

Specifications of Alienware m15 Ryzen Edition R5

Dimensions and weight

The following table lists the height, width, depth, and weight of your Alienware m15 Ryzen Edition R5.

Table 1. Dimensions and weight

Description	Values
Height:	
Front height	12.90 mm (0.51 in.)
Rear height	19.20 mm (0.76 in.)
Width	356.20 mm (14.02 in.)
Depth	272.50 mm (10.73 in.)
Weight ⓘ NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	2.69 kg (5.93 lbs) ⓘ NOTE: This is the maximum weight of the device.

Processor

The following table lists the details of the processors supported by your Alienware m15 Ryzen Edition R5.

Table 2. Processor

Description	Option one	Option two
Processor type	AMD Ryzen 7 5800H	AMD Ryzen 9 5900HX
Processor wattage	45 W	45 W
Processor core count	8	8
Processor thread count	16	16
Processor speed	Up to 4.40 GHz	Up to 4.60 GHz
Processor cache	16 MB	16 MB
Integrated graphics	AMD Radeon Graphics	AMD Radeon Graphics

Chipset

The following table lists the details of the chipset supported by your Alienware m15 Ryzen Edition R5.

Table 3. Chipset

Description	Values
Chipset	Integrated in the processor

Table 3. Chipset (continued)

Description	Values
Processor	AMD Ryzen 7 5800H/AMD Ryzen 9 5900HX
DRAM bus width	128-bit
Flash EPROM	16 MB
PCIe bus	Up to Gen3

Operating system

Your Alienware m15 Ryzen Edition R5 supports the following operating systems:

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

Memory

The following table lists the memory specifications of your Alienware m15 Ryzen Edition R5.

Table 4. Memory specifications

Description	Values
Memory slots	Two SoDIMM slots
Memory type	DDR4
Memory speed	3200 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	8 GB
Memory size per slot	4 GB, 8 GB, and 16 GB
Memory configurations supported	<ul style="list-style-type: none">• 8 GB, 1 x 8 GB, DDR4, 3200 MHz• 8 GB, 2 x 4 GB, DDR4, 3200 MHz, dual-channel• 16 GB, 2 x 8 GB, DDR4, 3200 MHz, dual-channel• 32 GB, 2 x 16 GB, DDR4, 3200 MHz, dual-channel

External ports

The following table lists the external ports of your Alienware m15 Ryzen Edition R5.

Table 5. External ports

Description	Values
Network port	One RJ-45
USB ports	<ul style="list-style-type: none">• 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

Table 5. External ports (continued)

Description	Values
	NOTE: You can connect a Dell Docking Station to this port. For more information, see the knowledge base article SLN286158 at www.dell.com/support .
Audio port	One headset (headphone and microphone combo) port
Video port	One HDMI 2.1 port
Media-card reader	Not supported
Power-adaptor port	7.4 mm barrel
Security-cable slot	Not supported

Internal slots

The following table lists the internal slots of your Alienware m15 Ryzen Edition R5.

Table 6. Internal slots

Description	Values
M.2	<ul style="list-style-type: none">Two M.2 2230/2280 slots for solid-state drives NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article 000144170 at www.dell.com/support .

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Alienware m15 Ryzen Edition R5.

Table 7. Ethernet specifications

Description	Values
Model number	Ethernet controller integrated to the system board
Transfer rate	10/100/1000/2500 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your Alienware m15 Ryzen Edition R5.

Table 8. Wireless module specifications

Description	Values
Model number	Killer 1650x
Transfer rate	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz

Table 8. Wireless module specifications (continued)

Description	Values
Wireless standards	<ul style="list-style-type: none">• WiFi 802.11a/b/g• Wi-Fi 4 (WiFi 802.11n)• Wi-Fi 5 (WiFi 802.11ac)• Wi-Fi 6 (WiFi 802.11ax)
Encryption	<ul style="list-style-type: none">• 64-bit/128-bit WEP• AES-CCMP• TKIP
Bluetooth	Bluetooth 5.0

Audio

The following table lists the audio specifications of your Alienware m15 Ryzen Edition R5.

Table 9. Audio specifications

Description		Values
Audio controller		Realtek ALC3254 with A-Volute Nahimic audio processing software – Integrated in Alienware Sound Center (AWSC)
Stereo conversion		Supported
Internal audio interface		High-definition audio interface
External audio interface		One headset (headphone and microphone combo) port
Number of speakers		Two
Internal-speaker amplifier		Supported
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W per channel
	Peak speaker output	2.5 W per channel
Subwoofer output		Not supported
Microphone		Dual-array microphone

Storage

This section lists the storage options on your Alienware m15 Ryzen Edition R5.

Your Alienware m15 Ryzen Edition R5 supports one of the following storage configurations:

- One M.2 solid-state drive
- Two M.2 solid-state drives

The primary drive of your Alienware m15 Ryzen Edition R5 varies with the storage configuration. For computers:

- with a M.2 drive, the M.2 drive is the primary drive
- with two M.2 drives, one of the M.2 drives is the primary drive

Table 10. Storage specifications

Storage type	Interface type	Capacity
One M.2 2230 solid-state drive	PCIe Gen3 x4 NVMe, up to 32 Gbps	Up to 512 GB
One M.2 2280 solid-state drive	PCIe Gen4 x4 NVMe, up to 32 Gbps NOTE: The performance of the PCIe NVMe Gen4 x4 will be limited to PCIe Gen3 x4 bandwidth on the system.	Up to 2 TB

Keyboard

The following table lists the keyboard specifications of your Alienware m15 Ryzen Edition R5.

Table 11. Keyboard specifications

Description	Values
Keyboard type	<ul style="list-style-type: none">4-zone RGB backlit rubber dome keyboardRGB per key backlit Cherry mechanical keyboard
Keyboard layout	QWERTY
Number of keys	<ul style="list-style-type: none">United States and Canada: 85 keysUnited Kingdom: 86 keysJapan: 89 keys
Keyboard size	X=19.05 mm key pitch Y=19.05 mm key pitch
Keyboard shortcuts	<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>NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.</p> <p>For more information, see keyboard shortcuts. Keyboard shortcuts</p>

Camera

The following table lists the camera specifications of your Alienware m15 Ryzen Edition R5.

Table 12. Camera specifications

Description	Values
Number of cameras	One
Camera type	<ul style="list-style-type: none">HD RGB cameraRGB-IR camera (optional)
Camera location	Front

Table 12. Camera specifications (continued)

Description		Values
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 (HD) 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 m15 Ryzen Edition R5.

Table 13. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1217
	Vertical	168
Touchpad dimensions:		
	Horizontal	105 mm (4.13 in.)
	Vertical	60 mm (2.36 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows 10, see the Microsoft knowledge base article 4027871 at support.microsoft.com .


Power adapter

The following table lists the power adapter specifications of your Alienware m15 Ryzen Edition R5.

Table 14. Power adapter specifications

Description		Option one	Option two
Type		180 W	240 W
Connector dimensions:			
	External diameter	7.40 mm	7.40 mm

Table 14. Power adapter specifications (continued)

Description		Option one	Option two
	Internal diameter	5.10 mm	5.10 mm
Input voltage		100 VAC–240 VAC	100 VAC–240 VAC
Input frequency		50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)		2.34 A	3.50 A
Output current (continuous)		9.23 A	12.31 A
Rated output voltage		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)
	Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
 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 m15 Ryzen Edition R5.

Table 15. Battery specifications


Description		Option one	Option two
Battery type		3-cell, 56 Wh "smart" lithium-ion	6-cell, 86 Wh "smart" lithium-ion
Battery voltage		13.20 VDC	13.35 VDC
Battery weight (maximum)		0.26 kg (0.57 lb)	0.34 kg (0.75 lb)
Battery dimensions:			
	Height	77.70 mm (3.06 in.)	77.70 mm (3.06 in.)
	Width	295.20 mm (11.62 in.)	295.20 mm (11.62 in.)
	Depth	7.56 mm (0.30 in.)	7.56 mm (0.30 in.)
Temperature range:			
	Operating	0°C to 70°C (32°F to 158°F)	0°C to 70°C (32°F to 158°F)
	Storage	-25°C to 65°C (-4°F to 149°F)	-25°C to 65°C (-4°F to 149°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		3 hours (when the computer is off)	3 hours (when the computer is off)

Table 15. Battery specifications (continued)

Description	Option one	Option two
application. For more information on the Dell Power Manager see, <i>Me and My Dell</i> on www.dell.com .		
Coin-cell battery	Not supported	Not supported
<p>⚠ 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.</p> <p>ⓘ NOTE: Dell recommends that you charge the battery regularly for optimal power consumption. If your battery charge is completely depleted, connect the power adapter, turn on your computer, and then restart your computer to reduce the power consumption.</p>		

Display

The following table lists the display specifications of your Alienware m15 Ryzen Edition R5.

Table 16. Display specifications

Description	Option one	Option two	Option three
Display type	Full High Definition	Full High Definition	Quad High Definition
Display-panel technology	Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)
Display-panel dimensions (active area):			
Height	193.59 mm (7.62 in.)	193.59 mm (7.62 in.)	193.62 mm (7.62 in.)
Width	344.16 mm (13.55 in.)	344.16 mm (13.55 in.)	344.22 mm (13.55 in.)
Diagonal	394.87 mm (15.55 in.)	394.87 mm (15.55 in.)	394.94 mm (15.55 in.)
Display-panel native resolution	1920 x 1080	1920 x 1080	2560 x 1440
Luminance (typical)	300 nits	300 nits	400 nits
Megapixels	2.07	2.07	3.69
Color gamut	100% sRGB	100% sRGB	DCI-P3 99%
Pixels Per Inch (PPI)	141	141	188
Contrast ratio (typ)	1000:1	1000:1	1000:1
Response time (max)	9 ms	5 ms	9 ms
Refresh rate	165 Hz	360 Hz	240 Hz
Horizontal view angle	+/- 85 degrees	+/- 85 degrees	+/- 85 degrees
Vertical view angle	+/- 85 degrees	+/- 85 degrees	+/- 85 degrees
Pixel pitch	0.18 mm	0.18 mm	0.18 mm
Power consumption (maximum)	6 W	8 W	10 W

Table 16. Display specifications (continued)

Description	Option one	Option two	Option three
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare
Touch options	No	No	No

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Alienware m15 Ryzen Edition R5.

Table 17. GPU—Integrated

Controller	Memory size	Processor
AMD Radeon Graphics	Shared system memory	AMD Ryzen 7 5800H/AMD Ryzen 9 5900HX

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Alienware m15 Ryzen Edition R5.

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	8 GB	GDDR6

Operating and storage environment

This table lists the operating and storage specifications of your Alienware m15 Ryzen Edition R5.

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)	50% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	140 G†	160 G†
Altitude range	0 m to 3048 m (0 ft to 10000 ft)	0 m to 10668 m (0 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.