


Specifications of Alienware x15 R1

Dimensions and weight

The following table lists the height, width, depth, and weight of your Alienware x15 R1.

Table 1. Dimensions and weight

Description		Values
Height:		
	Front height	12.50 mm (0.50 in.)
	Rear height	<ul style="list-style-type: none">15.90 mm (0.62 in.) - For computers with 240 Hz QHD or 360 Hz FHD displays16.30 mm (0.64 in.) - For computers with 165 Hz FHD displays
Width		359.70 mm (14.16 in.)
Depth		277.25 mm (10.91 in.)
Weight		2.36 kg (5.20 lb) - maximum
 NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.		

Processor

The following table lists the details of the processors supported by your Alienware x15 R1.

Table 2. Processor

Description	Option one	Option two
Processor type	11 th Generation Intel Core i7-11800H	11 th Generation Intel Core i9-11900H
Processor wattage	45 W	45 W
Processor core count	8	8
Processor thread count	16	16
Processor speed	Up to 4.6 GHz	Up to 4.9 GHz
Processor cache	24 MB	24 MB
Integrated graphics	Intel UHD Graphics	Intel UHD Graphics

Chipset

The following table lists the details of the chipset supported by your Alienware x15 R1.

Table 3. Chipset

Description	Values
Chipset	HM570
Processor	11th Generation Intel Core i7/i9
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Alienware x15 R1 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 x15 R1.

Table 4. Memory specifications

Description	Values
Memory slots	Onboard memory
Memory type	DDR4
Memory speed	3200 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	16 GB
Memory configurations supported	<ul style="list-style-type: none">• 16 GB, 2 x 8 GB, DDR4, 3200 MHz, dual-channel, integrated• 32 GB, 2 x 16 GB, DDR4, 3200 MHz, dual-channel, integrated

External ports

The following table lists the external ports of your Alienware x15 R1.

Table 5. External ports

Description	Values
Network port	Not supported


Table 5. External ports (continued)

Description	Values
USB ports	<ul style="list-style-type: none">• One USB 3.2 Gen 1 port with PowerShare• One USB Type-C 3.2 Gen 2 port with Power Delivery and DisplayPort• One Thunderbolt 4 port with Power Delivery and DisplayPort
Audio port	One headset (headphone and microphone combo) port
Video port	One HDMI 2.1 port
Media-card reader	One microSD-card slot
Power-adaptor 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 x15 R1.

Table 6. Internal slots

Description	Values
M.2	Two M.2 2230/2280 slots for solid-state drive  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 .

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your Alienware x15 R1.

Table 7. Wireless module specifications

Description	Values
Model number	Killer 1675x
Transfer rate	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz
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 5.2

Audio

The following table lists the audio specifications of your Alienware x15 R1.

Table 8. Audio specifications

Description		Values
Audio controller		Realtek ALC3281
Stereo conversion		Supported
Internal audio interface		High definition audio interface
External audio interface		Universal audio jack
Number of speakers		2
Internal-speaker amplifier		Not 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 x15 R1.

Your Alienware x15 R1 supports one of the following storage configurations:

- One M.2 2230/2280 solid-state drive
- Two M.2 2230/2280 solid-state drive

The primary drive of your Alienware x15 R1 varies with the storage configuration. The primary drive of your computer is the drive where your operating system is installed.

Table 9. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid-state drive	PCIe Gen3 x4 NVMe, up to 32 Gbps	Up to 256 GB
M.2 2280 solid-state drive	PCIe Gen3 x4 NVMe, up to 32 Gbps	Up to 1 TB
M.2 2280 solid-state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	Up to 2 TB

Media-card reader

The following table lists the media cards supported by your Alienware x15 R1.

Table 10. Media-card reader specifications

Description	Values
Media-card type	One microSD-card slot
Media-cards supported	<ul style="list-style-type: none">• Micro Secure Digital (microSD)• Micro Secure Digital High Capacity (microSDHC)• Micro Secure Digital Extended Capacity (microSDXC)
i NOTE: The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.	

Keyboard

The following table lists the keyboard specifications of your Alienware x15 R1.

Table 11. Keyboard specifications

Description	Values
Keyboard type	RGB per-key backlit keyboard
Keyboard layout	QWERTY
Number of keys	<ul style="list-style-type: none">• United States and Canada: 85 keys• United Kingdom: 86 keys• Japan: 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>i 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.</p>

Camera

The following table lists the camera specifications of your Alienware x15 R1.

Table 12. Camera specifications

Description	Values
Number of cameras	One
Camera type	HD RGB IR camera

Table 12. Camera specifications (continued)

Description		Values
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	75.80 degrees
	Infrared camera	75.80 degrees

Touchpad

The following table lists the touchpad specifications of your Alienware x15 R1.

Table 13. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1217
	Vertical	681
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 x15 R1.

Table 14. Power adapter specifications

Description	Values
Type	240 W
Connector dimensions:	

Table 14. Power adapter specifications (continued)

Description		Values
	External diameter	7.40 mm (0.30 in.)
	Internal diameter	5.10 mm (0.20 in.)
Input voltage		100 VAC–240 VAC
Input frequency		50 Hz–60 Hz
Input current (maximum)		3.50 A
Output current (continuous)		12.31 A
Rated output voltage		19.50 VDC
Temperature range:		
	Operating	0°C to 40°C (32°F to 104°F)
	Storage	-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 x15 R1.

Table 15. Battery specifications


Description		Values
Battery type		6-cell "smart" lithium ion (87 Wh)
Battery voltage		11.40 VDC
Battery weight (maximum)		0.33 kg (0.73 lb)
Battery dimensions:		
	Height	6.35 mm (0.25 in.)
	Width	309.80 mm (12.20 in.)
	Depth	82 mm (3.23 in.)
Temperature range:		
	Operating	0°C to 50°C (32°F to 122°F)
	Storage	-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.
Battery charging time (approximate)  NOTE: Control the charging time, duration, start and end time, and so on using the Dell Power Manager		From 0% up to 35% in as little as 20 minutes (ExpressCharge Boost) 2hr (Express charge), 3hr (Standard charge) hours (when the computer is off)

Table 15. Battery specifications (continued)

Description	Values
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
⚠ 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.	
⚠ CAUTION: 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.	

Display

The following table lists the display specifications of your Alienware x15 R1.

Table 16. Display specifications

Description	Option one	Option two	Option three
Display type	Full High Definition (FHD)	Full High Definition (FHD)	Quad High Definition (QHD)
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.)	344.21 mm (13.55 in.)
Diagonal	394.87 mm (15.55 in.)	394.87 mm (15.55 in.)	394.93 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	sRGB 100%	sRGB 100%	DCI P3 99%
Pixels Per Inch (PPI)	141.00	141.00	188.30
Contrast ratio (typ)	1000:1	1000:1	1000:1
Response time (max)	19 ms	10 ms	19 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	0.13 mm
Power consumption (maximum)	6.00 W	7.60 W	8.55 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
Adaptive sync support	None	G-SYNC, Advanced Optimus	G-SYNC, Advanced Optimus

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Alienware x15 R1.

Table 17. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics	Shared system memory	11th Generation Intel Core i7/i9

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Alienware x15 R1.

Table 18. GPU—Discrete


Controller	Memory size	Memory type
NVIDIA GeForce RTX 3060	6 GB	GDDR6
NVIDIA GeForce RTX 3070	8 GB	GDDR6
NVIDIA GeForce RTX 3080	8 GB	GDDR6

Operating and storage environment

This table lists the operating and storage specifications of your Alienware x15 R1.

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

Table 19. Computer environment

Description	Operating	Storage
Temperature range	0°C to 35°C (32°F to 95°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 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.

† Measured using a 2 ms half-sine pulse when the hard drive is in use.