

Specifications

Computer model

Dell G7 7588

System information

Table 2. System information

Processor	8 th Generation Intel Core i5/i7/i9
Chipset	Intel HM370

Dimensions and weight

Table 3. Dimensions and weight

Height	24.95 mm (0.98 in)
Width	389 mm (15.32 in)
Depth	274.70 mm (10.81 in)
Weight	2.70 kg (5.95 lbs)

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

Operating system

- Windows 10 Home (64-bit)
- Windows 10 Professional (64-bit)
- Ubuntu

Memory

Table 4. Memory specifications

Slots	Two SODIMM slots
Type	Dual-channel DDR4
Speed	2666 MHz
Configurations supported	
Per memory module slot	4 GB, 8 GB, and 16 GB
Total memory	4 GB, 8 GB, 12 GB, 16 GB, and 32 GB

Intel Optane memory

Intel Optane memory functions as a storage accelerator. It accelerates the computer and any type of SATA-based storage media such as hard drives and Solid-State Drives (SSDs).

NOTE: Intel Optane memory is supported on computers that meet the following requirements:

- 7th Generation or higher Intel Core i3/i5/i7 processor
- Windows 10 64-bit version or higher (Anniversary Update)
- Intel Rapid Storage Technology driver version 15.5 or higher

Table 5. Intel Optane memory

Interface	PCIe Gen 3 x2, NVMe
Connector	M.2
Configurations supported	16 GB and 32 GB

NOTE: For more information about enabling or disabling the Intel Optane memory, see [Enabling Intel Optane memory](#) or [Disabling Intel Optane memory](#).

Ports and connectors

Table 6. Ports and connectors

External:

Network	One RJ-45 port
USB/Video	<ul style="list-style-type: none">• One USB 3.1 Gen 1 port with Power Delivery• Two USB 3.1 Gen 1 ports• One Thunderbolt 3 (USB 3.1 Gen 2 Type-C) port/DisplayPort• One HDMI port
Audio	One headset (headphone and microphone combo) port

Table 7. Ports and connectors

Internal:

M.2 card	<ul style="list-style-type: none">• One M.2 slot for Solid-State Drive (SSD)• One M.2 slot for wireless/bluetooth combo card
----------	---

Communications

Table 8. Supported communications

Ethernet	10/100/1000 Mbps controller integrated on the system board
Wireless	<ul style="list-style-type: none">• Wi-Fi 802.11ac• Bluetooth 4.2• Miracast

Wireless

Table 9. Wireless

Transfer rate (maximum)	867 Mbps
Frequency bands	2.4 GHz/5 GHz
Encryption	64-bit/128-bit WEP

Audio

Table 10. Audio specifications

Controller	Realtek ALC3246-CG with Waves MaxxAudio Pro
Speakers	Two
Speaker output	<ul style="list-style-type: none">• Average: 2 W• Peak: 2.5 W
Microphone	Digital-array microphones

Storage

Table 11. Storage specifications

Type	Interface	Capacity
One 2.5-inch Hard Disk Drive (HDD)	SATA AHCI, Up to 6 Gbps	Up to 2 TB
One 2.5-inch Solid-State Hybrid Drive (SSHD)	SATA AHCI, Up to 6 Gbps	Up to 1 TB
One M.2 2280 Solid-State Drive (SSD)	<ul style="list-style-type: none">• SATA AHCI, Up to 6 Gbps• PCIe 3 x4 NVME, Up to 32 Gbps	<ul style="list-style-type: none">• Up to 128 GB• Up to 1 TB

Media-card reader

Table 12. Media-card reader specifications

Type	One SD-card slot
Cards supported	<ul style="list-style-type: none">• SD• SD High Capacity (SDHC)• SD Extended Capacity (SDXC)• MultiMediaCard (MMC)

Keyboard

Table 13. Keyboard specifications

Type	<ul style="list-style-type: none">Standard keyboardBacklit keyboard (optional)
Shortcut keys	<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: For better gaming experience, the tactile indicator is available on the S key.</p> <p>NOTE: Press Fn+Esc to switch the primary behavior of the function keys (F1–F12) between two modes – multimedia key mode and function key mode.</p> <p>NOTE: You can define the primary behavior of the function keys (F1–F12) by changing Function Key Behavior in BIOS setup program.</p>

[Keyboard shortcuts](#)

Camera

Table 14. Camera specifications

Resolution	
Camera	<ul style="list-style-type: none">Still image: 0.92 megapixel (HD)Video: 1280 x 720 (HD) at 30 fps
Diagonal viewing angle	
Camera	75.3 degrees

Touchpad

Table 15. Touchpad

Resolution	<ul style="list-style-type: none">Horizontal: 1229Vertical: 929
Dimensions	<ul style="list-style-type: none">Width: 105 mm (4.13 in)Height: 80 mm (3.15 in)

Touchpad gestures

For more information about touchpad gestures for Windows 10, see the Microsoft knowledge base article [4027871](https://support.microsoft.com/4027871) at support.microsoft.com.

Power adapter

Table 16. Power adapter specifications

Type	130 W	180 W
Dimensions (connector)	7.40 mm	7.40 mm
Input voltage	100 VAC–240 VAC	100 VAC–240 VAC
Input frequency	50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)	1.80 A	2.34 A
Output current (continuous)	6.70 A	9.23 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)

Hybrid Power

The Hybrid Power feature enables the system to function optimally during instances of heavy loading, such as graphics and processor-intensive gaming. It does so by coordinating the power input from the power adapter and the battery. This feature is enabled as long as the battery capacity is above 10%.

When the Hybrid Power feature is enabled, these events may occur:

- Battery charge does not increase when connected to the power adapter.
- Battery charges slowly when connected to the power adapter.
- Battery charge depletes when connected to the power adapter.

When the battery charge depletes below 10%, Hybrid Power is disabled, and this may lead to a drop in system performance. Battery charging resumes immediately when the computer is no longer under heavy loading.

Battery

Table 17. Battery specifications

Type	4-cell 56 WHr "smart" lithium-ion
Dimension:	
Width	233.37 mm (9.19 in)
Depth	98.20 mm (3.87 in)

Height	5.90 mm (0.23 in)
Weight (maximum)	0.25 kg (0.55 lb)
Voltage	15.20 VDC
Charging time when the computer is off (approximate)	4 hours
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Life span (approximate)	300 discharge/charge cycles
Temperature range: Operating	0°C to 35°C (32°F to 95°F)
Temperature range: Storage	-40°C to 65°C (-40°F to 149°F)
Coin-cell battery	CR2032

NOTE: It is recommended that you use a Dell coin-cell battery for your computer. Dell does not provide warranty coverage for problems caused by using accessories, parts, or components not supplied by Dell.

Display

Table 18. Display specifications

	15.6-inch FHD non-touchscreen	15.6-inch 4K non-touchscreen
Resolution (maximum)	1920 x 1080	3840 x 2160
Pixel pitch	0.179 mm	0.090 mm
Panel technology	IPS	IPS
	<p>NOTE: The maximum brightness and color gamut of the screen varies depending on the configuration ordered and is available only in certain regions.</p>	
Viewing angle (Left/Right/Down/Up)	80/80/80/80 degrees	80/80/80/80 degrees
Pixel pitch	0.0765 mm	0.0765 mm
Refresh rate	60 HZ	60 HZ
Operating angle	0 degrees (closed) to 135 degrees	0 degrees (closed) to 135 degrees
Controls	Brightness can be controlled using shortcut keys	Brightness can be controlled using shortcut keys
Dimension:		
Height (excluding bezel)	193.59 mm (7.62 in)	194.40 mm (7.65 in)
Width (excluding bezel)	344.16 mm (13.54 in)	345.60 mm (13.61 in)
Diagonal (excluding bezel)	394.87 mm (15.55 in)	396.52 mm (15.61 in)

Video

Table 19. Video specifications

Type	Controller	Memory
Integrated	Intel UHD Graphics 630	Shared system memory
Discrete	NVIDIA GeForce GTX 1050	4 GB
	NVIDIA GeForce GTX 1050 TI	4 GB
	NVIDIA GeForce GTX 1060 Max-Q Design	6 GB

Computer environment

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

Table 20. Computer environment

	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 (maximum)	-15.2 m to 3048 m (-50 ft to 10,000 ft)	-15.2 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.

‡ Measured using a 2 ms half-sine pulse when the hard-drive head is in parked position.