dual band 2.4 GHz/5 GHz
Wireless standards	WiFi 802.11a/b/g/n/ac
Encryption	<ul style="list-style-type: none"> <li>64-bit/128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>
Bluetooth	Bluetooth 5.0

## Audio

**Table 9. Audio specifications**

Description	Values
Controller	Realtek ALC3282-CG
Stereo conversion	Supported
Internal interface	High-definition audio
External interface	One global headset jack supports headset/headphone, one microphone/headphone port (configurable)

Description	Values
Speakers	Four
Internal speaker amplifier	Supported
External volume controls	Media-control shortcut keys
Speaker output:	
Average	8 W
Peak	10 W
Subwoofer output	Not supported
Microphone	Digital array microphones in camera assembly

## Storage


Your computer supports one 7.5 mm or 9.5 mm hard drive and two M.2 2230/2280 solid-state drives/Intel Optane storage.

**Table 10. Storage specifications**

Storage type	Interface type	Capacity
One 7 mm or 9.5 mm hard drive	SATA AHCI 6 Gbps	Up to 1 TB
Two M.2 2230/2280 solid-state drives/Intel Optane storage	<ul style="list-style-type: none"> <li>▪ SATA AHCI 6 Gbps</li> <li>▪ PCIe NVMe up to 32 Gbps</li> </ul>	<ul style="list-style-type: none"> <li>▪ Up to 1 TB (for SSD)</li> <li>▪ Up to 240 GB (for Intel Optane storage)</li> </ul>

## Keyboard

**Table 11. Keyboard specifications**

Description	Values
Type	RGB per Key keyboard
Layout	QWERTY
Number of keys	<ul style="list-style-type: none"> <li>▪ United States and Canada: 103 keys</li> <li>▪ United Kingdom: 104 keys</li> <li>▪ Japan: 107 keys</li> </ul>
Size	X = 19.05 mm key pitch Y = 18.05 mm key pitch
Shortcut keys	<p>Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key.</p> <p> <b>NOTE: You can define the primary behavior of the function keys (F1–F12) by changing Function Key Behavior in BIOS setup program.</b></p> <p><a href="#">Keyboard shortcuts</a></p>

# Camera

**Table 12. Camera specifications**

Description	Values
Number of cameras	One
Type	HD RGB Camera
Location	Front camera
Sensor type	CMOS sensor technology
Resolution:	
Still image	0.92 megapixel (HD)
Video	1280 x 720 (HD) at 30 fps
Diagonal viewing angle	74.9 degrees

# Touchpad

**Table 13. Touchpad specifications**

Description	Values
Resolution:	
Horizontal	1727
Vertical	1092
Dimensions:	
Horizontal	56 mm (2.20 in.)
Vertical	100 mm (3.94 in.)

## Touchpad gestures

For more information about touchpad gestures for Windows 10, see the Microsoft knowledge base article [4027871](https://support.microsoft.com/4027871) at [support.microsoft.com](https://support.microsoft.com).

# Power adapter

**Table 14. Power adapter specifications**


Description	Values
Type	E4 180 W      E4 240 W      E4 330 W
Diameter (connector)	7.4 mm      7.4 mm      7.4 mm
Input voltage	100 VAC-240 VAC      100 VAC-240 VAC      100 VAC-240 VAC
Input frequency	50 Hz-60 Hz      50 Hz-60 Hz      50 Hz-60 Hz
Input current (maximum)	2.34 A      3.50 A      4.40 A
Output current (continuous)	9.23 A      12.31 A      16.92 A
Rated output voltage	19.50 VDC      19.50 VDC      19.50 VDC
Temperature range:	



Description	Values		
Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°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)

## Battery

**Table 15. Battery specifications**

Description	Values
Type	6-cell "smart" lithium-ion (90 WHr)
Voltage	11.40 VDC
Weight (maximum)	0.37 kg (0.82 lb)
Dimensions:	
Height	15.8 mm (0.62 in.)
Width	81.0 mm (3.19 in.)
Depth	222 mm (8.74 in.)
Temperature range:	
Operating	0°C to 35°C (32°F to 95°F)
Storage	-40°C to 65°C (-40°F to 149°F)
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Charging time (approximate)	4 hours (when the computer is off)
	 <b>NOTE: Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information on the Dell Power Manager see, <i>Me and My Dell</i> on <a href="https://www.dell.com/">https://www.dell.com/</a></b>
Life span (approximate)	300 discharge/charge cycles
Coin-cell battery	CR-2032
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.

## Display

**Table 16. Display specifications**

Description	Values	
Type	17-inch Full High Definition (FHD) panel	17-inch Full High Definition (FHD) panel
Panel technology	In-plane switching (IPS)	In-plane switching (IPS)
Luminance (typical)	300 nits	300 nits
Dimensions (Active area):		
Height	214.81 mm (8.46 in.)	214.81 mm (8.46 in.)
Width	381.89 mm (15.04 in.)	381.89 mm (15.04 in.)

Description	Values	
Diagonal	438.16 mm (17.25 in.)	438.16 mm (17.25 in.)
Native resolution	1920 x 1080	1920 x 1080
Megapixels	2.07	2.07
Pixels per inch (PPI)	127	127
Contrast ratio (min)	600:1	600:1
Response time (max)	35 msec rise/fall	19 msec rise/fall
Refresh rate	60 Hz	144 Hz
Horizontal view angle	+/- 85 degrees	+/- 85 degrees
Vertical view angle	+/- 85 degrees	+/- 85 degrees
Pixel pitch	0.1989 mm	0.1989 mm
Power consumption (maximum)	8 W	8.5 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare
Touch options	No	No

## Video

**Table 17. Video specifications**

Discrete graphics			
Controller	External display support	Memory size	Memory Type
Nvidia GeForce RTX 2060	One HDMI port and one Mini DisplayPort	6 GB	GDDR6
Nvidia GeForce RTX 2070	One HDMI port and one Mini DisplayPort	8 GB	GDDR6
Nvidia GeForce RTX 2080	One HDMI port and one Mini DisplayPort	8 GB	GDDR6

**Table 18. Video specifications**

Integrated graphics			
Controller	External display support	Memory size	Processor
Intel UHD Graphics 630	One Thunderbolt (USB Type-C) port	Shared system memory	<ul style="list-style-type: none"> <li>▪ 8<sup>th</sup> Generation Intel Core i7</li> <li>▪ 9<sup>th</sup> Generation Intel Core i7/i9</li> </ul>

## Computer environment

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

**Table 19. Computer environment**

	Operating	Storage
Temperature range	0°C to 40°C (32°F to 104°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)	140 G†	160 G‡
Altitude (maximum)	0 m to 3,048 m (0 ft to 10,000 ft)	0 m to 10,668 m (0 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.

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

# Keyboard shortcuts

 **NOTE:** Keyboard characters may differ depending on the keyboard language configuration. Keys used for shortcuts remain the same across all language configurations.

Table 20. List of keyboard shortcuts



















Keys	Description
	Disconnect Alienware Graphics Amplifier
	Disable/enable wireless
	Mute audio
	Decrease volume
	Increase volume
	Switch to external display
	Decrease brightness
	Increase brightness
	Disable/enable touchpad
	Disable/enable AlienFX

Table 21. List of Macro keys

Keys	Description
	Macro keys  <b>NOTE:</b> You can configure modes and assign multiple tasks for the macro keys on the keyboard.
	
	
	
	
	
	

---

**Keys**

---

**Description**

---



# 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 [SLN309565](#) at [www.dell.com/support](http://www.dell.com/support).

# Getting help and contacting Alienware

## Self-help resources


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

**Table 22. Alienware products and online self-help resources**

Self-help resources	Resource location
Information about Alienware products and services	<a href="http://www.alienware.com">www.alienware.com</a>
My Dell	
Tips	
Contact Support	In Windows search, type <b>Contact Support</b> , and press <b>Enter</b> .
Online help for operating system	<a href="http://www.dell.com/support/windows">www.dell.com/support/windows</a> <a href="http://www.dell.com/support/linux">www.dell.com/support/linux</a>
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on	<a href="http://www.alienware.com/gamingservices">www.alienware.com/gamingservices</a>
VR Support	<a href="http://www.dell.com/VRsupport">www.dell.com/VRsupport</a>
Videos providing step-by-step instructions to service your computer	<a href="http://www.youtube.com/alienwareservices">www.youtube.com/alienwareservices</a>

## Contacting Alienware

To contact Alienware for sales, technical support, or customer service issues, see [www.alienware.com](http://www.alienware.com).

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

 **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.**