

Specifications of Alienware Area-51m R2

Dimensions and weight

The following table lists the height, width, depth, and weight of your Alienware Area-51m R2.

Table 1. Dimensions and weight

Description	Values
Height:	
Front height	27.65 mm (1.09 in.)
Peak height	44 mm (1.73 in.)
Rear height	31.80 mm (1.25 in.)
Width	402.60 mm (15.85 in.)
Depth	319.14 mm (12.56 in.)
Weight (maximum)	<ul style="list-style-type: none">4.10 kg (9.04 lb): Computers shipped with NVIDIA GeForce GTX 1660 Ti4.70 kg (10.36 lb): Computers shipped with other graphics cards <p>NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.</p>

Processor

The following table lists the details of the processors supported by your Alienware Area-51m R2.

Table 2. Processor

Description	Option one	Option two	Option three	Option four
Processor type	10 th Generation Intel Core i7-10700	10 th Generation Intel Core i7-10700k	10 th Generation Intel Core i9-10900	10 th Generation Intel Core i9-10900k
Processor wattage	65 W	125 W	65 W	125 W
Processor core count	8	8	10	10
Processor thread count	16	16	20	20
Processor speed	Up to 4.80 GHz	Up to 5.10 GHz	Up to 5.10 GHz	Up to 5.20 GHz
Processor cache	16 MB	16 MB	20 MB	20 MB
Integrated graphics	Intel UHD Graphics 630	Intel UHD Graphics 630	Intel UHD Graphics 630	Intel UHD Graphics 630

Chipset

The following table lists the details of the chipset supported by your Alienware Area-51m R2.

Table 3. Chipset

Description	Values
Chipset	Z490

Table 3. Chipset(continued)

Description	Values
Processor	10 th Generation Intel Core i7/i7k/i9/i9k
DRAM bus width	128-bit
Flash EPROM	24 MB
PCIe bus	Up to Gen3

Operating system

Your Alienware Area-51m R2 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 Area-51m R2.

Table 4. Memory specifications

Description	Values
Memory slots	Two SoDIMM slots
Memory type	DDR4
Memory speed	2933 MHz
Maximum memory configuration	64 GB
Minimum memory configuration	8 GB
Memory size per slot	4 GB, 8 GB, 16 GB, 32 GB
Memory configurations supported	<ul style="list-style-type: none"> • 8 GB, 2 x 4 GB, DDR4, 2933 MHz, dual-channel • 16 GB, 2 x 8 GB, DDR4, 2933 MHz, dual-channel • 32 GB, 2 x 16 GB, DDR4, 2933 MHz, dual-channel • 64 GB, 2 x 32 GB, DDR4, 2933 MHz, dual-channel • 16 GB, 2 x 8 GB, DDR4, 3200 MHz, dual-channel, Intel XMP • 32 GB, 2 x 16 GB, DDR4, 3200 MHz, dual-channel, Intel XMP <p>(i) NOTE: Only Dell supplied XMP memory modules are supported on this computer. Third-party XMP memory modules are not supported.</p>

External ports

The following table lists the external ports of your Alienware Area-51m R2.

Table 5. External ports

Description	Values
Network port	One RJ45 port

Table 5. External ports(continued)

Description	Values
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 Thunderbolt 3 port
Audio port	<ul style="list-style-type: none"> One global headset port One microphone/headphone retaskable port
Video port	<ul style="list-style-type: none"> One HDMI 2.0 port One mini DisplayPort 1.4 One external graphics port
Media-card reader	One SD-card slot
Docking port	Not supported
Power-adaptor port	Two 7.4 mm power-adaptor ports
Security	One noble lock slot

Internal slots

The following table lists the internal slots of your Alienware Area-51m R2.

Table 6. Internal slots

Description	Values
M.2	<ul style="list-style-type: none"> One M.2 2230 slot for WiFi and Bluetooth combo card Two M.2 2230/2280 slots for solid-state drive Two optional M.2 2280 slots on Sled board <p>NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626 at www.dell.com/support.</p>

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Alienware Area-51m R2.

Table 7. Ethernet specifications

Description	Values
Model number	Killer E3000 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 Area-51m R2.

Table 8. Wireless module specifications

Description	Values
Model number	Killer AX1650i
Transfer rate	Up to 2212 Mbps

Table 8. Wireless module specifications(continued)

Description	Values
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 5.1

Audio

The following table lists the audio specifications of your Alienware Area-51m R2.

Table 9. Audio specifications

Description	Values	
Audio controller	Realtek ALC3282-CG	
Stereo conversion	Supported	
Internal audio interface	High-definition audio interface	
External audio interface	<ul style="list-style-type: none"> ▪ One global headset jack supports headset/headphone ▪ One headphone retasking jack supports headphone/line-out/line-in/microphone 	
Number of speakers	Four	
Internal-speaker amplifier	Supported	
External volume controls	Media-control shortcut keys	
Speaker output:		
	Average speaker output	4 W
	Peak speaker output	6 W
Subwoofer output	Not supported	
Microphone	Digital array microphones in camera assembly	

Storage

This section lists the storage options on your Alienware Area-51m R2.

Your Alienware Area-51m R2 supports one of the following storage configurations:

- One M.2 solid-state drive
- Two M.2 solid-state drives
- One 2.5-inch hard drive and one M.2 solid-state drive
- Three M.2 solid-state drives
- One 2.5-inch hard drive and two M.2 solid-state drives

- Four M.2 solid-state drives

The M.2 drive is the primary drive of your Alienware Area-51m R2.

Table 10. Storage specifications

Storage type	Interface type	Capacity
2.5-inch hard drive	SATA AHCI, up to 6 Gbps	Up to 1 TB
M.2 2230 solid-state drive	PCIe NVMe Gen3 x4, up to 32 Gbps	Up to 256 GB
M.2 2280 solid-state drive	PCIe NVMe Gen3 x4, up to 32 Gbps	Up to 2 TB

Media-card reader

The following table lists the media cards supported by your Alienware Area-51m R2.

Table 11. Media-card reader specifications

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

Keyboard

The following table lists the keyboard specifications of your Alienware Area-51m R2.

Table 12. Keyboard specifications

Description	Values
Keyboard type	<ul style="list-style-type: none"> • RGB per key backlit keyboard (Rubber dome) • RGB per key backlit keyboard (Cherry Mechanical Switch)
Keyboard layout	QWERTY
Number of keys	<ul style="list-style-type: none"> • United States and Canada: 103 keys • United Kingdom: 104 keys • Japan: 107 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.</p>

Camera

The following table lists the camera specifications of your Alienware Area-51m R2.

Table 13. Camera specifications

Description		Values
Number of cameras		One
Camera type		RGB HD camera
Camera location		Front camera
Camera sensor type		CMOS sensor technology
Camera resolution:		
	Still image	0.92 megapixels
	Video	1280 x 720 (HD) at 30 fps
Diagonal viewing angle:		74.9 degrees

Touchpad

The following table lists the touchpad specifications of your Alienware Area-51m R2.

Table 14. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1727
	Vertical	1092
Touchpad dimensions:		
	Horizontal	56 mm (2.20 in.)
	Vertical	100 mm (3.94 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 Area-51m R2.

Table 15. Power adapter specifications

Description	Option one	Option two	Option three
Type	180 W	240 W	330 W
Connector dimensions:			
External diameter	7.40 mm	7.40 mm	7.40 mm
Internal diameter	5.10 mm	5.10 mm	5.10 mm

Table 15. Power adapter specifications(continued)

Description	Option one	Option two	Option three
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	5 A	4.40 A
Output current (continuous)	9.23 A	12.31 A	16.92 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)

Battery

The following table lists the battery specifications of your Alienware Area-51m R2.

Table 16. Battery specifications

Description	Values
Battery type	6-cell "smart" lithium-ion (90 WHr)
Battery voltage	11.40 VDC
Battery weight (maximum)	0.37 kg (0.82 lb)
Battery dimensions:	
Height	15.80 mm (0.62 in.)
Width	222 mm (8.74 in.)
Depth	81 mm (3.19 in.)
Temperature range:	
Operating	0°C to 45°C (32°F to 113°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)	4 hours (when the computer is off)
<i>i</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.	<i>i</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.
Coin-cell battery	CR2032

Display

The following table lists the display specifications of your Alienware Area-51m R2.

Table 17. Display specifications

Description		Option one	Option two	Option three
Display type		Full High Definition (FHD)	Full High Definition (FHD)	Ultra High Definition (UHD)
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 (17.3 in.)	438.16 mm (17.3 in.)	438.16 mm (17.3 in.)
Display-panel native resolution		1920 x 1080	1920 x 1080	3840 x 2160
Luminance (typical)		300 nits	300 nits	500 nits
Megapixels		2.07	2.07	8.29
Color gamut		72% NTSC	100% sRGB	100% Adobe RGB
Pixels Per Inch (PPI)		127	127	255
Contrast ratio (typ)		600:1	700:1	1200:1
Response time (max)		7 ms (GtG)	3 ms (GtG)	25 ms (Black to White)
Refresh rate		144 Hz	300 Hz	60 Hz
Horizontal view angle		85 +/- degrees	85 +/- degrees	85 +/- degrees
Vertical view angle		85 +/- degrees	85 +/- degrees	85 +/- degrees
Pixel pitch		0.20 mm	0.20 mm	0.10 mm
Power consumption (maximum)		8.67 W	7 W	12 W
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 Area-51m R2.

Table 18. GPU—Integrated

Controller	External display support	Memory size	Processor
Intel UHD Graphics 630	One Thunderbolt 3 port	Shared system memory	10 th Generation Intel Core i7/i7k/i9/i9k

GPU — Discrete

The following table lists the specifications of the discrete graphics processing unit (GPU) supported by your Alienware Area-51m R2.

Table 19. GPU — Discrete

Controller	External display support	Memory size	Memory type
NVIDIA GeForce GTX 1660 Ti	One HDMI 2.0 port, one mini DisplayPort 1.4	6 GB	GDDR6
NVIDIA GeForce RTX 2060	One HDMI 2.0 port, one mini DisplayPort 1.4	6 GB	GDDR6
NVIDIA GeForce RTX 2070 SUPER	One HDMI 2.0 port, one mini DisplayPort 1.4	8 GB	GDDR6
NVIDIA GeForce RTX 2080 SUPER	One HDMI 2.0 port, one mini DisplayPort 1.4	8 GB	GDDR6
AMD Radeon RX 5700M	One HDMI 2.0 port, one mini DisplayPort 1.4	8 GB	GDDR6

Operating and storage environment

This table lists the operating and storage specifications of your Alienware Area-51m R2.

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

Table 20. 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	1.30 GRMS
Shock (maximum)	140 G†	160 G†
Altitude (maximum)	0 m to 3048 m (0 ft to 10000 ft)	0 m to 10668 m (0 ft to 35000 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.