ALIENWARE™

Alienware Aurora R11
Setup and Specifications

ALIENWARE™

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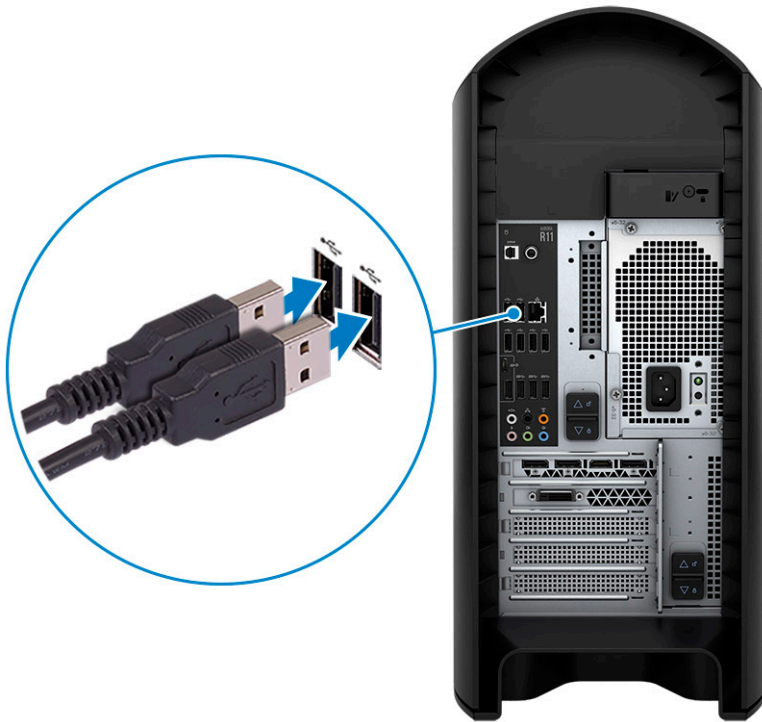
WARNING: A WARNING indicates a potential for property damage, personal injury, or death.
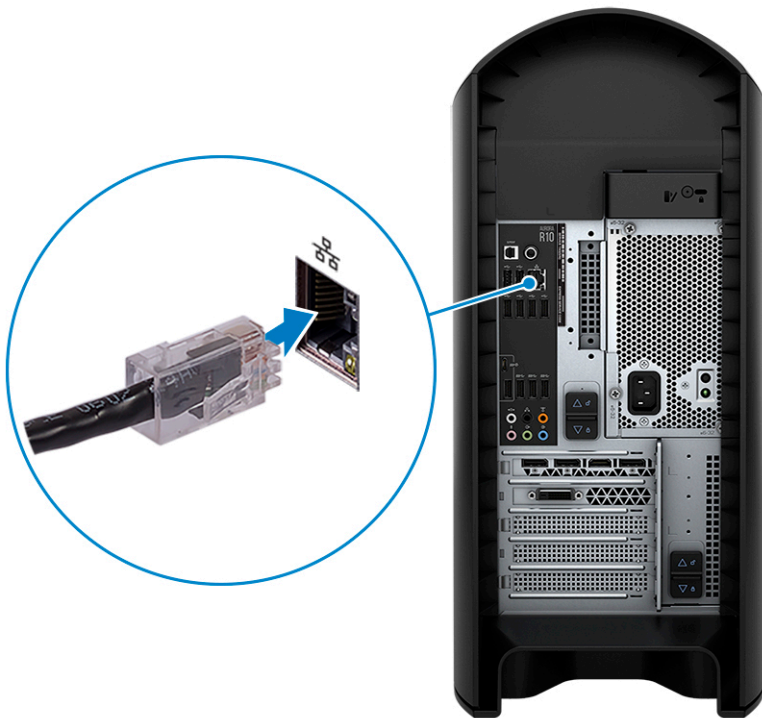
Contents

Set up your computer

1. Connect the keyboard and mouse.

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

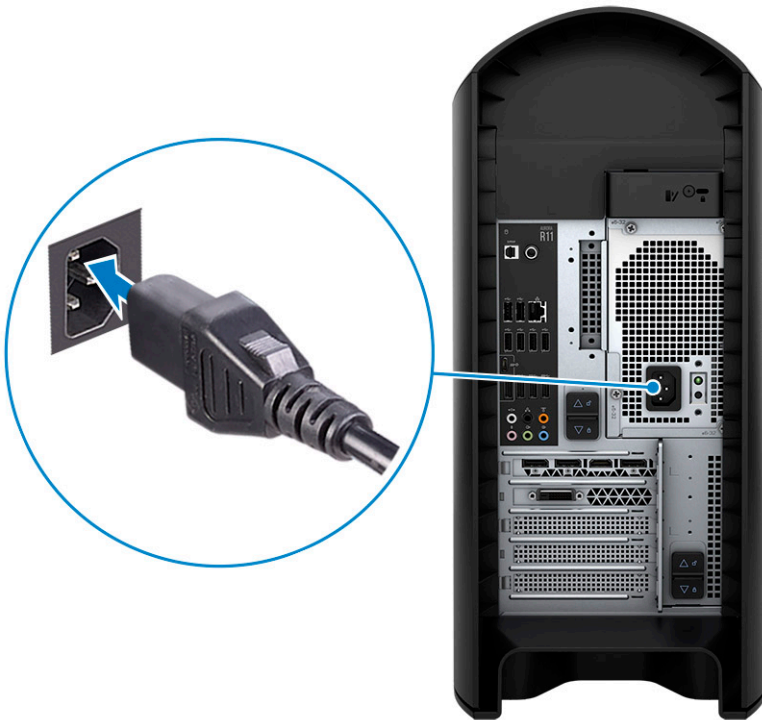

3. Connect the display.

ⓘ **NOTE:** The DisplayPort on the back panel of your computer is covered. Connect the display to the discrete graphics card of your computer.

ⓘ **NOTE:** If you have two graphics cards, the card installed in PCI-Express X16 (graphics slot 1) is the primary graphics card.

4. Connect the power cable.

5. Press the power button.

Views of Alienware Aurora R11

Front
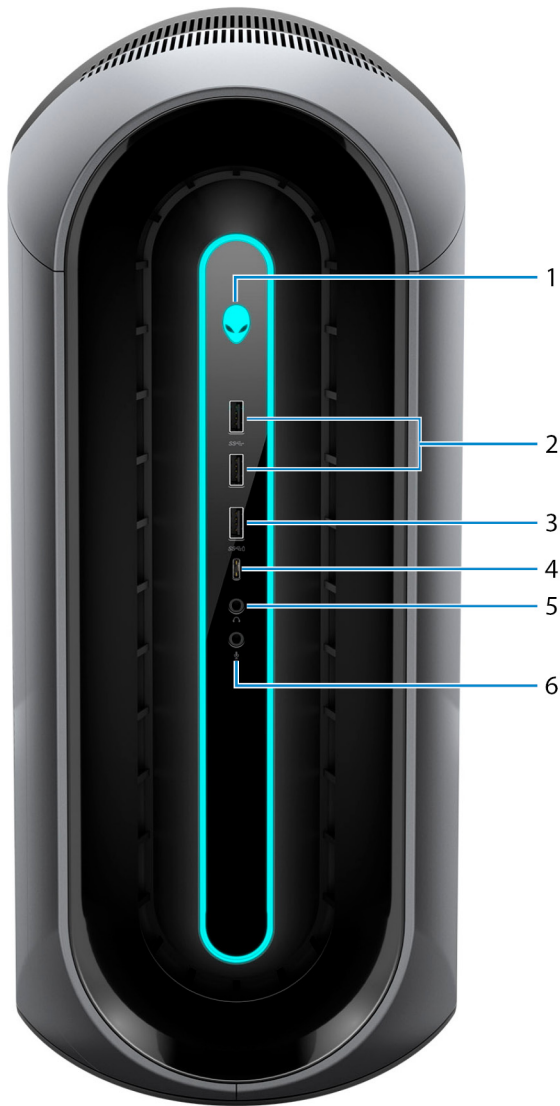
1. **Power button (Alienhead)**

    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.

    (i) **NOTE:** You can customize the power-button behavior in Power Options.

2. **USB 3.2 Gen 1 ports (2)**

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

3. **USB 3.2 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 connected USB devices.

> ⓘ **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. **USB 3.2 Gen 1 Type-C 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 connected USB devices.

   > ⓘ **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.

5. **Headphone port**

   Connect a headphone or speakers.

6. **Microphone port**

   Connect an external microphone to provide sound input.

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 a PCI-Express X16 slot for connecting the graphics card.

(i) **NOTE:** The PCI-Express X16 slot works at X8 lanes only.

(i) **NOTE:** If you have two graphics cards, the card installed in PCI-Express X16 (graphics slot 1) is the primary graphics card.
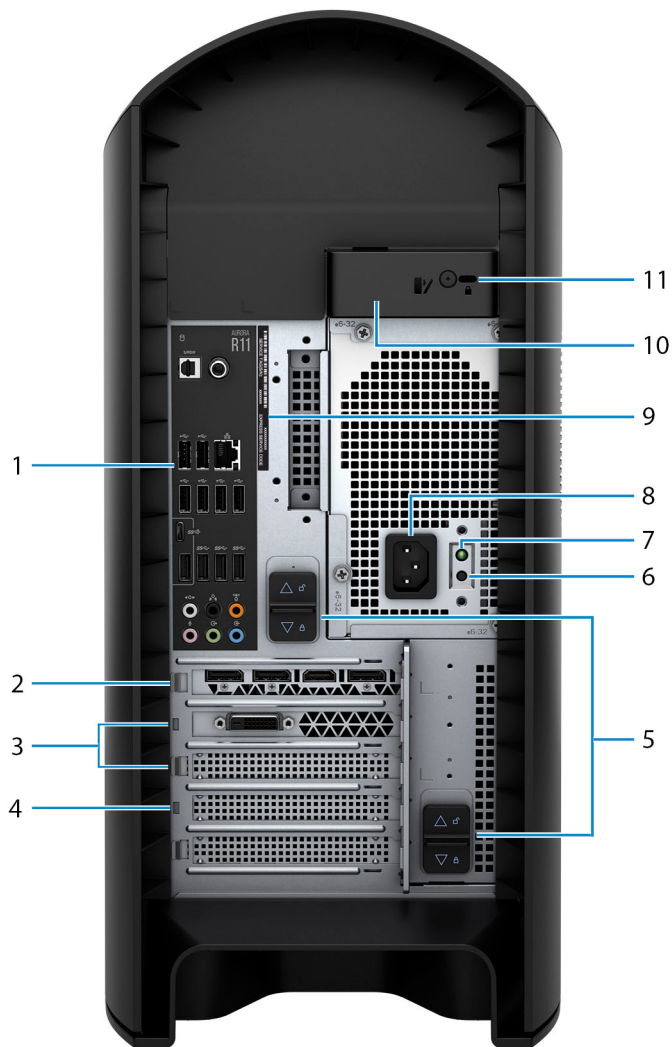
3. **PCI-Express X4 slots (2)**

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

(i) **NOTE:** The PCI-Express X4 slot 3 works at X2 lanes only.

4. **PCI-Express X16 (graphics slot 2)**

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

For optimal graphics performance, use a PCI-Express X16 slot for connecting the graphics card.

(i) **NOTE:** The PCI-Express X16 slot works at X8 lanes only.

5. **Power-supply cage release-latches (2)**

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

6. **Power-supply diagnostics button**

Press to check the power-supply state.

7. **Power-supply diagnostics light**

Indicates the power-supply state.

8. **Power port**

Connect a power cable to provide power to your computer.

9. **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.
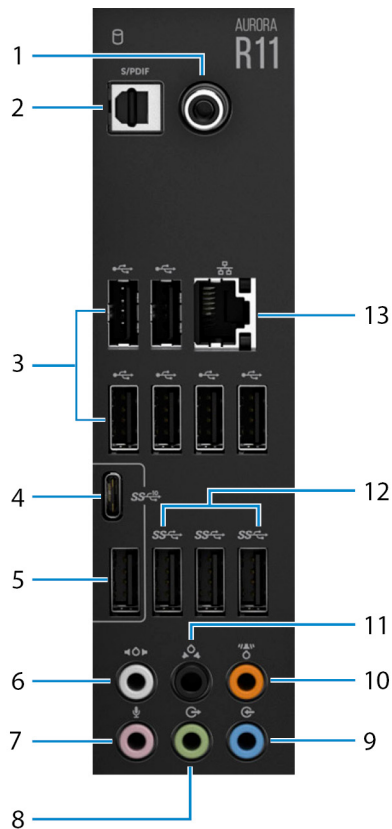
10. **Side panel release latch**

Allows you to remove the side panel from your computer.

11. **Security-cable slot (for Kensington locks)**

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

Back panel

1. **Coaxial S/PDIF port**

   Connect an amplifier, speakers, or a TV for digital audio output through a coaxial cable.

2. **Optical S/PDIF port**

   Connect an amplifier, speakers, or a TV for digital audio output through an optical cable.

3. **USB 2.0 ports (6)**

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

4. **USB 3.2 Gen 2 (Type-C) port**

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

   ⓘ **NOTE:** This port does not support video/audio streaming or power delivery.

5. **USB 3.2 Gen 2 port**

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

6. **Side L/R surround port**

   Connect audio-output devices such as speakers and amplifiers. In a 7.1 speaker channel setup, connect the side-left and side-right speakers.

7. **Microphone port**

   Connect an external microphone to provide sound input.

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

   Connect audio-output devices such as speakers and amplifiers. In a 2.1 speaker channel setup, connect the left and right speakers. In a 5.1 or a 7.1 speaker channel setup, connect the front-left and front-right speakers.

9. **Line-in port**

   Connect recording or playback devices such as a microphone or CD player.

10. **Center/subwoofer LFE surround port**

Connect the center speaker or the subwoofer.

(i) | **NOTE:** For more information about the speaker setup, refer the documentation that shipped with the speakers.

11. **Rear L/R surround port**

Connect audio-output devices such as speakers and amplifiers. In a 5.1 or a 7.1 speaker channel setup, connect the rear-left and rear-right speakers.

12. **USB 3.2 Gen 1 ports (3)**

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

13. **Network port (with lights)**

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.

Specifications of Alienware Aurora R11

Dimensions and weight

The following table lists the height, width, depth, and weight of your Alienware Aurora R11.

Table 1. Dimensions and weight

Description	Values
Height:	
Front height	441.80 mm (17.39 in.)
Rear height	481.60 mm (18.96 in.)
Width	222.80 mm (8.77 in.)
Depth	431.90 mm (17 in.)
Weight (maximum)	17.80 kg (39.24 lb)
	(i) **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.

Processors

The following table lists the details of the processors supported by your Alienware Aurora R11.

Table 2. Processors

Processors	Wattage	Core count	Thread count	Speed	Cache
10th Generation Intel Core i3-10100F	65 W	6	12	3.60 GHz/4.1 GHz	12 MB
10th Generation Intel Core i3-10100	65 W	6	12	3.60 GHz/4.1 GHz	12 MB
10th Generation Intel Core i5-10400	65 W	6	12	2.90 GHz/4 GHz	12 MB
10th Generation Intel Core i5-10400F	65 W	6	12	2.90 GHz/4 GHz	12 MB
10th Generation Intel Core i5-10600K	125 W	6	12	4.10 GHz/4.50 GHz	12 MB
10th Generation Intel Core i5-10600KF	125 W	6	12	4.10 GHz/4.50 GHz	12 MB
10th Generation Intel Core i7-10700	65 W	8	16	2.90 GHz/4.60 GHz	16 MB

Table 2. Processors (continued)

Processors	Wattage	Core count	Thread count	Speed	Cache
10th Generation Intel Core i7-10700K	125 W	8	16	3.80 GHz/4.70 GHz	16 MB
10th Generation Intel Core i7-10700F	65 W	8	16	2.90 GHz/4.60 GHz	16 MB
10th Generation Intel Core i7-10700KF	125 W	8	16	3.80 GHz/4.70 GHz	16 MB
10th Generation Intel Core i9-10900	65 W	10	20	2.80 GHz/4.60 GHz	20 MB
10th Generation Intel Core i9-10900K	125 W	10	20	3.70 GHz/4.90 GHz	20 MB
10th Generation Intel Core i9-10900F	65 W	10	20	2.80 GHz/4.60 GHz	20 MB
10th Generation Intel Core i9-10900KF	125 W	10	20	3.70 GHz/4.90 GHz	20 MB

Chipset

The following table lists the details of the chipset supported by your Alienware Aurora R11.

Table 3. Chipset

Description	Values
Chipset	Intel Z490
Processor	10th Generation Intel Core i5/i7/i9
DRAM bus width	128 bit
Flash EPROM	256 Mb
PCIe bus	PCIe Gen3

Operating system

Your Alienware Aurora R11 supports the following operating systems:

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

Memory

The following table lists the memory specifications of your Alienware Aurora R11.

Table 4. Memory specifications

Description	Values
Memory slots	Four UDIMM
Memory type	DDR4
Memory speed	2666 MHz up to 3200 MHz (XMP memory)
Maximum memory configuration	64 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, and 32 GB
Memory configurations supported	8 GB DDR4 at 2666 MHz 16 GB DDR4 at 2666 MHz 32 GB DDR4 at 2666 MHz 64 GB DDR4 at 2666 MHz 16 GB XMP at 2933 MHz 32 GB XMP at 2933 MHz 64 GB XMP at 2933 MHz 16 GB XMP at 3200 MHz 32 GB XMP at 3200 MHz 64 GB XMP at 3200 MHz

Ports and connectors

The following table lists the external and internal ports available on your Alienware Aurora R11.

Table 5. Ports and connectors

Description	Values
External:	
Network	One RJ-45 port
USB	- Six USB 2.0 ports - Five USB 3.2 Gen 1 ports - One USB 3.2 Gen 1 (Type-C) port with PowerShare - One USB 3.2 Gen 2 port - One USB 3.2 Gen 2 (Type-C) port - One USB 3.2 Gen 1 port with PowerShare
Audio	- One audio output/headphone port (supports 2 channel audio) - One audio input/microphone port - One optical S/PDIF port - One coaxial S/PDIF port - One front L/R surround line-out port - One side L/R surround port - One rear L/R surround port

Table 5. Ports and connectors (continued)

Description	Values
	• One center/subwoofer LFE surround port • One line–in port
Video	Not supported
Media–card reader	Not supported
Power port	110 V/220 V
Security	Kensington lock slot
Internal:	
PCIe expansion card slots	• Two PCIe x16 slots • Two PCIe x4 slots
mSATA	Not supported
SATA	Four
M.2	• One M.2 card slot for WLAN and Bluetooth • One PCIe/SATA M.2 card slot for 2242/2260/2280 solid–state drive ⓘ **NOTE:** To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Alienware Aurora R11.

Table 6. Ethernet specifications

Description	Values
Model number	Killer E3000 Ethernet controller integrated on system board
Transfer rate	10/100/1000/2500 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module specifications of your Alienware Aurora R11.

Table 7. Wireless module specifications

Description	Option one	Option two	Option three
Model number	Qualcomm QCA9377 (DW1810)	Intel AX201	Killer 1650i
Transfer rate	Up to 433 Mbps	Up to 2400 Mbps	Up to 2400 Mbps
Frequency bands supported	Dual band 2.4 GHz/5 GHz	Dual band 2.4 GHz/5 GHz	Dual band 2.4 GHz/5 GHz
Wireless standards	Wi-Fi 5 (WiFi 802.11ac)	Wi-Fi 6 (WiFi 802.11ax)	Wi-Fi 6 (WiFi 802.11ax)

Table 7. Wireless module specifications (continued)

Description	Option one	Option two	Option three
Encryption	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP
Bluetooth	Bluetooth 4.2	Bluetooth 5.0	Bluetooth 5.0

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Alienware Aurora R11.

(i) **NOTE:** Install AMD Vega 20 only into the PCIe slot 1 of your computer. If installed on PCIe slot 4, the power-supply unit cannot be closed.

(i) **NOTE:** If you are using any other graphics card other than AMD Vega 20, it can be installed into the appropriate PCIe slot i.e. X4, X8 or X16 on your computer.

Table 8. Discrete graphics specifications

Controller	Number of cards (maximum)	External display support	Memory size	Memory type
AMD RX 5700 (ECS)	1	Three DisplayPort and one HDMI port	8 GB	GDDR6
AMD RX 5700 XT (ECS)	1	Three DisplayPort and one HDMI port	8 GB	GDDR6
AMD RX 5600	11	Three DisplayPort and one HDMI port	6 GB	GDDR6
AMD Vega 20	1	Three DisplayPort and one HDMI port	16 GB	GDDR6
NVIDIA GeForce GTX 1650	1	One HDMI port and one DVI-D port	4 GB	GDDR5
NVIDIA GeForce GTX 1650 Super	1	One HDMI port and one DVI-D port	6 GB	GDDR5
NVIDIA GeForce GTX 1660	1	One DisplayPort, one HDMI port and one DVI-D port	6 GB	GDDR5
NVIDIA GTX 1660Ti	1	One DVI port, one HDMI port and one DisplayPort	6 GB	GDDR6
NVIDIA RTX 2060	1	One DVI port, one HDMI port and one DisplayPort	6 GB	GDDR6
NVIDIA RTX 2060 Super	1	One DVI port, one HDMI port and one DisplayPort	8 GB	GDDR6
NVIDIA RTX 2070 Super	2	Three DisplayPort and one HDMI port	8 GB	GDDR6
NVIDA RTX 2080 Super	2	Three DisplayPort and one HDMI port	8 GB	GDDR6
NVIDIA RTX 2080Ti	2	Three DisplayPort and one HDMI port	11 GB	GDDR6

Table 8. Discrete graphics specifications (continued)

Controller	Number of cards (maximum)	External display support	Memory size	Memory type
LC NVIDIA RTX 2080 Super	1	Three DisplayPort and one HDMI port	8 GB	GDDR6

Audio

The following table lists the audio specifications of your Alienware Aurora R11.

Table 9. Audio specifications

Description	Values
Audio type	Integrated 7.1 channel audio with S/PDIF port
Audio controller	Realtek ALC3861
Internal audio interface	High-definition audio
External audio interface	7.1 channel output, Microphone-in, stereo headphones, and headset combo connector

Storage

This section lists the storage options on your Alienware Aurora R11.

Your computer supports one of the following configurations:

- One M.2 2242/2260/2280 solid-state drive, one 3.5-inch hard drive, and two 2.5-inch hard drives
- One 3.5-inch hard drive and two 2.5-inch hard drives
  (i) **NOTE:** The primary drive of your computer varies depending on the storage configuration.

Table 10. Storage specifications

Storage type	Interface type	Capacity
Two 2.5-inch hard drives	SATA AHCI 6 Gbps	Up to 2 TB
One 3.5-inch hard drive	SATA AHCI 6 Gbps	Up to 1 TB
One M.2 2230/2280 solid-state drive	- SATA AHCI 6 Gbps - PCIe NVMe up to 32 Gbps	Up to 1 TB

Power ratings

The following table lists the power rating specifications of Alienware Aurora R11.

Table 11. Power ratings

Description	Option one	Option two
Type	550 W	1000 W
Input voltage	90 VAC to 264 VAC	90 VAC to 264 VAC
Input frequency	47 Hz to 63 Hz	47 Hz to 63 Hz

Table 11. Power ratings (continued)

Description		Option one	Option two
Input current (maximum)		8 A	14 A
Output current (continuous)		5.1 V/20 A, 12 VA1/18 A, 12 VA2/18 A, 12 VA1+12 VA2/28 A, 12 VB/16 A, 12 VC1/18 A, 12 VC2/18 A, 12 VC1+12 VC2/20 A, 3.3 V/15 A, 5.1 Vaux/4A	5.1 V/20 A, 12VA/42 A, 12VB/52 A, 12VD/16 A, 3.3 V/20 A, -12 V/0.5 A, 5.1Vaux/4 A
Rated output voltage		5.1 V/12 VA1/12 VA2/ 12 VB/12 VC1/12 VC2/3.3 V/ 5.1 Vaux	5.1 V/12 VA/12VB/12VD/3.3 V/-12 V/5.1 Vaux
Temperature range			
	Operating	5°C to 50°C (41°F to 122°F)	5°C to 50°C (41°F to 122°F)
	Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

Computer environment

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

Table 12. Computer environment

Description	Operating	Storage
Temperature range	10°C to 35°C (50°F to 95°F)	−40°C to 65°C (−40°F to 149°F)
Relative humidity (maximum)	20% to 90% (non-condensing)	5% 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)	−15.2 m to 3,048 m (−50 ft to 10,000 ft)	−15.2 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.

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*.

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 13. Alienware products and online self-help resources

Self-help resources	Resource location
Information about Alienware products and services	www.alienware.com
My Dell	
Tips	
Contact Support	In Windows search, type **Contact Support**, 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 for your Dell Laptop.
VR Support	www.dell.com/VRsupport
Videos providing step-by-step instructions to service your computer	www.youtube.com/alienwareservices

Contacting Alienware

To contact Alienware for sales, technical support, or customer service issues, see www.alienware.com.

(i) **NOTE:** Availability varies by country/region and product, and some services may not be available in your country/region.

(i) **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.