


# Specifications of Dell G7 17 7700

## Dimensions and weight

The following table lists the height, width, depth, and weight of your Dell G7 17 7700.

**Table 2. Dimensions and weight**

Description	Values
Height:	
Front height	19.30 mm (0.76 in.)
Rear height	20.70 mm (0.81 in.)
Width	398.20 mm (15.68 in.)
Depth	290 mm (11.42 in.)
Weight (maximum)	3.29 kg (7.25 lb)  <b>NOTE:</b> 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 G7 17 7700.

**Table 3. Processor**

Description	Option one	Option two	Option three
Processor type	10 <sup>th</sup> Generation Intel Core i5-10300H	10 <sup>th</sup> Generation Intel Core i7-10750H	10 <sup>th</sup> Generation Intel Core i9-10885H
Processor wattage	45 W	45 W	45 W
Processor core count	4	6	8
Processor thread count	8	12	16
Processor speed	Up to 4.5 GHz	Up to 5 GHz	Up to 5.3 GHz
Processor cache	8 MB	12 MB	16 MB
Integrated graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics

# Chipset

The following table lists the details of the chipset supported by your Dell G7 17 7700.

**Table 4. Chipset**

Description	Values
Chipset	HM470
Processor	10 <sup>th</sup> Generation Intel Core i5/i7/i9
DRAM bus width	64-bit
Flash EPROM	24 MB
PCIe bus	Up to Gen3

# Operating system

Your Dell G7 17 7700 supports the following operating systems:

- Windows 10 Home, 64-bit
- Windows 10 Professional, 64-bit

# Memory

The following table lists the memory specifications of your Dell G7 17 7700.

**Table 5. Memory specifications**

Description	Values
Memory slots	Two SODIMM slots
Memory type	Dual-channel DDR4
Memory speed	2933 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	8 GB
Memory size per slot	4 GB, 8 GB, 16 GB
Memory configurations supported	<ul style="list-style-type: none"><li>• 8 GB, 2 x 4 GB, DDR4, 2933 MHz, SODIMM, dual-channel</li><li>• 16 GB, 2 x 8 GB, DDR4, 2933 MHz, SODIMM, dual-channel</li><li>• 32 GB, 2 x 16 GB, DDR4, 2933 MHz, SODIMM, dual-channel</li></ul>

## External ports

The following table lists the external ports of your Dell G7 17 7700.

**Table 6. External ports**

Description	Values
Network port	One RJ45 port
USB ports	<ul style="list-style-type: none"><li>• One USB 3.2 Gen 1 port with PowerShare</li><li>• Two USB 3.2 Gen 1 ports</li><li>• One USB 3.2 Gen 2 Type-C port with Power Delivery and DisplayPort (only in computers shipped with NVIDIA GeForce GTX 1650Ti graphics card)</li><li>• One Thunderbolt 3 Type-C port (only in computers shipped with NVIDIA GeForce GTX 1660Ti, RTX 2060, RTX 2070, or RTX 2070 Super graphics card)</li></ul> <p><b>NOTE:</b> Your computer supports either one USB 3.2 Gen 2 (Type-C) port with Power Delivery and DisplayPort or one Thunderbolt 3 port.</p>
Audio port	One headset (headphone and microphone combo) port
Video port	<ul style="list-style-type: none"><li>• One HDMI 2.0 port</li><li>• One Mini DisplayPort 1.4 (only in computers shipped with NVIDIA GeForce GTX 1660Ti, RTX 2060, RTX 2070, or RTX 2070 Super graphics card)</li></ul>
Media-card reader	One SD-card slot
Docking port	Supported through USB Type-C port
Power-adaptor port	One 7.4 mm x 5.1 mm power-adaptor port
Security	Not supported

## Internal slots

The following table lists the internal slots of your Dell G7 17 7700.

**Table 7. Internal slots**

Description	Values
M.2	<ul style="list-style-type: none"><li>• One M.2 2230 slot for WiFi and Bluetooth combo card</li><li>• One M.2 2230/2280 slot for solid-state drive/Intel Optane memory</li></ul> <p><b>NOTE:</b> To learn more about the features of different types of M.2 cards, see the knowledge base article <a href="https://www.dell.com/support/sln/SLN301626">SLN301626</a> at <a href="https://www.dell.com/support">www.dell.com/support</a>.</p>

# Communications

## Ethernet

**Table 8. Ethernet specifications**

Description	Values
Model number	<ul style="list-style-type: none"> <li>Realtek RTL8111H Gigabit ethernet controller (only in computers shipped with NVIDIA GeForce GTX 1650Ti graphics card)</li> <li>Killer E2500V2 PCI-e Gigabit ethernet controller (only in computers shipped with NVIDIA GeForce GTX 1660Ti, RTX 2060, RTX 2070, or RTX 2070 Super graphics card)</li> </ul>
Transfer rate	10/100/1000 Mbps

## Wireless module

**Table 9. Wireless module specifications**

Description	Options			
Model number	Killer 1650i	Intel AX201	Intel 9560	Qualcomm QCA61x4A (DW1820)
Transfer rate	Up to 2400 Mbps	Up to 2400 Mbps	Up to 1733 Mbps	Up to 867 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	<ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> <li>Wi-Fi 4 (WiFi 802.11n)</li> <li>Wi-Fi 5 (WiFi 802.11ac)</li> <li>Wi-Fi 6 (WiFi 802.11ax)</li> </ul>	<ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> <li>Wi-Fi 4 (WiFi 802.11n)</li> <li>Wi-Fi 5 (WiFi 802.11ac)</li> <li>Wi-Fi 6 (WiFi 802.11ax)</li> </ul>	<ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> <li>Wi-Fi 4 (WiFi 802.11n)</li> <li>Wi-Fi 5 (WiFi 802.11ac)</li> </ul>	<ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> <li>Wi-Fi 4 (WiFi 802.11n)</li> <li>Wi-Fi 5 (WiFi 802.11ac)</li> </ul>
Encryption	<ul style="list-style-type: none"> <li>64-bit/128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>	<ul style="list-style-type: none"> <li>64-bit/128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>	<ul style="list-style-type: none"> <li>64-bit/128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>	<ul style="list-style-type: none"> <li>64-bit/128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>
Bluetooth	Bluetooth 5.1	Bluetooth 5.1	Bluetooth 5.0	Bluetooth 5.0

## Audio

The following table lists the audio specifications of your Dell G7 17 7700.

**Table 10. Audio specifications**

Description	Values
Audio controller	Realtek ALC3281 with Nahimic 3D Audio for Gamers
Stereo conversion	Supported

**Table 10. Audio specifications (continued)**

Description		Values
Internal audio interface		Intel High-Definition Audio (HDA) via HDMI
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 G7 17 7700.

Your Dell G7 17 7700 supports various storage configurations, depending on the computer configuration ordered.

- If your computer is shipped with NVIDIA GeForce GTX 1650Ti graphics card, it has one of the following storage options:
  - One 2.5-inch hard drive (for computers shipped with 3-cell, 56 WHr battery)
  - One 2.5-inch hard drive and one Intel Optane Memory M10 (for computers shipped with 3-cell, 56 WHr battery)
  - One M.2 2230 or M.2 2280 solid-state drive (for computers shipped with 3-cell, 56 WHr or 6-cell, 97 WHr battery)

**i 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.
- If your computer is shipped with NVIDIA GeForce GTX 1660Ti, RTX 2060, RTX 2070, or RTX 2070 Super graphics card, it has one of the following storage options:
  - Up to two M.2 2230 solid-state drives
  - Up to two M.2 2280 solid-state drives
  - One M.2 2230 solid-state drive and one M.2 2280 solid-state drive

**i 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.

**i NOTE:** If you have ordered only one solid-state drive, it can be upgraded to the solid-state drive of the same form factor but an additional solid-state drive is not supported. If you have ordered two solid-state drives, they can be upgraded to the solid-state drives of the same form factor respectively.

The primary drive of your Dell G7 17 7700 varies with the storage configuration. For computers:

- with an M.2 solid-state drive, the M.2 solid-state drive is the primary drive
- without an M.2 solid-state drive, the 2.5-inch hard drive is the primary drive

**Table 11. Storage specifications**

Storage type	Interface type	Capacity
2.5-inch hard drive <b>i</b> <b>NOTE:</b> Applies only to computers shipped with NVIDIA GeForce GTX 1650Ti graphics card and 3-cell, 56 Wh battery)	SATA AHCI, up to 6 Gbps	Up to 2 TB
M.2 2230/2280 solid-state drive	PCIe Gen3 x4 NVMe	Up to 1 TB (M.2 2230) and 2 TB (M.2 2280)
M.2 2280 Intel Optane memory	PCIe Gen3 x2 NVMe	Up to 32 GB

## Intel Optane memory

Intel Optane memory functions only as a storage accelerator. It neither replaces nor adds to the memory (RAM) installed on your computer.

- i** **NOTE:** Intel Optane memory is supported on computers that meet the following requirements:
- 7<sup>th</sup> Generation or higher Intel Core i3/i5/i7 processor
  - Windows 10 64-bit version or higher (Anniversary Update)
  - Latest version of Intel Rapid Storage Technology driver

**Table 12. Intel Optane memory**

Description	Values
Type	Storage accelerator
Interface	PCIe 3.0x2
Connector	M.2 2280
Configurations supported	32 GB
Capacity	32 GB

## Media-card reader

The following table lists the media cards supported by your Dell G7 17 7700.

**Table 13. Media-card reader specifications**

Description	Values
Media-card type	One SD card
Media-cards supported	<ul style="list-style-type: none"> <li>• Secure Digital (SD)</li> <li>• Secure Digital High Capacity (SDHC)</li> <li>• Secure Digital Extended Capacity (SDXC)</li> </ul>
<b>i</b> <b>NOTE:</b> 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 Dell G7 17 7700.

**Table 14. Keyboard specifications**

Description	Values
Keyboard type	Four-zone RGB backlit keyboard
Keyboard layout	QWERTY
Number of keys	<ul style="list-style-type: none"><li>• United States and Canada: 103 keys</li><li>• United Kingdom: 104 keys</li><li>• Japan: 107 keys</li></ul>
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 the fn key and the desired key.</p> <p><b>NOTE:</b> You can define the primary behavior of the function keys (F1–F12) changing <b>Function Key Behavior</b> in BIOS setup program.</p>

# Camera

The following table lists the camera specifications of your Dell G7 17 7700.

**Table 15. Camera specifications**

Description	Values
Number of cameras	One
Camera type	HD RGB 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
Diagonal viewing angle:	74.9 degrees

# Touchpad

The following table lists the touchpad specifications of your Dell G7 17 7700.

**Table 16. Touchpad specifications**

Description		Values
Touchpad resolution:		
	Horizontal	1349
	Vertical	929
Touchpad dimensions:		
	Horizontal	115 mm (4.53 in.)
	Vertical	80 mm (3.15 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows 10, see the Microsoft knowledge base article <a href="https://support.microsoft.com/4027871">4027871</a> at <a href="https://support.microsoft.com">support.microsoft.com</a> .

# Power adapter

The following table lists the power adapter specifications of your Dell G7 17 7700.

**Table 17. Power adapter specifications**

Description	Option one	Option two
Type	E4 130 W	E4 240 W
Connector dimensions:		
	External diameter	7.40 mm
	Internal diameter	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)	<ul style="list-style-type: none"> <li>• 1.80 A</li> <li>• 2.50 A</li> </ul>	3.50 A
Output current (continuous)	6.70 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)
	Storage	-40°C to 70°C (-40°F to 158°F)



# Battery

The following table lists the battery specifications of your Dell G7 17 7700.

**Table 18. Battery specifications**

Description		Option one	Option two
Battery type		3-cell (56 Wh) "smart" lithium-ion	6-cell (97 Wh) "smart" lithium-ion
Battery voltage		11.40 VDC	11.40 VDC
Battery weight (maximum)		0.24 kg (0.53 lb)	0.34 kg (0.75 lb)
Battery dimensions:			
	Height	7.20 mm (0.28 in.)	7.20 mm (0.28 in.)
	Width	71.80 mm (2.83 in.)	71.80 mm (2.83 in.)
	Depth	223.20 mm (8.79 in.)	330.50 mm (13.01 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	-40°C to 65°C (-40°F to 149°F)	-40°C to 65°C (-40°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>i</i> <b>NOTE:</b> 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 <a href="http://www.dell.com">www.dell.com</a> .		<ul style="list-style-type: none"> <li>4 hours (when the computer is off)</li> <li>2 hours (ExpressCharge)</li> </ul>	4 hours (when the computer is off)
Coin-cell battery		CR2032	CR2032

# Display

The following table lists the display specifications of your Dell G7 17 7700.

**Table 19. Display specifications**

Description		Option one	Option two
Display type		Full High Definition (FHD)	Full High Definition (FHD)
Display-panel technology		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.)
	Width	381.99 mm (15.04 in.)	381.99 mm (15.04 in.)

**Table 19. Display specifications (continued)**

Description		Option one	Option two
	Diagonal	438.16 mm (17.25 in.)	438.16 mm (17.25 in.)
Display-panel native resolution		1920 x 1080	1920 x 1080
Luminance (typical)		300 nits	300 nits
Megapixels		2.07	2.07
Color gamut		72% NTSC (Typical)	72% NTSC (Typical)
Pixels Per Inch (PPI)		127	127
Contrast ratio (min)		600 : 1	600 : 1
Response time (typ)		25 ms	19 ms
Refresh rate		60 Hz	144 Hz
Horizontal view angle		+/- 85 degrees	+/- 85 degrees
Vertical view angle		+/- 85 degrees	+/- 85 degrees
Pixel pitch		0.1989 mm	0.1989 mm
Power consumption (maximum)		8 W	8.50 W
Anti-glare vs glossy finish		Anti-glare	Anti-glare
Touch options		No	No

## Fingerprint reader (optional)

The following table lists the specifications of the optional fingerprint-reader of your Dell G7 17 7700.

**Table 20. Fingerprint reader specifications**

Description	Values
Fingerprint-reader sensor technology	Capacitive
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	80 x 64

## GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Dell G7 17 7700.

**Table 21. GPU—Integrated**

Controller	External display support	Memory size	Processor
Intel UHD Graphics	HDMI 1.4 port	Shared system memory	10 <sup>th</sup> Generation Intel Core i5/i7/i9

# GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Dell G7 17 7700.

**Table 22. GPU—Discrete**

Controller	External display support	Memory size	Memory type
NVIDIA GeForce GTX 1650 Ti	HDMI 2.0 port	4 GB	GDDR5
NVIDIA GeForce GTX 1660 Ti	<ul style="list-style-type: none"> <li>HDMI 2.0 port</li> <li>Mini DisplayPort 1.4 port</li> </ul>	6 GB	GDDR6
NVIDIA GeForce RTX 2060	<ul style="list-style-type: none"> <li>HDMI 2.0 port</li> <li>Mini DisplayPort 1.4 port</li> </ul>	6 GB	GDDR6
NVIDIA GeForce RTX 2070	<ul style="list-style-type: none"> <li>HDMI 2.0 port</li> <li>Mini DisplayPort 1.4 port</li> </ul>	8 GB	GDDR6
NVIDIA GeForce RTX 2070 Super	<ul style="list-style-type: none"> <li>HDMI 2.0 port</li> <li>Mini DisplayPort 1.4 port</li> </ul>	8 GB	GDDR6

# Operating and storage environment

This table lists the operating and storage specifications of your Dell G7 17 7700.

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

**Table 23. 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 3,048 m (-49.87 ft to 10,000 ft)	-15.2 m to 10,668 m (-49.87 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.