

Specifications of Alienware x17 R1

Dimensions and weight

The following table lists the height, width, depth, and weight of your Alienware x17 R1.

Table 1. Dimensions and weight

Description	Values
Height (maximum)	<ul style="list-style-type: none">20.90 mm (0.82 in.) for computers shipped with 360 Hz displays21.41 mm (0.84 in.) for computers shipped with 120 Hz and 165 Hz displays
Width	399.23 mm (15.72 in.)
Depth	299.49 mm (11.79 in.)
Weight (maximum)	3.20 kg (7.05 lb) <div><div></div><div>NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.</div></div>

Processor

The following table lists the details of the processors supported by your Alienware x17 R1.

Table 2. Processor

Description	Option one	Option two
Processor type	11 th h Generation Intel Core i7-11800H	11 th Generation Intel Core i9-11980HK
Processor wattage	45 W	65 W
Processor core count	8	8
Processor thread count	16	16
Processor speed	Up to 4.6 GHz	Up to 5 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 x17 R1.

Table 3. Chipset

Description	Values
Chipset	HM570

Table 3. Chipset (continued)

Description	Values
Processor	11 th Generation Intel Core i7/i9K
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Alienware x17 R1 supports the following operating systems:

- Windows 10 Pro, 64-bit
- Windows 10 Home, 64-bit

Memory

The following table lists the memory specifications of your Alienware x17 R1.

Table 4. Memory specifications

Description	Values
Memory slots	Two SO-DIMM slots
Memory type	DDR4
Memory speed	<ul style="list-style-type: none">• 3200 MHz• 3466 MHz, XMP
Maximum memory configuration	64 GB
Minimum memory configuration	16 GB
Memory size per slot	8 GB, 16 GB, 32 GB
Memory configurations supported	<ul style="list-style-type: none">• 16 GB, 2 x 8 GB, 3200 MHz, dual-channel DDR4• 32 GB, 2 x 16 GB, 3200 MHz, dual-channel DDR4• 32 GB, 2 x 16 GB, 3466 MHz, dual-channel DDR4, XMP• 64 GB, 2 x 32 GB, 3466 MHz, dual-channel DDR4, XMP

External ports

The following table lists the external ports of your Alienware x17 R1.

Table 5. External ports

Description	Values
Network port	One RJ-45 port
USB ports	<ul style="list-style-type: none">• Two USB 3.2 Gen 1 ports with PowerShare

Table 5. External ports (continued)

Description	Values
	<ul style="list-style-type: none">One USB 3.2 Gen 2 (Type-C) port with DisplayPort and Power DeliveryOne Thunderbolt 4 port with Power Delivery
Audio port	One universal audio jack
Video port	<ul style="list-style-type: none">One HDMI 2.1 portOne Mini DisplayPort 1.4One Thunderbolt 4 port with Power Delivery <p>① NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect to a DisplayPort device.</p>
Media-card reader	One microSD-card slot
Power-adaptor port	One 7.4 mm x 5.1 mm DC-in
Security-cable slot	None

Internal slots

The following table lists the internal slots of your Alienware x17 R1.

Table 6. Internal slots

Description	Values
M.2	Two M.2 2230/2280 slots for solid-state drives <p>① 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.</p>

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Alienware x17 R1.

Table 7. Ethernet specifications

Description	Values
Model number	Killer E3100G PCI-e Gigabit ethernet controller
Transfer rate	10/100/1000/2500 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your Alienware x17 R1.

Table 8. Wireless module specifications

Description	Values
Model number	Intel Killer 1675w

Table 8. Wireless module specifications (continued)

Description	Values
Transfer rate	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz/6 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 x17 R1.

Table 9. Audio specifications

Description		Values
Audio controller		Realtek ALC3281
Stereo conversion		Not supported
Internal audio interface		High definition audio interface
External audio interface		One universal audio jack
Number of speakers		<ul style="list-style-type: none">• Two tweeter speakers• Two woofer speakers
Internal-speaker amplifier		<ul style="list-style-type: none">• Realtek ALC 3281 built-in amplifier for tweeter speakers• Realtek ALC1309 built-in amplifier for woofer speakers
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 x17 R1.

Your Alienware x17 R1 supports:

- One M.2 2230/2280 solid-state drive on M.2 card slot one

- One M.2 2230/2280 solid-state drive on M.2 card slot two

The primary drive of your Alienware x17 R1 varies with the storage configuration. The primary drive of your computer is the drive where your operating system is installed.

Table 10. 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 x17 R1.

Table 11. 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 (mSD) • Micro Secure Digital High Capacity (mSDHC) • Micro Secure Digital Extended Capacity (mSDXC)
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 x17 R1.

Table 12. Keyboard specifications

Description	Values
Keyboard type	<ul style="list-style-type: none"> • RGB per-key backlit keyboard • RGB per key backlit Mechanical 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	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.

Table 12. Keyboard specifications (continued)

Description	Values
	<p data-bbox="780 224 1479 246">  NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program. </p> <p data-bbox="780 248 1479 255">For more information, see Keyboard shortcuts.</p>

Camera

The following table lists the camera specifications of your Alienware x17 R1.

Table 13. Camera specifications

Description		Values
Number of cameras		One
Camera type		One HD RGB-Infrared camera
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	75.8 degrees
	Infrared camera	75.8 degrees

Touchpad

The following table lists the touchpad specifications of your Alienware x17 R1.

Table 14. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1229
	Vertical	929
Touchpad dimensions:		
	Horizontal	105 mm (4.13 in.)


Table 14. Touchpad specifications (continued)

Description		Values
	Vertical	80 mm (3.15 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 x17 R1.

Table 15. Power adapter specifications

Description		Option one	Option two
Type		240 W AC adapter	330 W AC adapter
Connector dimensions:			
	External diameter	7.40 mm	7.40 mm
	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)		3.50 A	4.40 A
Output current (continuous)		12.31 A	16.92 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 x17 R1.

Table 16. 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:		

Table 16. Battery specifications (continued)

Description		Values
	Height	309.80 mm (12.20 in.)
	Width	82 mm (3.23 in.)
	Depth	6.35 mm (0.25 in.)
Temperature range:		
	Operating	0°C to 60°C (32°F to 140°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) i 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 www.dell.com .		3 hours (when the computer is off)
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 x17 R1.

Table 17. Display specifications

Description		Option one	Option two	Option three
Display type		Ultra High Definition (UHD)	Full High Definition (FHD)	Full High Definition (FHD)
Display-panel technology		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.)
	Width	381.89 mm (15.04 in.)	381.89 mm (15.04 in.)	381.89 mm (15.04 in.)
	Diagonal	438.16 mm (17.25 in.)	438.16 mm (17.25 in.)	438.16 mm (17.25 in.)
Display-panel native resolution		3840 x 2160	1920 x 1080	1920 x 1080
Luminance (typical)		500 nits	300 nits	300 nits
Megapixels		8.29	2.07	2.07
Color gamut		100% Adobe RGB	100% sRGB	100% sRGB

Table 17. Display specifications (continued)

Description	Option one	Option two	Option three
Pixels Per Inch (PPI)	255	127	127
Contrast ratio (typ)	1200:1	1000:1	800:1
Response time (max)	4 ms	1 ms	3 ms
Refresh rate	120 Hz	165 Hz	360 Hz
Horizontal view angle	85 +/- degrees	85 +/- degrees	85 +/- degrees
Vertical view angle	85 +/- degrees	85 +/- degrees	85 +/- degrees
Pixel pitch	0.10 mm	0.20 mm	0.20 mm
Power consumption (maximum)	12.20 W	7.20 W	8.40 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare
Touch options	No	No	No
Adaptive sync support	None	None	G-SYNC, Advanced Optimus

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Alienware x17 R1.

Table 18. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics	Shared system memory	11 th Generation Intel Core i7/i9k

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Alienware x17 R1.

Table 19. 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	16 GB	GDDR6

Operating and storage environment

This table lists the operating and storage specifications of your Alienware x17 R1.

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

Table 20. 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)	110 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 when the hard drive is in use.

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