


Dell G15 5521 Special Edition

Setup and Specifications

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Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **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.

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Contents

Chapter 1: Set up your Dell G15 5521 Special Edition.....	4
Chapter 2: Views of Dell G15 5521 Special Edition.....	6
Right.....	6
Left.....	6
Back.....	6
Display.....	8
Top.....	9
Bottom.....	10
Chapter 3: Specifications of Dell G15 5521 Special Edition.....	11
Dimensions and weight.....	11
Processor.....	11
Chipset.....	12
Operating system.....	12
Memory.....	12
External ports.....	12
Internal slots.....	13
Ethernet.....	13
Wireless module.....	14
Audio.....	14
Storage.....	15
Keyboard.....	15
Camera.....	16
Touchpad.....	16
Power adapter.....	16
Battery.....	17
Display.....	18
GPU—Integrated.....	19
GPU—Discrete.....	19
Operating and storage environment.....	19
Chapter 4: Keyboard shortcuts.....	21
Chapter 5: Low blue light.....	23
Chapter 6: Getting help and contacting Dell.....	24

Set up your Dell G15 5521 Special Edition

NOTE: The images in this document may differ from your computer depending on the configuration you ordered.

1. Connect the power adapter and press the power button.



NOTE: The battery may go into power-saving mode during shipment to conserve charge on the battery. Ensure that the power adapter is connected to your computer when it is turned on for the first time.

2. Finish Windows setup.

Follow the on-screen instructions to complete the setup. When setting up, Dell recommends that you:





- Connect to a network for Windows updates.

NOTE: If connecting to a secured wireless network, enter the password for the wireless network access when prompted.

- If connected to the Internet, sign in with or create a Microsoft account. If not connected to the Internet, create an offline account.
- On the **Support and Protection** screen, enter your contact details.

3. Locate and use Dell apps from the Windows Start menu—Recommended.

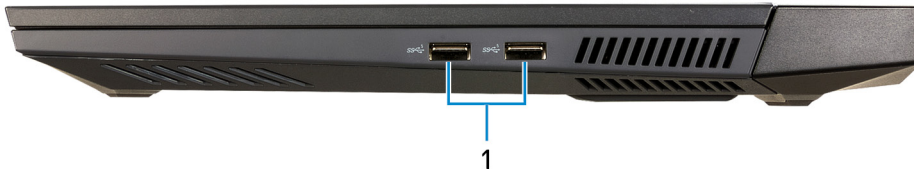
Table 1. Locate Dell apps

Resources	Description
	<p>My Dell</p> <p>Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.</p>
	<p>SupportAssist</p> <p>SupportAssist proactively and predictively identifies hardware and software issues on your computer and automates the engagement process with Dell Technical support. It addresses performance and stabilization issues, prevents security threats, monitors, and detects hardware failures. For more information, see <i>SupportAssist for Home PCs User's Guide</i> at www.dell.com/serviceabilitytools. Click SupportAssist and then, click SupportAssist for Home PCs.</p> <p>NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.</p>
	<p>Dell Update</p> <p>Updates your computer with critical fixes and latest device drivers as they become available. For more information on using Dell Update, search in the Knowledge Base Resource at www.dell.com/support.</p>
	<p>Dell Digital Delivery</p> <p>Download software applications, which are purchased but not preinstalled on your computer. For more information on using Dell Digital Delivery, search in the Knowledge Base Resource at www.dell.com/support.</p>

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Views of Dell G15 5521 Special Edition

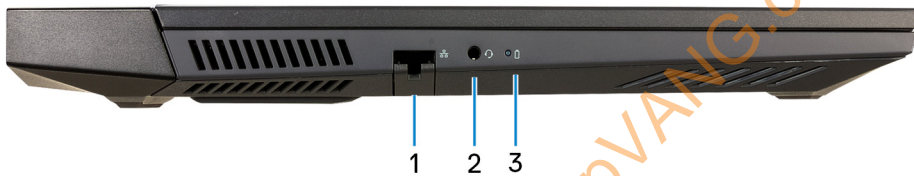
Right



1. USB 3.2 Gen 1 ports (2)

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

Left



1. Network port

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

2. Headset port

Connect headphones or a headset (headphone and microphone combo).

3. Battery-status light

Indicates the battery-charge status.

Solid amber—Battery charge is low.

Blinking amber—Battery charge is critical.

Off—Battery is fully charged.

Back

On computers shipped with NVIDIA GeForce RTX 3050 Ti



1. USB 3.2 Gen 2 (Type-C) port with DisplayPort

Connect devices such as external storage devices, printers, and external displays. Provides data transfer rate of up to 10 Gbps.

Supports DisplayPort 1.4 and also enables you to connect an external display using a display adapter.

NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

2. USB 3.2 Gen 1 port

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

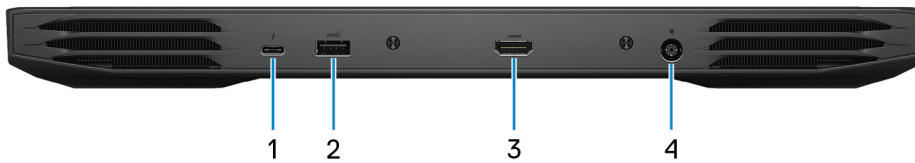
3. HDMI port

Connect to a TV, external display or another HDMI-in enabled device. Provides video and audio output.

4. Power-adapter port

Connect a power adapter to provide power to your computer and charge the battery.

On computers shipped with NVIDIA GeForce RTX 3060



1. Thunderbolt 4

Supports Thunderbolt 4 and also enables you to connect to an external display using a display adapter. Provides data transfer rates up to 40 Gbps for Thunderbolt 4.

NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

2. USB 3.2 Gen 1 port

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

3. HDMI port

Connect to a TV, external display or another HDMI-in enabled device. Provides video and audio output.

4. Power-adapter port

Connect a power adapter to provide power to your computer and charge the battery.

Display



- 1. Left microphone**
Provides digital sound input for audio recording and voice calls.
- 2. Camera**
Enables you to video chat, capture photos, and record videos.
- 3. Camera-status light**
Turns on when the camera is in use.
- 4. Right microphone**
Provides digital sound input for audio recording and voice calls.

Top



1. Touchpad

Move your finger on the touchpad to move the mouse pointer. Tap to left-click and two fingers tap to right-click.

2. Left-click area

Press to left-click.

3. Right-click area

Press to right-click.

4. Power button

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

When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for 10 seconds to force shut-down the computer.

NOTE: You can customize the power-button behavior in Windows. For more information, see *Me and My Dell* at www.dell.com/support/manuals.

Bottom



1. Left speaker

Provides audio output.

2. Service Tag label

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.

3. Right speaker

Provides audio output.

Specifications of Dell G15 5521 Special Edition

Dimensions and weight

The following table lists the height, width, depth, and weight of your Dell G15 5521 Special Edition.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	20.91 mm (0.82 in.)
Rear height	25.33 mm (0.99 in.)
Width	357.26 mm (14.07 in.)
Depth	272.11 mm (10.71 in.)
Weight (maximum)	2.674 kg (5.895 lb)
	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 Dell G15 5521 Special Edition.

Table 3. Processor

Description	Values
Processor type	12 th Generation Intel Core i7-12700H
Processor wattage	45 W
Processor core count	14
Processor thread count	20
Processor speed	Up to 4.70 GHz
Processor cache	24 MB
Integrated graphics	Intel UHD Graphics

Chipset

The following table lists the details of the chipset supported by your Dell G15 5521 Special Edition.

Table 4. Chipset

Description	Values
Chipset	Integrated in the processor
Processor	12 th Generation Intel Core i7
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Dell G15 5521 Special Edition supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit

Memory

The following table lists the memory specifications of your Dell G15 5521 Special Edition.

Table 5. Memory specifications

Description	Values
Memory slots	Two SoDIMM slots
Memory type	DDR5
Memory speed	4800 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, 32 GB
Memory configurations supported	

External ports

The following table lists the external ports of your Dell G15 5521 Special Edition.

Table 6. External ports

Description	Values
Network port	One RJ45 port

Table 6. External ports (continued)

Description	Values
USB ports	<ul style="list-style-type: none"> • Three USB 3.2 Gen 1 ports • One Thunderbolt 4 (On computers shipped with NVIDIA GeForce RTX 3060) • One USB 3.2 Gen 2 Type-C port with Display Port (On computers shipped with NVIDIA GeForce RTX 3050 Ti)
Audio port	One headset (headphone and microphone combo) port
Video port	One HDMI 2.1 port
Media-card reader	Not applicable
Power-adaptor port	One 7.4 mm x 5.1 mm power-adaptor port
Security-cable slot	Not supported

Internal slots

The following table lists the internal slots of your Dell G15 5521 Special Edition.

Table 7. Internal slots

Description	Values
M.2	<ul style="list-style-type: none"> • One M.2 2230 slot for WiFi and Bluetooth combo card • One M.2 slot for either an M.2 2230 solid-state drive or an M.2 2280 solid-state drive <p>NOTE: To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at www.dell.com/support.</p>

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Dell G15 5521 Special Edition.

Table 8. Ethernet specifications

Description	Values
Model number	<ul style="list-style-type: none"> • Killer E2600 PCI-e 1 Gigabit ethernet controller (on computers shipped with NVIDIA GeForce RTX 3060) • Realtek RTL8111H PCI-e 1 Gigabit ethernet controller (on computers shipped with RTX 3050 Ti)
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules supported on your Dell G15 5521 Special Edition.

Table 9. Wireless module specifications

Description	Option one	Option two
Model number	Intel AX201	Killer 1650i
Transfer rate	Up to 2400 Mbps	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz	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) 	<ul style="list-style-type: none"> • WiFi 802.11b/g/a • 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 	<ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth	Bluetooth 5.2	Bluetooth 5.2

Audio

The following table lists the audio specifications of your Dell G15 5521 Special Edition.

Table 10. Audio specifications

Description	Values
Audio controller	Realtek ALC3254 with Dolby Audio for Alienware Sound Centre
Stereo conversion	Supported
Internal audio interface	High Definition Audio
External audio interface	Headset-combo connector/Digital-array microphone input on camera module
Number of speakers	Two
Internal-speaker amplifier	Supported (audio codec built-in amplifier)
External volume controls	Keyboard shortcut controls
Speaker output:	
Average speaker output	2 W
Peak speaker output	2.5 W
Subwoofer output	Not supported
Microphone	Dual-array microphones

Storage

This section lists the storage options on your Dell G15 5521 Special Edition.

Your Dell G15 5521 supports only one M.2 slot for either an M.2 2230 solid-state drive or an M.2 2280 solid-state drive.

NOTE: The solid-state drive is secured to the system board by a solid-state drive bracket that is specific to the form factor of the solid-state drive. If you are replacing a solid-state drive, ensure that the new solid-state drive has the same form factor. For example, replace an M.2 2280 solid-state drive with an M.2 2280 solid-state drive.

NOTE: For more information about Dell qualified solid-state drives supported by your computer, see Parts & Accessories at <https://www.dell.com/support>.

Table 11. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid-state drive	PCIe Gen3 x4 NVMe	Up to 1 TB
M.2 2230 solid-state drive	PCIe Gen4 x4 NVMe	Up to 1 TB
M.2 2280 solid-state drive	PCIe Gen4 x4 NVMe	Up to 2 TB

Keyboard

The following table lists the keyboard specifications of your Dell G15 5521 Special Edition.

Table 12. Keyboard specifications

Description	Values
Keyboard type	<ul style="list-style-type: none"> Standard keyboard Backlit keyboard Four-zone RGB backlit keyboard (optional)
Keyboard layout	QWERTY
Number of keys	<ul style="list-style-type: none"> United States and Canada: 101 keys United Kingdom: 102 keys Japan: 105 keys
Keyboard size	X=18.70 mm key pitch Y=18.05 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 Dell G15 5521 Special Edition.

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 megapixel
	Video	1280 x 720 (HD) at 30 fps
Diagonal viewing angle:		<ul style="list-style-type: none"> 78.6 degrees 74.9 degrees

Touchpad

The following table lists the touchpad specifications of your Dell G15 5521 Special Edition.

Table 14. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1229
	Vertical	749
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, see the Microsoft knowledge base article at support.microsoft.com .


Power adapter

The following table lists the power adapter specifications of your Dell G15 5521 Special Edition.

Table 15. Power adapter specifications

Description	Option one	Option two
Type	180 W	240 W
Connector dimensions:		

Table 15. Power adapter specifications (continued)

Description		Option one	Option two
	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)		2.34 A	3.5A/ 5 A
Output current (continuous)		6.23 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 Dell G15 5521 Special Edition.

Table 16. 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	13.2 VDC /13.35 VDC
Battery weight (maximum)		0.25 kg (0.55 lb)	0.34 kg (0.74 lb)
Battery dimensions:			
	Height	7.56 mm (0.3 in.)	7.56 mm (0.3 in.)
	Width	295.20 mm (11.62 in.)	295.20 mm (11.62 in.)
	Depth	77.50 mm (3.05 in.)	77.50 mm (3.05 in.)
Temperature range:			
	Operating	0°C to 45°C (32°F to 113°F)	0°C to 45°C (32°F to 113°F)
	Storage	-20°C to 65°C (-4°F to 149°F)	-20°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)		4 hours (when the computer is off)	4 hours (when the computer is off)
 NOTE: Control the charging time, duration, start and end time, and so			

Table 16. Battery specifications (continued)

Description	Option one	Option two
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	Not applicable	Not applicable
<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>i 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 Dell G15 5521 Special Edition.

Table 17. Display specifications

Description	Option one	Option two
Display type	Quad High Definition (QHD)	Full High Definition (FHD)
Display-panel technology	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.)
Width	344.16 mm (13.55 in.)	344.16 mm (13.55 in.)
Diagonal	395 mm (15.55 in.)	395 mm (15.55 in.)
Display-panel native resolution	2560 x 1440	1920 x 1080
Luminance (typical)	400 nits	300 nits
Megapixels	2.07	2.07
Color gamut	DCI-P3 99%	100% sRGB
Pixels Per Inch (PPI)	141	141
Contrast ratio (min.)	800 : 1	800 : 1
Response time (max.)	10 ms	13 ms
Refresh rate	240 Hz	165 Hz
Horizontal view angle	85 +/- degrees	80 +/- degrees (minimum)
Vertical view angle	85 +/- degrees	80 +/- degrees (minimum)
Pixel pitch	0.17925 mm x 0.17925 mm	0.17925 mm x 0.17925 mm
Power consumption (maximum)	7.60 W	6 W

Table 17. Display specifications (continued)

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

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Dell G15 5521 Special Edition.

Table 18. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics	Shared system memory	12 th Generation Intel Core i7

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Dell G15 5521 Special Edition.

Table 19. GPU—Discrete


Controller	Memory size	Memory type
NVIDIA GeForce RTX 3060	6 GB	GDDR6
NVIDIA GeForce RTX 3050 Ti	4 GB	GDDR6
NVIDIA GeForce RTX 3070 Ti	8 GB	GDDR6

Operating and storage environment

This table lists the operating and storage specifications of your Dell G15 5521 Special Edition.

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.