Alienware m17 R5 AMD
Setup and Specifications

ALIENWARE

Notes, cautions, and warnings

(i) **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.**

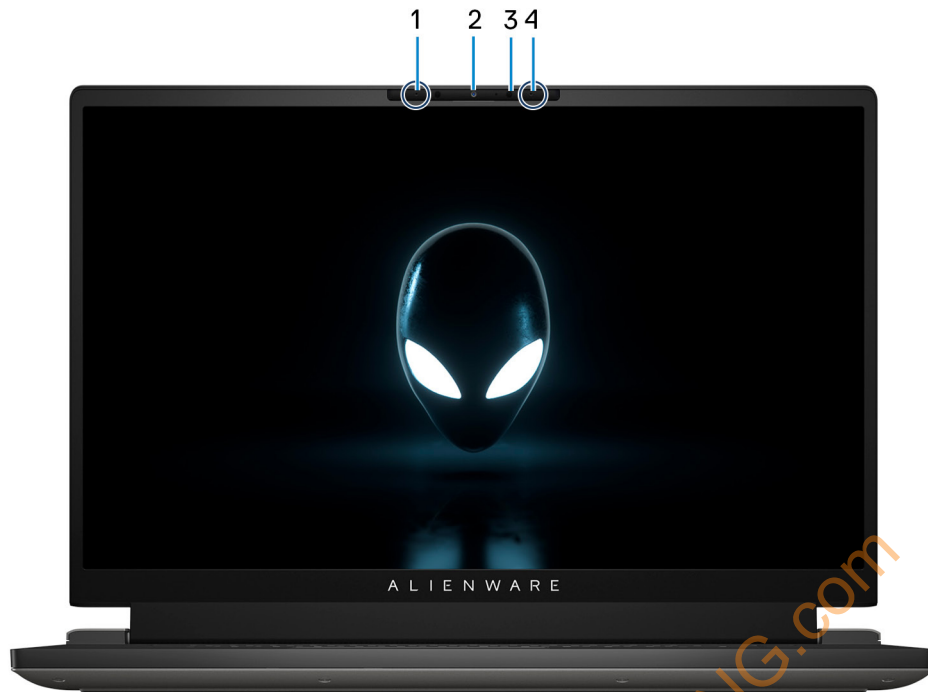# Contents

Set up your Alienware m17 R5 AMD

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

Connect the power adapter and press the power button.

Views of Alienware m17 R5 AMD

Display

1. **Left microphone**

   Provides digital sound input for audio recording and voice calls.

2. **RGB-infrared camera**

   This combined camera supports both infrared Windows Hello facial recognition and standard RGB imaging for photos and videos.

   > (i) **NOTE:** Depending on the display configuration ordered your computer may ship with a HD RGB camera that enables you to video chat, capture photos, and record videos. For this configuration, the infrared emitters will not be featured in the camera module.

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.

Right

1. **USB 3.2 Gen 1 port**

   Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.
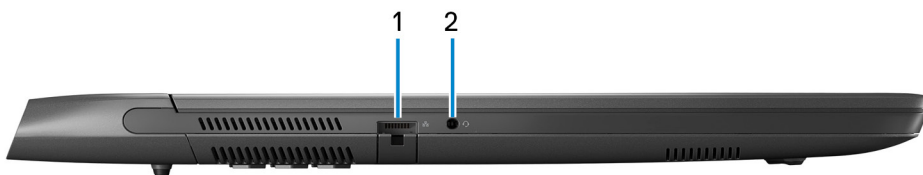
2. **USB 3.2 Gen 1 port with PowerShare**

   Connect devices 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.

   (i) **NOTE:** If your computer is turned off or in hibernate state, you must connect the power adapter to charge your devices using the PowerShare port. You must enable this feature in the BIOS setup program.

   (i) **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.

Left
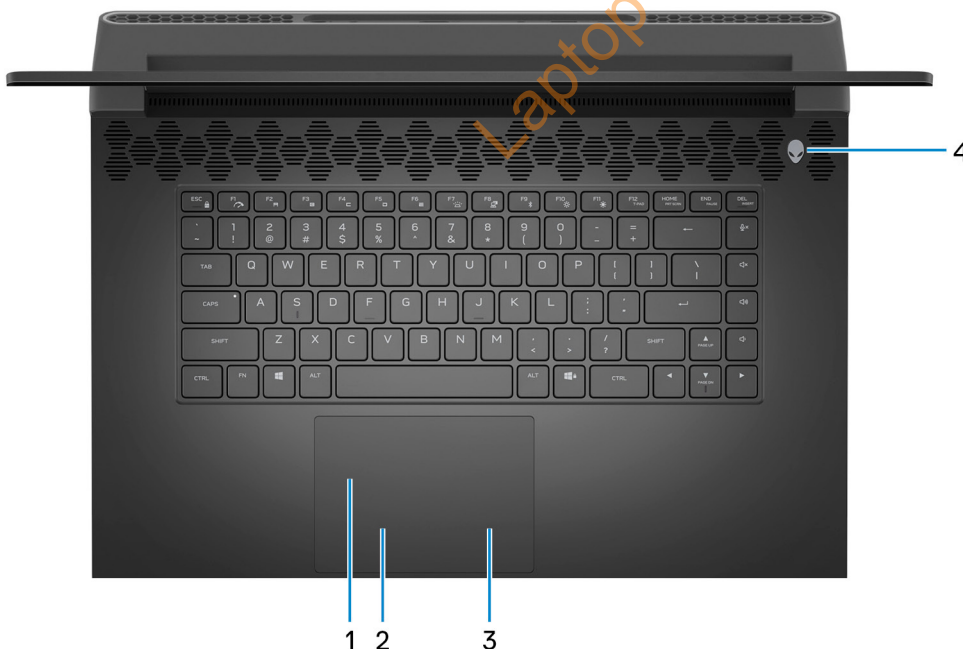

1. **Network port**

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

2. **Universal audio jack**

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

Top

1. **Touchpad**

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

2. **Left-click button**

Press to left-click.

3. Right-click button

Press to right-click.

4. Power button (Alien head)

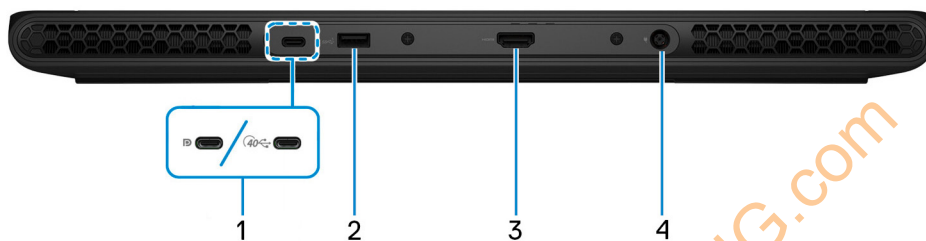Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

Press to put the computer into sleep state if it is turned on.

When the computer is turned on, press and hold the power button for four seconds to force shut-down the computer.

(i) **NOTE:** You can customize power-button behavior in Windows. For more information, see *Me and My Dell* at www.dell.com/support/manuals.

(i) **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 and power button. For more information, see Alienware Command Center.

Back

1. USB 3.2 Gen 2 (Type-C) port with DisplayPort, for computers with a NVIDIA GeForce RTX 3050 Ti graphics card

Connect devices such as external storage devices, printers, and external displays. Provides data transfer rate of up to 10 Gbps.

Supports DisplayPort 1.4 and also enables you to connect an external display using a display adapter.

(i) **NOTE:** A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

USB 4.0 40 Gbps (Type-C) port with DisplayPort, for computers with a NVIDIA GeForce RTX 3060/3070 Ti/3080/3080 Ti and AMD Radeon RX 6700M/RX 6850M XT graphics card

Supports USB4, DisplayPort 2.0, and also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for USB4.

(i) **NOTE:** You can connect a Dell Docking Station to the USB4 ports. For more information, search in the Knowledge Base Resource at www.dell.com/support.

(i) **NOTE:** A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

(i) **NOTE:** USB4 is backward compatible with USB 3.2, USB 2.0.

(i) **NOTE:** USB 4.0 supports two 4K displays or one 8K display.

(i) **NOTE:** When with BIOS version 1.4.3 or newer.

2. USB 3.2 Gen 1 port

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

3. HDMI 2.1 port

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

4. Power-adapter port

Connect a power adapter to provide power to your computer and charge the battery.

Bottom

1. **Left speaker**

   Provides audio output.

2. **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.

3. **Right speaker**

   Provides audio output.

Specifications of Alienware m17 R5 AMD

Dimensions and weight

The following table lists the height, width, depth, and weight of your Alienware m17 R5 AMD.

Table 1. Dimensions and weight

Description	Values
Height:	
Front height	14.62 mm (0.57 in.)
Rear height	22.60 mm (0.89 in.)
Width	397.30 mm (15.64 in.)
Depth	298.71 mm (11.76 in.)
Weight (i) **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.	• 3.43 kg (7.56 lb), maximum weight for computers shipped with a 97 Wh battery • 3.13 kg (6.90 lb), maximum weight for computers shipped with a 64 Wh battery

Processor

The following table lists the details of the processors supported by your Alienware m17 R5 AMD.

Table 2. Processor

Description	Option one	Option two
Processor type	AMD Ryzen 7 6800H	AMD Ryzen 9 6900HX
Processor wattage	45 W	45 W
Processor core count	8	8
Processor thread count	16	16
Processor speed	Up to 4.70 GHz	Up to 4.90 GHz
Processor cache	20 MB	20 MB
Integrated graphics	AMD Radeon Graphics	AMD Radeon Graphics

Chipset

The following table lists the details of the chipset supported by your Alienware m17 R5 AMD.

Table 3. Chipset

Description	Values
Chipset	Integrated in the processor

Table 3. Chipset (continued)

Description	Values
Processor	AMD Ryzen 9/7
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Alienware m17 R5 AMD supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit

Memory

The following table lists the memory specifications of your Alienware m17 R5 AMD.

Table 4. Memory specifications

Description	Values
Memory slots	Two-SODIMM slots
Memory type	DDR5
Memory speed	4800 MHz
Maximum memory configuration	64 GB
Minimum memory configuration	16 GB
Memory size per slot	16 GB, 32 GB, and 64 GB
Memory configurations supported	- For computers shipped with NVIDIA GeForce RTX 3050 Ti graphics card: 16 GB, 2 x 8 GB, DDR5, 4800 MHz, dual channel - For computers shipped with NVIDIA GeForce RTX 3060/ RTX 3070 Ti/ RTX 3080 Ti graphics card: 16 GB, 2 x 8 GB, DDR5, 4800 MHz, dual channel 32 GB, 2 x 16 GB, DDR5, 4800 MHz, dual-channel 64 GB, 2 x 32 GB, DDR5, 4800 MHz, dual-channel - For computers shipped with AMD Radeon RX 6850M XT/RX 6700M graphics card: 16 GB, 2 x 8 GB, DDR5, 4800 MHz, dual channel 32 GB, 2 x 16 GB, DDR5, 4800 MHz, dual-channel 64 GB, 2 x 32 GB, DDR5, 4800 MHz, dual-channel

External ports

The following table lists the external ports of your Alienware m17 R5 AMD.

Table 5. External ports

Description	Values
Network port	One RJ45 port
USB ports	- Two USB 3.2 Gen 1 ports - One USB 3.2 Gen 1 port with PowerShare - One USB 3.2 Gen 2 Type-C port with DisplayPort, for computers with a NVIDIA GeForce RTX 3050 Ti graphics card **or** - One USB 4.0 Type-C port with DisplayPort, for computers with a NVIDIA GeForce RTX 3060/3070 Ti/3080/3080 Ti and AMD Radeon RX 6700M/RX 6850M XT graphics card (i) **NOTE:** When with BIOS version 1.4.3 or newer.
Audio port	One Universal audio jack
Video port	One HDMI 2.1 port
Media-card reader	Not supported
Power-adapter port	One 7.40 mm x 5.10 mm DC-in
Security-cable slot	Not supported

Internal slots

The following table lists the internal slots of your Alienware m17 R5 AMD.

Table 6. Internal slots

Description	Values
M.2	- One M.2 2230 slot for WiFi and Bluetooth combo card - One M.2 2230/2280 slot for solid-state drive, for computers shipped with NVIDIA GeForce RTX 3050 Ti graphics card - Two M.2 2230/2280 slots for solid-state drive, for computers shipped with NVIDIA GeForce RTX 3060/3070 Ti/3080 Ti graphics card and AMD Radeon RX 6700M and RX 6850M XT graphics card (i) **NOTE:** To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at www.dell.com/support.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Alienware m17 R5 AMD.

Table 7. Ethernet specifications

Description	Values
Model number	- RTL8111H for computers shipped with NVIDIA GeForce RTX 3050 Ti graphics card - RTL8125 for computers shipped with NVIDIA GeForce RTX 3060/3070 Ti/3080 Ti, AMD Radeon RX 6700M, and RX 6850M XT graphics card
Transfer rate	- RTL8111H: 10/100/1000 Mbps - RTL8125: 10/100/1000/2500 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules supported on your Alienware m17 R5 AMD.

Table 8. Wireless module specifications

Description	Option one	Option two
Model number	MediaTek MT7921	Qualcomm WCN6856-DBS
Transfer rate	Up to 1200 Mbps	Up to 3571 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz/6 GHz
Wireless standards	- WiFi 802.11a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac) - Wi-Fi 6 (WiFi 802.11ax)	- WiFi 802.11a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac) - Wi-Fi 6 (WiFi 802.11ax) - Wi-Fi 6E (WiFi 802.11ax)
Encryption	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP
Bluetooth	Bluetooth 5.2	Bluetooth 5.3

Audio

The following table lists the audio specifications of your Alienware m17 R5 AMD.

Table 9. Audio specifications

Description	Values
Audio controller	Realtek ALC3254
Stereo conversion	Supported
Internal audio interface	High definition audio interface

Table 9. Audio specifications (continued)

Description	Values
External audio interface	• One Universal audio jack port • One HDMI 2.1 port
Number of speakers	2
Internal–speaker amplifier	Supported
External volume controls	Keyboard shortcut controls
Speaker output:	
	Average speaker output	2 W
	Peak speaker output	2.5 W
Subwoofer output	Not supported
Microphone	Digital-array microphones in camera assembly

Storage

This section lists the storage options on your Alienware m17 R5 AMD.

Your Alienware m17 R5 AMD supports one of the following storage configurations:
- One M.2 2230/2280 slot for solid-state drive, for computers shipped with NVIDIA GeForce RTX 3050 Ti graphics card
- Two M.2 2230/2280 slots for solid-state drives, for computers shipped with NVIDIA GeForce RTX 3060/3070 Ti/3080 Ti graphics card and AMD Radeon RX 6700M and RX 6850M XT graphics card

The primary drive of your Alienware m17 R5 AMD varies with the storage configuration. The primary drive of your computer is the M.2 drive where the operating system is installed.

Table 10. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid–state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	Up to 256 GB
M.2 2280 solid–state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	• Up to 4 TB (primary drive) • Up to 2 TB (secondary drive)

Keyboard

The following table lists the keyboard specifications of your Alienware m17 R5 AMD.

Table 11. Keyboard specifications

Description	Values
Keyboard type	• 1-zone RGB, backlit rubber dome keyboard • RGB per key, backlit rubber dome keyboard • RGB per key, backlit Cherry mechanical keyboard
Keyboard layout	QWERTY
Number of keys	• United States and Canada: 85 keys • United Kingdom: 86 keys

Table 11. Keyboard specifications (continued)

Description	Values
	• Japan: 89 keys
Keyboard size	X=19.05 mm key pitch Y=19.05 mm key pitch
Keyboard shortcuts	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. ⓘ **NOTE:** You can define the primary behavior of the function keys (F1–F12) changing **Function Key Behavior** in BIOS setup program. For more information, see Keyboard shortcuts.

Camera

The following table lists the camera specifications of your Alienware m17 R5 AMD.

Table 12. Camera specifications

Description		Values
Number of cameras		One
Camera type		• One HD RGB camera, for computers with 165 Hz display • One HD RGB-Infrared camera, for computers with 120 Hz or 360 Hz display
Camera location		Front
Camera sensor type		CMOS sensor technology
Camera resolution:		
	Still image	0.92 megapixel
	Video	1280 x 720 (HD) at 30 fps
Infrared camera resolution:		
	Still image	0.23 megapixel
	Video	640 x 360 at 30 fps
Diagonal viewing angle:		
	Camera	74.9 degrees
	Infrared camera	75.8 degrees

Touchpad

The following table lists the touchpad specifications of your Alienware m17 R5 AMD.

Table 13. Touchpad specifications

Description		Values
Touchpad resolution:		>300 DPI
Touchpad dimensions:		
	Horizontal	115 mm (4.52 in.)
	Vertical	80 mm (3.15 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows, see the Microsoft knowledge base article at support.microsoft.com.

Power adapter

The following table lists the power adapter specifications of your Alienware m17 R5 AMD.

Table 14. Power adapter specifications

Description		Option one	Option two	Option three
Type		180 W	240 W	240 W SFF
Connector dimensions:				
	External diameter	7.40 mm	7.40 mm	7.40 mm
	Internal diameter	5.10 mm	5.10 mm	5.10 mm
Power-adapter dimensions:				
	Height	30 mm (1.18 in.)	25.40 mm (1 in.)	23 mm (0.91 in.)
	Width	76.20 mm (3 in.)	100 mm (3.94 in.)	78 mm (3.07 in.)
	Depth	155 mm (6.10 in.)	200 mm (7.87 in.)	152 mm (5.98 in.)
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	3.50 A
Output current (continuous)		9.23 A	12.31 A	12.31 A
Rated output voltage		19.50 VDC	19.50 VDC	19.50 VDC
Temperature range:				
	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)

Table 14. Power adapter specifications (continued)

Description	Option one	Option two	Option three
⚠ **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.**			

Battery

The following table lists the battery specifications of your Alienware m17 R5 AMD.

Table 15. Battery specifications

Description		Option one	Option two
Battery type		4-cell "smart" lithium-ion (64 Wh)	6-cell "smart" lithium-ion (97 Wh)
Battery voltage		15.20 VDC	11.40 VDC
Battery weight (maximum)		0.28 kg (0.62 lb)	0.43 kg (0.95 lb)
Battery dimensions:			
	Height	7.40 mm (0.29 in.)	7.90 mm (0.31 in.)
	Width	226.60 mm (8.92 in.)	336 mm (13.23 in.)
	Depth	81.40 mm (3.20 in.)	81.40 mm (3.20 in.)
Temperature range:			
	Operating	0°C to 50°C (32°F to 122°F)	0°C to 50°C (32°F to 122°F)
	Storage	-20°C to 60°C (-4°F to 140°F)	-20°C to 60°C (-4°F to 140°F)
Battery operating time		Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Battery charging time (approximate) ⓘ **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, *Me and My Dell* on www.dell.com.		• Standard charging: 3 hours, when computer is turned off • ExpressCharge: 2 hours, when computer is turned off • ExpressChargeBoost: 20 minutes, from 0% up to 35% when computer is turned off	• Standard charging: 3 hours, when computer is turned off • ExpressCharge: 2 hours, when computer is turned off • ExpressChargeBoost: 20 minutes, from 0% up to 35% when computer is turned off
Coin-cell battery		Not supported	Not supported
⚠ **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.**			

Display

The following table lists the display specifications of your Alienware m17 R5 AMD.

Table 16. Display specifications

Description		Option one	Option two	Option three	Option four
Display type		17.3-inch, Full High Definition (FHD)	17.3-inch, Full High Definition (FHD)	17.3-inch, Full High Definition (FHD)	17.3-inch, Ultra High Definition (UHD)
Display-panel technology		Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)
Display-panel dimensions (active area):					
	Height	214.81 mm (8.46 in.)	214.81 mm (8.46 in.)	214.81 mm (8.46 in.)	214.81 mm (8.46 in.)
	Width	381.89 mm (15.03 in.)	381.89 mm (15.03 in.)	381.89 mm (15.03 in.)	381.89 mm (15.03 in.)
	Diagonal	438.16 mm (17.25 in.)	438.16 mm (17.25 in.)	438.16 mm (17.25 in.)	438.16 mm (17.25 in.)
Display-panel native resolution		1920 x 1080	1920 x 1080	1920 x 1080	3840 x 2160
Luminance (typical)		300 nits	300 nits	300 nits	500 nits
Megapixels		2.07	2.07	2.07	8.29
Color gamut		sRGB 100% (typical)	sRGB 100% (typical)	sRGB 100% (typical)	DCI-P3 99% (typical)
Pixels Per Inch (PPI)		127	127	127	255
Contrast ratio (typical)		800:1	1000:1	1000:1	1200:1
Response time (typical)		- With Overdrive: 3 ms - Without Overdrive: 7 ms	- With Overdrive: 1 ms - Without Overdrive: 3 ms	- With Overdrive: 3 ms - Without Overdrive: 7 ms	- With Overdrive: 3 ms - Without Overdrive: 7 ms
Refresh rate		165 Hz	360 Hz	480 Hz	120 Hz
Horizontal view angle (typical)		+/- 85 degrees	+/- 85 degrees	+/- 85 degrees	+/- 85 degrees
Vertical view angle (typical)		+/- 85 degrees	+/- 85 degrees	+/- 85 degrees	+/- 85 degrees
Pixel pitch		0.20 mm	0.20 mm	0.20 mm	0.10 mm
Power consumption (maximum)		8.40 W	7.20 W	7.50 W	10.30 W
Anti-glare vs glossy finish		Anti-glare	Anti-glare	Anti-glare	Anti-glare
Touch options		Not supported	Not supported	Not supported	Not supported
Adaptive sync support		G-SYNC, FreeSync, Advanced Optimus	G-SYNC, FreeSync, Advanced Optimus	G-SYNC, FreeSync, Advanced Optimus	FreeSync

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Alienware m17 R5 AMD.

Table 17. GPU—Integrated

Controller	Memory size	Processor
AMD Radeon Graphics	Shared system memory	AMD Ryzen 7/AMD Ryzen 9

GPU—Discrete

The following table lists the specifications of the discrete graphics processing unit (GPU) supported by your Alienware m17 R5 AMD.

Table 18. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce RTX 3050 Ti	4 GB	GDDR6
NVIDIA GeForce RTX 3060	6 GB	GDDR6
NVIDIA GeForce RTX 3070 Ti	8 GB	GDDR6
NVIDIA GeForce RTX 3080 Ti	16 GB	GDDR6
AMD Radeon RX 6850M XT	12 GB	GDDR6
AMD Radeon RX 6700M	10 GB	GDDR6

Operating and storage environment

This table lists the operating and storage specifications of your Alienware m17 R5 AMD.

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

Table 19. Computer environment

Description	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	1.15 GRMS
Shock (maximum)	140 G†	160 G†
Altitude range	-15.2 m to 3048 m (-49.87 ft to 10000 ft)	-15.2 m to 10668 m (-49.87 ft to 35000 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.