

# Technical specifications

## System information

**Table 3. System information**

Feature	Specifications
Chipset	Intel Chipset
DRAM bus width	64-bit
FLASH EPROM	24 MB / 32 MB
PCIe bus	100 Mhz

## Processor

**NOTE:** Processor numbers are not a measure of performance. Processor availability is subject to change and may vary by region/country.

**Table 4. Processor specifications**

Type	UMA Graphics
8th Generation Intel core i5-8265U Processor (Quad Core (QC), 6M SmartCache, base frequency 1.6 GHz, up to 3.9 GHz)	
8th Generation Intel core i7-8665U Processor (QC, 8M SmartCache, base frequency 1.9 GHz, up to 4.8 GHz)	Intel UHD Graphics 620 (8th Generation Intel Core)
8th Generation Intel core i5-8365U Processor (QC, 6M SmartCache, base frequency 1.6 GHz, up to 4.1 GHz)	

## Memory

**Table 5. Memory specifications**

Feature	Specifications
Minimum memory configuration	4 GB
Maximum memory configuration	32 GB
Number of slots	Two SoDIMM
Memory options	<ul style="list-style-type: none"> <li>· 4 GB - 1 x 4 GB</li> <li>· 8 GB - 1 x 8 GB</li> <li>· 8 GB - 2 x 4 GB</li> <li>· 16 GB - 1 x 16 GB</li> <li>· 16 GB - 2 x 8 GB</li> <li>· 32 GB - 2 x 16 GB</li> </ul>

**Table 5. Memory specifications(continued)**

Feature	Specifications
Type	DDR4
Speed	2400 MHz

## Storage

**Table 6. Storage specifications**

Type	Form factor	Interface	Capacity
Solid-state drive	M.2 2280	PCIe / SATA	Up to 1 TB
Solid-state drive	M.2 2230 (With bracket)	PCIe	128 GB
Self Encrypting Drive (SED) / Opal SED	M.2 2280	PCIe NVMe	256 GB

## Media card-reader

**Table 7. Media card-reader specifications**

Feature	Specifications
Type	One micro-SD card slot
Supported cards	<ul style="list-style-type: none"> <li>· SD</li> <li>· SDHC</li> <li>· SDXC</li> </ul>

## Audio

**Table 8. Audio specifications**

Feature	Specifications
Controller	Realtek ALC3254 with Waves MaxxAudio Pro
Type	Two-channel high-definition audio
Speakers	Two (Directional speakers)
Interface	Intel HDA bus
Internal speaker amplifier	2 W (RMS) per channel

# Video card

**Table 9. Video card specifications**

Controller	Type	CPU Dependency	Graphics memory type	Capacity	External display support	Maximum resolution
Intel UHD Graphics 620	UMA	<ul style="list-style-type: none"> <li>8th Gen Intel Core i5 processor</li> <li>8th Gen Intel Core i7 processor</li> </ul>	Integrated	Shared system memory	HDMI 1.4a	4096 x 2304

# Camera

**Table 10. Camera specifications**

Feature	Specifications
Resolution	<ul style="list-style-type: none"> <li>Still image: 0.92 megapixels</li> <li>Video: 1280 x 720 at 30 fps</li> </ul>
Diagonal viewing angle	<ul style="list-style-type: none"> <li>Diagonal &gt;/ 86.7° (tolerance +/- 3%)</li> <li>Vertical &gt;/ 47°</li> </ul>
Camera Options	<ul style="list-style-type: none"> <li>No Camera</li> <li>6.0 mm RGB HD</li> <li>6.0 mm RGB IR</li> <li>3.0 mm RGB IR</li> <li>2.7 mm RGB HD</li> </ul> <p>Ambient Light Sensor is only available with the 3mm IR camera option</p>
Video Max resolution	1280 x 720 (HD) at 30 FPS
Still image max resolution	0.92 megapixel (1280 x 720)

# Ports and connectors

**Table 11. Ports and connectors**

Features	Specifications
Memory card reader	micro-SD 4.0 memory card reader (optional)
USB	<ul style="list-style-type: none"> <li>One USB Type-C 3.1 Gen 2 port (Thunderbolt)</li> <li>Two USB Type-A 3.1 Gen 1 ports (one PowerShare capable)</li> </ul>
Security	<ul style="list-style-type: none"> <li>Noble Wedge lock slot</li> <li>Smart card reader (optional)</li> </ul>
Docking port	Dell USB 3.0 Dock (UNO)
Audio	Universal audio jack (Headset Jack + microphone-in + line-in support)
Video	HDMI 1.4a

# Wireless

## Wireless LAN card specifications

Table 12. Wireless LAN card specifications

Wireless card options
Qualcomm QCA61x4A 802.11ac Dual Band (2x2) Wireless Adapter + Bluetooth 4.2 (non vPro)
Intel Dual-Band Wireless-AC 9560 Wi-Fi + Bluetooth 5.0 Wireless Card (2x2)(vPro)(Bluetooth Optional)
Intel Wi-Fi 6 AX200 2x2 .11ax 160MHz + Bluetooth 5.0

## WWAN card specifications

Table 13. Wireless WAN card specifications

Wireless card option
Mobile Broadband Qualcomm Snapdragon X20 Global Gigabit LTE (Optional)

# Display

Table 14. Display specifications

Feature	Specifications
Type	<ul style="list-style-type: none"><li>· 14-in. HD AG (WXGA 1366x768), 220 nits, non-touch display</li><li>· 14-in. FHD AG (1920 x 1080), 300 nits, non-touch display</li><li>· 14-in. FHD AG (1920 x 1080), 300 nits, non-touch display with Dynamic Privacy Dell SafeScreen</li><li>· 14-in. FHD AG (1920 x 1080), 255 nits, touch display</li></ul>
Height (Active area)	173.89 mm (6.85 in.)
Width (Active area)	309.14 mm (12.18 in.)
Diagonal	355.6 mm (14.0 in.)
Luminance/Brightness (typical)	HD: 220 nits (Super Low Power) / FHD: 300 nits
Refresh rate	60 Hz

# Keyboard

Table 15. Keyboard specifications

Feature	Specifications
Number of keys	<ul style="list-style-type: none"><li>· 81 (U.S)</li><li>· 82 (UK)</li><li>· 82 (Brazil)</li><li>· 85 (Japan)</li></ul>

**Table 15. Keyboard specifications(continued)**

Feature	Specifications
Size	Full sized <ul style="list-style-type: none"> <li>· X= 19.05 mm key pitch</li> <li>· Y= 19.05 mm key pitch</li> </ul>
Backlit keyboard	Optional
Layout	QWERTY / AZERTY / Kanji

## Touchpad

**Table 16. Touchpad specifications**

Feature	Specifications
Resolution	1048 x 984
Dimensions	<ul style="list-style-type: none"> <li>· Width: 3.91 inch (99.5 mm)</li> <li>· Height: 2.08 inch (53 mm)</li> </ul>
Multi-touch	Configurable single finger and multi-finger gestures

## 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](https://support.microsoft.com).

## Operating system

**Table 17. Operating system**

Feature	Specifications
Operating systems supported	<ul style="list-style-type: none"> <li>· Windows 10 Home (64 bit)</li> <li>· Windows 10 Pro (64 bit)</li> <li>· Ubuntu</li> </ul>

## Battery

**Table 18. Battery specifications**

Type	<ul style="list-style-type: none"> <li>· Polymer 3-cell 42 WHr</li> <li>· Polymer 4-cell 60 WHr</li> <li>· Polymer 4-cell 60 WHr (LCL)</li> </ul>
Dimension	Polymer 3-cell 42 WHr <ul style="list-style-type: none"> <li>· Width: 95.9 mm (3.78 in)</li> <li>· Length: 200.5 mm (7.89 in)</li> <li>· Height: 5.7 mm (0.22 in)</li> </ul> Polymer 4-cell 60 WHr and LCL

**Table 18. Battery specifications(continued)**

	<ul style="list-style-type: none"> <li>Width: 95.9 mm (3.78 in)</li> <li>Length: 238 mm (9.37 in)</li> <li>Height: 5.7 mm (0.22 in)</li> </ul>
Weight (maximum)	<ul style="list-style-type: none"> <li>Polymer 3-cell 42 WHr: 192.5 g (0.42 lb)</li> <li>Polymer 4-cell and LCL: 270 g (0.60 lb)</li> </ul>
Voltage	11.4 VDC
Life span	<ul style="list-style-type: none"> <li>Polymer 3-cell 42 WHr and 4-cell 60 WHr (Standard Pack): 300 discharge / charge cycles</li> <li>Polymer 4-cell 60 WHr (LCL): 1000 discharge / charge cycles</li> </ul>
Charging time when the computer is off (approximate)	<ul style="list-style-type: none"> <li>Standard Charge: 0°C to 50°C : 4 hours</li> <li>Express Charge†: <ul style="list-style-type: none"> <li>0°C to 15°C : 4 hours</li> <li>16°C to 45°C : 2 hours</li> <li>46°C to 50°C : 3 hours</li> </ul> </li> </ul>
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions
Temperature range: Operating	<ul style="list-style-type: none"> <li>Charging: 0°C to 50°C (32°F to 122°F)</li> <li>Discharging : 0°C to 70°C (32°F to 158°F)</li> </ul>
Temperature range: Storage	-20°C to 60°C (-4°F to 140°F)
Coin-cell battery	CR 2032

**NOTE:** †For batteries with the ExpressCharge feature, the battery will typically have at least an 80% charge after about an hour of charging with the system off, and fully charged in about 2 hours with the system off.

Enabling ExpressCharge requires that both the computer and the battery used be ExpressCharge capable. If these requirements are not met, ExpressCharge will not be enabled.

## Power adapter

**Table 19. Power adapter specifications**

Feature	Specifications
Type	<ul style="list-style-type: none"> <li>E5 65 W 7.4 mm Barrel Adapter</li> <li>E5 65 W BFR/PVC Halogen Free adapter, 7.4 mm barrel</li> <li>E5 65 W Rugged Adapter 7.4 mm barrel (India only)</li> <li>E5 90 W 7.4 mm Barrel Adapter</li> <li>65 W adapter, Type-C</li> <li>90 W adapter, Type-C</li> </ul>
Input Voltage	100 VAC - 240 VAC
Input current (maximum)	<ul style="list-style-type: none"> <li>1.7 A for 65 W</li> <li>2.5 A for 90 W</li> </ul>
Input frequency	50 Hz to 60 Hz

**Table 19. Power adapter specifications(continued)**

Feature	Specifications
Output current	<ul style="list-style-type: none"> <li>• 3.34 A for 65 W</li> <li>• 4.62 A for 90 W</li> </ul>
Rated output voltage	19.5 VDC
Temperature range (Operating)	0°C to 40° C (32°F to 104°F)
Temperature range (Non-Operating)	40°C to 70°C (-40°F to 158°F)

## Dimensions and weight

**Table 20. Dimensions and weight**

Feature	Specifications	
	Aluminum (Al)	Carbon fibre (CF)
Height	Front - 16.75 mm(0.66 inch) Rear - 18.20 mm(0.72 inch)	Front - 17.82 mm(0.70 inch) Rear - 18.96 mm(0.75 inch)
Width	321.35 mm(12.65 inch)	
Depth	214.08 mm (8.42 inch)	
Weight	1.4 kg(3.11 lb)	1.35 kg(2.99 lb)

## Computer environment

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

**Table 21. Computer environment**

	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)	10% to 90% (non-condensing) <b>NOTE: Maximum dew point temperature = 26°C</b>	0% to 95% (non-condensing) <b>NOTE: Maximum dew point temperature = 33°C</b>
Vibration (maximum)	0.66 GRMS	1.30 GRMS
Shock (maximum)	140 G †	160 G ‡
Altitude (maximum)	0 m to 3048 m (0 ft to 10,000 ft)	0 m to 10,668 m (0 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.