Specifications of Inspiron 15 5510

Dimensions and weight

The following table lists the height, width, depth, and weight of your Inspiron 15 5510.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	14.59 mm (0.57 in.)
Rear height	17.99 mm (0.71 in.)
Width	356.06 mm (14.02 in.)
Depth	228.90 mm (9.01 in.)
Weight i NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	1.75 kg (3.86 lb) (maximum)

Processor

The following table lists the details of the processors supported by your Inspiron 15 5510.

Table 3. Processor

Description	Option one	Option two	Option three
Processor type	11 th Generation Intel Core i3-1125G4	11 th Generation Intel Core i5-11300H	11 th Generation Intel Core i7-11370H
Processor wattage	28 W	35 W	35 W
Processor core count	4	4	4
Processor thread count	8	8	8
Processor speed	2 GHz to 3.70 GHz	3.10 GHz to 4.40 GHz	3.30 GHz to 4.80 GHz
Processor cache	8 MB	8 MB	12 MB
Integrated graphics	Intel UHD Graphics	Intel Iris X ^e Graphics	Intel Iris X ^e Graphics

Chipset

The following table lists the details of the chipset supported by your Inspiron 15 5510.

Table 4. Chipset

Description	Values	
Chipset	Integrated in the processor	
Processor	11 th Generation Intel Core i3/i5/i7	
DRAM bus width	64-bit	
Flash EPROM	32 MB	
PCle bus	Up to Gen3	

Operating system

Your Inspiron 15 5510 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Home in S-mode, 64-bit
- Windows 11 Pro, 64-bit
- Windows 11 Pro National Academic, 64-bit
- Windows 10 Home, 64-bit
- Windows 10 Home in S-mode, 64-bit
- Windows 10 Pro, 64-bit
- Ubuntu 20.04 LTS, 64-bit

Memory

The following table lists the memory specifications of your Inspiron 15 5510.

Table 5. Memory specifications

Description	Values	
Memory slots	Two SODIMM slots	
Memory type	DDR4	
Memory speed	3200 MHz	
Maximum memory configuration	32 GB	
Minimum memory configuration	4 GB	
Memory size per slot	4 GB, 8 GB, and 16 GB	
Memory configurations supported	 4 GB (1 x 4 GB), DDR4, 3200 MHz 8 GB (2 x 4 GB), DDR4, 3200 MHz, dual-channel 8 GB (1 x 8 GB), DDR4, 3200 MHz 12 GB (1 x 4 GB + 1 x 8 GB), DDR4, 3200 MHz 16 GB (1 x 16 GB), DDR4, 3200 MHz 16 GB (2 x 8 GB), DDR4, 3200 MHz, dual-channel 	

Table 5. Memory specifications (continued)

Description	Values	
	 24 GB (1 x 8 GB + 1 x 16 GB), DDR4, 3200 MHz 32 GB (2 x 16 GB), DDR4, 3200 MHz, dual-channel 	

External ports

The following table lists the external ports on your Inspiron 15 5510.

Table 6. External ports

Description	Values	
USB ports	 Two USB 3.2 Gen 1 ports One USB 3.2 Gen 2x2 Type-C port with DisplayPort 1.4 and Power Delivery (in computers shipped with i3 or i5 processor) One USB Type-C Thunderbolt 4.0 port (in computers shipped with i7 processor) NOTE: You can connect a Dell Docking Station to this port. For more information, see the knowledge base article 000124295 at www.dell.com/support. 	
Audio port	One global headset jack	
Video port/ports	 One USB 3.2 Gen 2x2 Type-C port with DisplayPort 1.4 and Power Delivery (in computers shipped with i3 or i5 processor) NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect to a DisplayPort device. One USB Type-C Thunderbolt 4.0 port (in computers shipped with i7 processor) NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect to a DisplayPort device. HDMI 1.4 port 	
Media-card reader	One SD-card slot	
Power-adapter port	DC-IN through an AC adapter (4.50 mm x 2.90 mm)	
Security-cable slot	Not applicable	

Internal slots

The following table lists the internal slots of your Inspiron 15 5510.

Table 7. Internal slots

Description	Values	
M.2	 One M.2 2230 slot for WiFi and Bluetooth combo card One M.2 2230/2280 slot for solid-state drive/Intel Optane Memory H20 One M.2 2280 slot for solid-state drive/Intel Optane Memory H20 	

Table 7. Internal slots

Description	Values	
	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 specifications of your Inspiron 15 5510.

Table 8. Wireless module specifications

Description	Option one	Option two	Option three
Model number	Intel 9462	Qualcomm QCA61x4A (DW1820)	Intel AX201
Transfer rate	Up to 433 Mbps	Up to 867 Mbps	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	 WiFi 802.11a/b/g Wi-Fi 4 (WiFi 802.11n) Wi-Fi 5 (WiFi 802.11ac) 	WiFi 802.11a/b/gWi-Fi 4 (WiFi 802.11n)Wi-Fi 5 (WiFi 802.11ac)	 WiFi 802.11a/b/g Wi-Fi 4 (WiFi 802.11n) Wi-Fi 5 (WiFi 802.11ac) Wi-Fi 6 (WiFi 802.11ax)
Encryption	64-bit/128-bit WEP AES-CCMP TKIP	64-bit/128-bit WEP AES-CCMP TKIP	64-bit/128-bit WEP AES-CCMP TKIP
Bluetooth	Bluetooth 5.0	Bluetooth 5.0	Bluetooth 5.2

Audio

The following table lists the audio specifications of your Inspiron 15 5510.

Table 9. Audio specifications

Description		Values	
Audio controller		Realtek	
Stereo conversion		Supported	
Internal audio interface		High-definition audio	
External audio interface	9	Global headset jack	
Number of speakers		Two	
Internal-speaker amplif	ier	Supported (audio codec built-in amplifier)	
External volume contro	ols	Keyboard shortcut controls	
Speaker output:			
	Average speaker output	2 W	

Table 9. Audio specifications (continued)

Description		Values
	Peak speaker output	2.5 W
Subwoofer output		Not supported
Microphone		Dual digital-array microphones

Storage

This section lists the storage options on your Inspiron 15 5510.

Your Inspiron 15 5510 supports one of the following storage options:

- One M.2 2230 or M.2 2280 solid-state drive
- A combination of two M.2 solid-state drives (M.2 2230 or M.2 2280)

The primary drive of your Inspiron 15 5510 is the M.2 solid-state drive where the operating system is installed.

Table 10. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid-state drive	PCIe NVMe Gen3 x2 NVMe, up to 32 Gbps	Up to 1 TB
M.2 2280 solid-state drive	PCle Gen3 x2 NVMe, up to 32 Gbps	Up to 2 TB

Intel Optane Memory H20 with Solid-State Storage (optional)

Intel Optane Memory technology uses 3D XPoint memory technology and functions as a nonvolatile storage cache/accelerator and/or storage device depending on the Intel Optane Memory that is installed in your system.

Intel Optane Memory H20 with Solid-State Storage functions as both a nonvolatile storage cache/accelerator (enabling enhanced read/write speeds for hard drive storage) and a solid-state storage solution. It neither replaces nor adds to the memory (RAM) installed on your system.

Table 11. Intel Optane Memory H20 with Solid-State Storage specifications

Description	Values
Interface	PCIe NVMe Gen3 x4
Connector	M.2 2280
Form factor	2280
Capacity (Intel Optane memory)	Up to 32 GB
Capacity (solid-state storage)	Up to 512 GB

- NOTE: Intel Optane Memory H20 with Solid-State Storage is supported on systems that meet the following requirements:
 - 11th Generation or higher Intel Core i3/i5/i7 processors
 - Windows 10 64-bit version or higher
 - Intel Rapid Storage Technology driver version 18.1.0.1027 or higher

Media-card reader

The following table lists the media cards supported by your Inspiron 15 5510.

Table 12. Media-card reader specifications

Description	Values	
Media-card type	One SD-card slot	
Media-cards supported	 Secure Digital (SD) Secure Digital High Capacity (SDHC) Secure Digital Extended Capacity (SDXC) 	
NOTE: The maximum capacity supported by the media-card reader varies depending on the standard of the media card		

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 Inspiron 15 5510.

Table 13. Keyboard specifications

Description	Values
Keyboard type	Standard keyboard Backlit keyboard
Keyboard layout	QWERTY
Number of keys	United States and Canada: 99 keysUnited Kingdom: 100 keysJapan: 103 keys
Keyboard size	X=18.70 mm key pitch Y=18.05 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. (i) NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.

Camera

The following table lists the camera specifications of your Inspiron 15 5510.

Table 14. Camera specifications

Description	Values
Number of cameras	One
Camera type	HD RGB

Table 14. 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
Diagonal viewing angle:		74.90 degrees

Touchpad

The following table lists the touchpad specifications of your Inspiron 15 5510.

Table 15. Touchpad specifications

Description	Values	
Touchpad resolution:		
Horizontal	3512	
Vertical	2442	
Touchpad dimensions:	70.	
Horizontal	115 mm (4.53 in.)	
Vertical	80 mm (3.15 in.)	
Touchpad gestures	For more information about touchpad gestures available on Windows, see the Microsoft knowledge base article 4027871 at support.microsoft.com.	

Power adapter

The following table lists the power adapter specifications of your Inspiron 15 5510.

Table 16. Power adapter specifications

Description		Values
Туре		65 W DC-in
Connector dimensions:		
	External diameter	4.50 mm
	Internal diameter	2.90 mm
Input voltage		100 VAC-240 VAC
Input frequency		50 Hz-60 Hz
Input current (maximum)		1.70 A

Table 16. Power adapter specifications (continued)

Description		Values
Output current (continuous)		3.34 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 Inspiron 15 5510.

Table 17. Battery specifications

Description		Option one	Option two	
Battery type		3-cell polymer (41 Wh)	4-cell polymer (54 Wh)	
Battery voltage		11.25 VDC	15 VDC	
Battery weight (maximu	m)	0.176 kg (0.39 lb)	0.231 kg (0.51 lb)	
Battery dimensions:		16,		
	Height	5.75 mm (0.23 in.)	5.75 mm (0.23 in.)	
	Width	206.40 mm (8.13 in.)	271.90 mm (10.70 in.)	
	Depth	82 mm (3.23 in.)	82 mm (3.23 in.)	
Temperature range:				
	Operating	0°C to 35°C (32°F to 95°F)	0°C to 35°C (32°F to 95°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) (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, Me and My Dell on www.dell.com.		4 hours (when the computer is off)	4 hours (when the computer is off)	
Coin-cell battery		CR2032	CR2032	

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.

Display

The following table lists the display specifications of your Inspiron 15 5510.

Table 18. Display specifications

on	Option one	Option two	Option three
pe	Full High Definition (FHD), ComfortView Plus	Full High Definition (FHD), ComfortView	Full High Definition (FHD), ComfortView
nel technology	Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)
nnel dimensions ea):			
Height	193.60 mm (7.62 in.)	193.60 mm (7.62 in.)	193.60 mm (7.62 in.)
Width	344.20 mm (13.55 in.)	344.20 mm (13.55 in.)	344.20 mm (13.55 in.)
Diagonal	394.90 mm (15.60 in.)	394.90 mm (15.60 in.)	394.90 mm (15.60 in.)
nel native	1920 x 1080	1920 x 1080	1920 x 1080
e (typical)	300 nits	250 nits	250 nits
S	2.0736	2.0736	2.0736
ut	sRGB 100% (typical)	NTSC 45% (typical)	NTSC 45% (typical)
Inch (PPI)	141 ppi	141 ppi	141 ppi
ratio (typ)	600:1	600:1	600:1
time (max)	35 ms	35 ms	35 ms
ate	60 Hz	60 Hz	60 Hz
l view angle	80	80	80
ew angle	80	80	80
1	0.179 mm x 0.179 mm	0.179 mm x 0.179 mm	0.179 mm x 0.179 mm
nsumption 1)	4.40 W	4.60 W	4.60 W
Anti-glare vs glossy finish Anti-glare		Anti-glare	Anti-glare
ions	No	No	Yes
	anel technology anel dimensions ea): Height Width Diagonal anel native e (typical) s ut Inch (PPI) ratio (typ) time (max) ate view angle ew angle assumption e) vs glossy finish	Full High Definition (FHD), ComfortView Plus Intel technology Wide-Viewing Angle (WVA) Intel dimensions Eas): Height 193.60 mm (7.62 in.) Width 344.20 mm (13.55 in.) Diagonal 394.90 mm (15.60 in.) Intel native 1920 x 1080 2 (typical) 300 nits 2 .0736 Intel (PPI) Intel (PPI) Intel (Typ) Intel (Typ)	Full High Definition (FHD), ComfortView Plus Full High Definition (FHD), ComfortView Mide-Viewing Angle (WVA) Mide-View

Fingerprint reader

The following table lists the fingerprint-reader specifications of your Inspiron 15 5510.

Table 19. Fingerprint reader specifications

Description	Values
Fingerprint-reader sensor technology	Capacitive

Table 19. Fingerprint reader specifications (continued)

Description	Values
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	108 x 88

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Inspiron 15 5510.

Table 20. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics	Shared system memory	11 th Generation Intel Core i3
Intel Iris X ^e Graphics	Shared system memory	11 th Generation Intel Core i5/i7

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Inspiron 15 5510.

Table 21. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce MX450	2 GB	GDDR5

Computer environment

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

Table 22. 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)	50% to 90% (non-condensing)	2% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	Not applicable
Shock (maximum)	140 G†	160 G†
Altitude (maximum)	-15.2 m to 3048 m (4.64 ft to 5518.4 ft)	-15.2 m to 10668 m (4.64 ft to 19234.4 ft)

 $[\]ensuremath{^{*}}$ 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.