Alienware Area-51 R5 Setup and Specifications

Computer Model: Alienware Area-51 R5 Regulatory Model: D03X Regulatory Type: D03X002

ALIENWARE 🗣

Notes, cautions, and warnings





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.

© **2018 Dell Inc. or its subsidiaries. All rights reserved.** Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

2018 - 01

Rev. A00

Contents

Set up your computer	4
Views	7
Front	
Back	9
Back panel	11
Specifications	13
Computer model	
Dimensions and weight	
System information	
Memory	
Ports and connectors	
Communications	15
Wireless module	
Audio	15
Video	16
Storage	
Power ratings	17
Computer environment	17
PCI-Express graphics card installation matrix	19
Getting help and contacting Alienware	20
Self-help resources	20
Contacting Alienware	20

Set up your computer

1 Connect the keyboard and mouse.



2 Connect the network cable — optional.



3 Connect the display.





NOTE: The DisplayPort on the back panel of your computer is covered. Connect the display to the discrete graphics card of your computer.

- NOTE: If you have one graphics card, PCI-Express (graphics) slot 1 will be the primary graphics card. If you have two or three graphics card, PCI-Express (graphics) slot 4 will be the primary graphics card. If you have four graphics card, PCI-Express (graphics) slot 3 will be the primary graphics card.
- Connect the power cable. 4



Press the power button.



Views

Front



1 Power button (Alienhead)

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

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

Press and hold for 4 seconds to force shut-down the computer.



NOTE: You can customize the power-button behavior in Power **Options.**

2 USB 3.1 Gen 1 port with PowerShare (2)

Connect peripherals 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.



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.



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.

3 USB 3.1 Gen 1 ports (2)

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

4 Microphone port

Connect an external microphone to provide sound input.

5 Headphone port

Connect a headphone or speakers.

Back



- Rear I/O accessibility lighting button Press to illuminate the back panel ports.
- 2 Regulatory label

Contains regulatory information of your computer.

3 Back panel

Connect USB, audio, video, and other devices.

- 4 **Power cable connector** Connect a power cable to provide power to your computer.
- 5 Power-supply diagnostics button

Press to check the power-supply state.

6 Power-supply diagnostics light

Indicates the power-supply state.

7 PCI-Express (graphics) slot 7

Connect a PCI-Express X16 card such as graphics, audio, or network card to enhance the capabilities of your computer.

8 PCI-Express slot 6

Connect a PCI-Express X4 card such as audio, or network card to enhance the capabilities of your computer.

9 PCI-Express (graphics) slot 5

Connect a PCI-Express X16 card such as graphics, audio, or network card to enhance the capabilities of your computer.

10 PCI-Express (graphics) slot 4

Connect a PCI-Express X16 card such as graphics, audio, or network card to enhance the capabilities of your computer.

11 PCI-Express (graphics) slot 3

Connect a PCI-Express X16 card such as graphics, audio, or network card to enhance the capabilities of your computer.

12 PCI-Express (graphics) slot 1

Connect a PCI-Express X16 card such as graphics, audio, or network card to enhance the capabilities of your computer.

NOTE: For more details on installing the PCI-Express graphics card, see PCI-Express graphics card installation matrix.

Service Tag label 13

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.

14 Security-cable slot (for Kensington locks)

Connect a security cable to prevent unauthorized movement of your computer.

15 Security-cable slot latch

Release to allow opening the side panel.

Back panel



USB 3.1 Gen 2 port

Connect peripherals such as storage devices and printers. Provides data transfer speeds up to 10 Gbps.

2 Hard-drive activity light

Turns on when the computer reads from or writes to the hard drive.

3 USB 3.1 Gen 2 (Type-C) port with PowerShare

Connect peripherals such as storage devices and printers.

Provides data transfer speeds up to 10 Gbps. Supports Power Delivery that enables two-way power supply between devices. Provides up to 15 W power output that enables faster charging of peripheral devices.

PowerShare enables you to charge your USB devices even when your computer is turned off.



NOTE: The Type-C port only provides the USB data function, and no alternate video or Thunderbolt mode features are supported.

USB 3.1 Gen 1 ports (6) 4

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

5 Rear L/R surround port

Connect audio-output devices such as speakers and amplifiers. In a 5.1 speaker channel setup, connect the rear-left and rear-right speakers.

Side L/R surround port 6

Connect the side-left and side-right speakers or surround sound speakers.

Optical S/PDIF port 7

Connect an amplifier, speakers, or a TV for digital audio output through an optical cable.

8 Line-out port

Connect speakers.

9 Line-in port

Connect recording or playback devices such as a microphone or CD player.

10 Center/subwoofer port

Connect the subwoofer.

11 Network ports (2)

Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or internet access.

12 USB 2.0 ports (2)

Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

Specifications

Computer model

Alienware Area-51 R5

Dimensions and weight

Table 1. Dimensions and weight

Height

Width

Depth

Weight (maximum)

569.25 mm (22.41 in)

638.96 mm (25.15 in)

272.71 mm (10.73 in)

28 kg (61.73 lbs)

NOTE: The weight of your computer varies depending on the configuration ordered and the manufacturing variability.

System information

Table 2. System information

Processor

Chipset

Intel Core X-series Intel X299 PCH

Memory

Table 3. M	emory spe	cifications
------------	-----------	-------------

Slots

Four internally-accessible DDR4 DIMM sockets

Туре

DDR4

Speed	2666 MHz up to 3200 MHz (XMP memory)
Configurations supported	
Per memory module slot	4 GB, 8 GB, and 16 GB
Total memory	8 GB, 16 GB, 32 GB, and 64 GB

Ports and connectors

Table 4. External ports and connectors

External		
Network	Two RJ-45 ports	
USB	 Two USB 3.1 Gen 1 ports One USB 3.1 Gen 2 port Two USB 3.1 Gen 1 ports with PowerShare One USB 3.1 Gen 2 (Type-C) port 	
	 with PowerShare Six USB 3.1 Gen 1 ports Two USB 2.0 ports 	
Audio/Video	 Four audio output/headphone ports One audio input/microphone port One optical S/PDIF port 	

Table 5.	Internal	ports and	connectors

Internal	
M2	 One M.2 card slot for WLAN and Bluetooth
	 One M.2 card slot for 2280 solid- state drive
Storage	Four SATA ports

Communications

Table 6. Supported communications

Ethernet

Wireless

10/100/1000 Mbps Ethernet controller integrated on system board

- Wi-Fi 802.11ac
- Bluetooth 4.1

Wireless module

Table 7. Wireless module specifications

Transfer rate

Frequency bands supported

Encryption

Up to 867 Mbps Dual band 2.4 GHz/5 GHz

- 64-bit and 128-bit WEP
- TKIP
- AES-CCMP

Audio

Table 8. Audio specifications

Controller

Туре

Realtek ALC3861

- Integrated 7.1 channel
- High Definition Audio with S/PDIF support

Video

Table 9. Video specifications

Туре

Controller

Up to four PCI-Express, single/ double-width, full length graphics card

- Single AMD
- Single NVIDIA
- Dual/Triple/Quad AMD (CrossFire)
- Dual NVIDIA (SLI)
- NOTE: The graphics configuration of your desktop varies depending on the power supply and graphics card configuration ordered.
- NOTE: Install either NVIDIA or AMD graphics card, when using with dual and triple graphics configurations.
- U

NOTE: For more details on installing the PCI-Express graphics card, see <u>PCI-Express graphics card</u> installation matrix.

Storage

Table 10. Storage specifications

Internally accessible

- Three 3.5-inch drive bays for SATA hard drives
- Two 2.5-inch drive bays for SATA solid-state drives or U.2 solid-state drives

 Max up to total five hard drives supported

Power ratings

Table 11. Power ratings

Turne	850W	1500 W	1500 W	
Туре	85000	1500 W	1500 W	
Input voltage	100 VAC-240 VAC	100 VAC-240 VAC	200 VAC-240 VAC	
Input frequency	50 Hz-60 Hz	50 Hz-60 Hz	50 Hz-60 Hz	
Input current (maximum)	10 A	16 A	10 A	
Output current	+3.3 V/20 A, +5 V/20 A, +12 VA/32 A, +12 VB/48 A, +12 VD/16 A, -12 V/0.5 A, +5 Vaux/4 A	+3.3 V/20 A, +5 V/ +12 VB/48 A, +12 V A, -12 V/0.5 A	C/48 A, +12 VD/16	
Rated output voltage	+3.3 V, +5 V, +12 VA, +12 VB, +12 VD, -12 V, +5 Vaux	+3.3 V, +5 V, +12 V +12 VD, -12		
Temperature range				
Operating	5	°C to 50°C (41°F to 12	2°F)	
Storage	-40°C to 70°C (-40°F to 158°F)			

Computer environment

Airborne contaminant level: G2 or lower as defined by ISA-S71.04-1985

Table 12. Computer environment

	Operating	Storage
Temperature range	5°C to 35°C (41°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) *	0.26 GRMS	1.37 GRMS
Shock (maximum)	40 G for 2 ms with a change in velocity of 20 in/s (51 cm/s) †	105 G for 2 ms with a change in velocity of 52.5 in/s (133 cm/s)
Altitude (maximum)	–15.24 m to 3048 m (–50 ft to 10,000 ft)	–15.24 m to 10,668 m (–50 ft to 35,000 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.

PCI-Express graphics card installation matrix

850 W power-supply unit

Table 13. PCI-Express graphics card installation matrix

	Single graphics	Dual graphics	Triple graphics	Quad graphics
Slot installation	Slot 1	Slot 1 and Slot 4		
Power connector label	PCIE1	PCIE1 and PCIE3	Not supported	Not supported
Primary output	Slot 1	Slot 4		

1500 W power-supply unit Table 14. PCI-Express graphics card installation matrix

	Single graphics	Dual graphics	Triple graphics	Quad graphics
Slot installation	Slot 1	Slot 1 and Slot 4	Slot 1, Slot 4 and Slot 7	Slot 1, Slot 3, Slot 5 and Slot 7
Power connector label	VGA1	VGA1 and VGA2	VGA1 and VGA2 and VGA3	VGA1 and VGA2 and VGA3 and VGA4
Primary output	Slot 1	Slot 4	Slot 4	Slot 3

850 W power-supply unit

Getting help and contacting Alienware

Self-help resources

You can get information and help on Alienware products and services using these online self-help resources:

Table 15. Alienware products and online self-help resources

Information about Alienware products <u>www.alienware.com</u> and services

Dell Help & Support app

Tips

Contact Support

Online help for operating system

Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on

Videos providing step-by-step instructions to service your computer

In Windows search, type **Help and Support**, and press **Enter**.

www.dell.com/support/windows www.dell.com/support/linux

www.alienware.com/gamingservices

www.youtube.com/alienwareservices

Contacting Alienware

To contact Alienware for sales, technical support, or customer service issues, see <u>www.alienware.com</u>.







NOTE: Availability varies by country and product, and some services may not be available in your country.



NOTE: If you do not have an active internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.