

# Latitude 7220 Rugged Extreme Tablet 5G

## Setup and Specifications

## 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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# Set up your Latitude 7220 Rugged Extreme Tablet

## Steps

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


 **NOTE:** To conserve battery power, the battery might enter power-saving mode.



2. Finish Windows system setup.

Follow the on-screen instructions to complete the setup. When setting up, it is recommended 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.

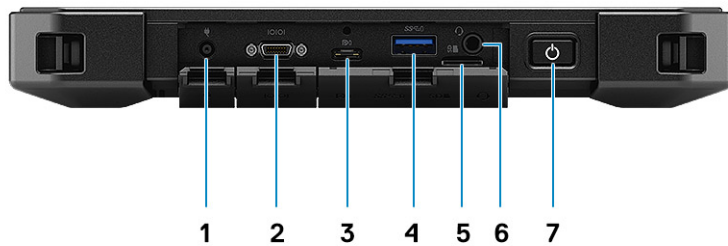
3. Locate and use Dell apps from the Windows Start menu—Recommended.

**Table 1. Locate Dell apps**

Dell apps	Details
	<p><b>Dell Product Registration</b> Register your computer with Dell.</p>
	<p><b>Dell Help &amp; Support</b> Access help and support for your computer.</p>
	<p><b>SupportAssist</b> SupportAssist is the smart technology that keeps your computer running at its best by optimizing settings, detecting issues, removing viruses and notifies when you need to make system updates. SupportAssist proactively checks the health of your system's hardware and software. When an issue is detected, the necessary system state information is sent to Dell to begin troubleshooting. SupportAssist is preinstalled on most of the Dell devices running Windows operating system. For more information, see SupportAssist for Business PCs User's Guide on <a href="http://www.dell.com/serviceabilitytools">www.dell.com/serviceabilitytools</a>.</p>
	<p><b>Dell Update</b> Updates your computer with critical fixes and important device drivers as they become available.</p>
	<p><b>Dell Digital Delivery</b> Download software applications including software that is purchased but not preinstalled on your computer.</p>

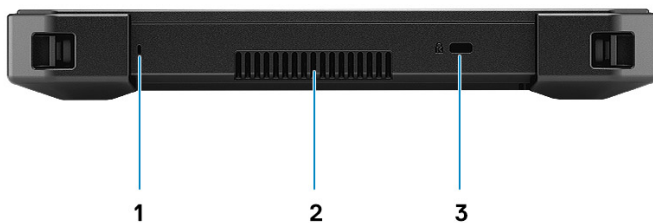
## Chassis overview

### Right view



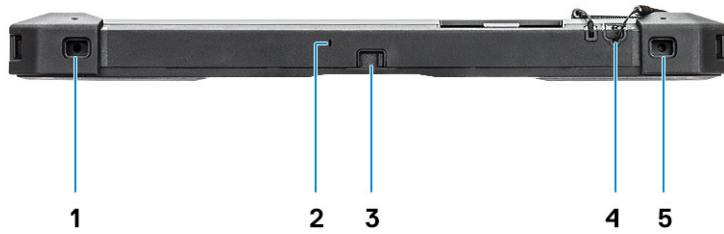
1. Power connector port
2. Mini serial RS-232 port
3. USB Type-C DisplayPort Alt mode/USB 3.2 Gen2/Power Delivery
4. USB 3.2 Gen1 Type-A with PowerShare
5. Micro SD-card slot
6. Universal audio jack
7. Power button/ LED status light

### Left view



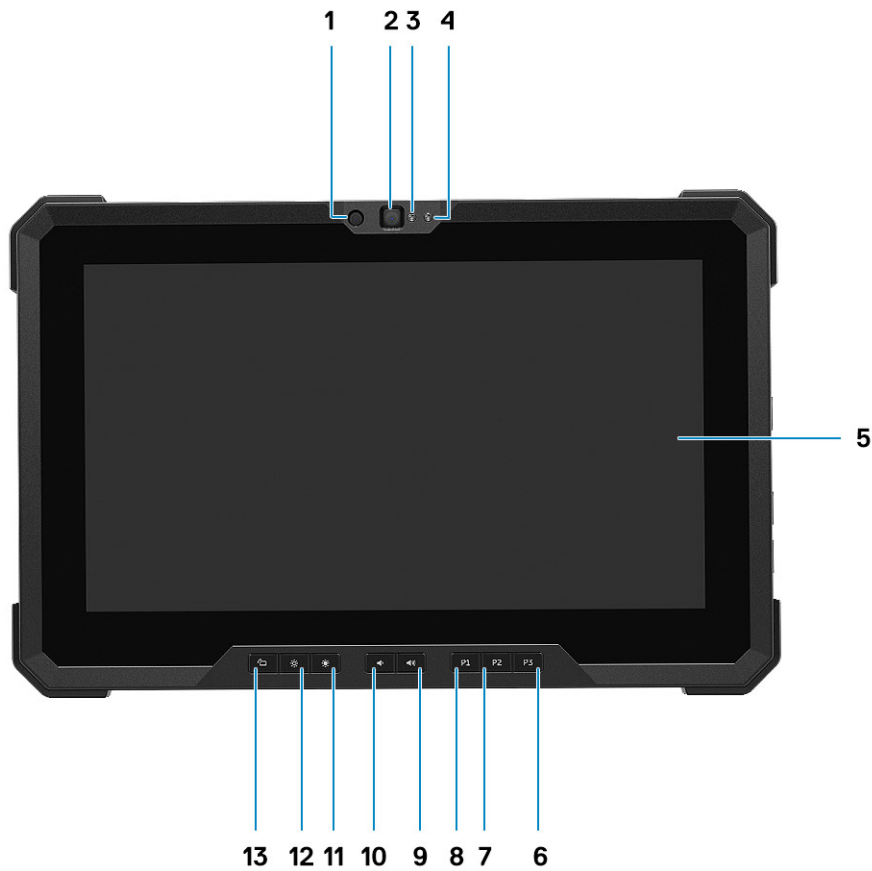
1. Microphone
2. Quad cool vent output
3. Lock slot (T-bar)

## Top view



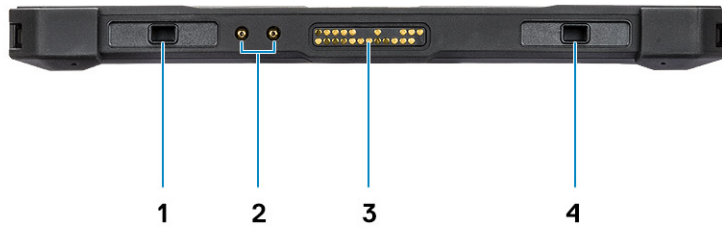
1. Accessory connection point
2. Microphone
3. Camera shutter switch
4. Stylus
5. Accessory connection point


# Front view



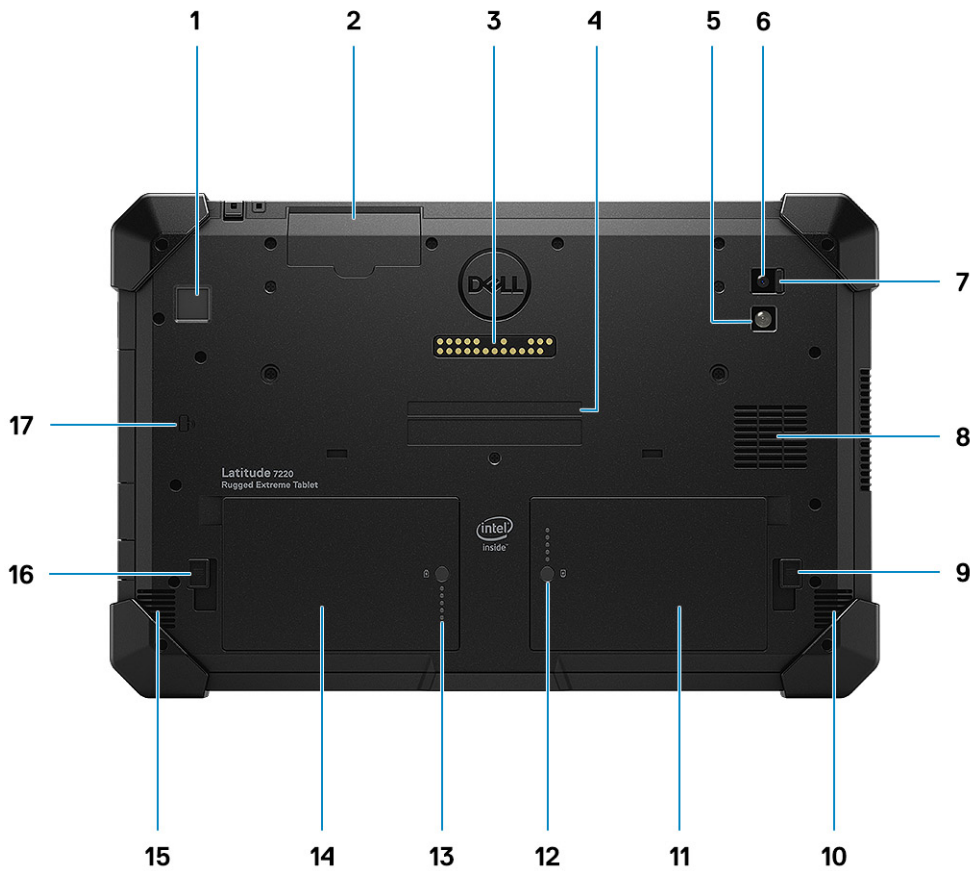
- 1. IR emitter
- 2. Camera
- 3. Camera status light
- 4. Ambient light sensor
- 5. Display
- 6. User programmable button 3
- 7. User programmable button 2
- 8. User programmable button 1
- 9. Volume increase button
- 10. Volume decrease button
- 11. Brightness increase button
- 12. Brightness decrease button
- 13. Screen rotate lock button

## Bottom view



1. Docking/Keyboard retention alignment feature
2. Radio antennae pass-through connector
3. Docking pogo connector
-  **NOTE:** Used for docking a docking station or a rugged keyboard.
4. Docking/Keyboard retention alignment feature

# Back view



1. Fingerprint reader (optional)
2. Smart card reader slot
3. OpExpansion module pogo connector
4. Service tag and Express service code label
5. LED flash
6. Rear camera
7. Rear camera shutter switch
8. Quad cool intake vent
9. Right battery release latch
10. Speaker
11. Right battery
12. Right battery LED indicator
13. Left battery LED indicator
14. Left battery
15. Speaker
16. Left battery release latch
17. Contactless smart card reader (optional)

## Technical specifications

**NOTE:** Offerings may vary by region. The following specifications are only those required by law to ship with your computer. For more information about the configuration of your computer, go to Help and Support in your Windows operating system and select the option to view information about your computer.

### Dimensions and weight

**Table 2. Dimensions and weight**

Description	Values
Height:	
Front	203 mm (7.99 in.)
Rear	209 mm (8.23 in.)
Width	<ul style="list-style-type: none"> <li>with bumpers: 318.2 (12.52 in.)</li> <li>without bumpers: 312.20 mm</li> </ul>
Depth	<ul style="list-style-type: none"> <li>with bumpers: 27.7 mm (1.09 in.)</li> <li>without bumpers: 24.7 mm (0.97 in.)</li> </ul>
Starting weight	1.31 kg (2.9 lb) <b>NOTE:</b> The weight of your tablet depends on the configuration ordered and the manufacturing variability.

### Processors

**Table 3. Processors**

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics
8 <sup>th</sup> Generation Intel Core i3-8145U	15 W	2	4	2.10 GHz to 3.90 GHz Turbo	4 MB SmartCache	Intel UHD Graphics 620
8 <sup>th</sup> Generation Intel Core i5-8365U, vPro	15 W	4	8	1.60 GHz to 4.10 GHz Turbo	6 MB SmartCache	Intel UHD Graphics 620
8 <sup>th</sup> Generation Intel Core i7-8665U, vPro	15 W	4	8	1.90 GHz to 4.80 GHz Turbo	8 MB SmartCache	Intel UHD Graphics 620

# Chipset

Table 4. Chipset

Description	Values
Chipset	Intel
Processor	Whiskey lake - 8 <sup>th</sup> Gen Intel Core
DRAM bus width	Two channels, 64 bits
Flash EPROM	32 MB
PCIe bus	Up to Gen 3

# Operating system

Your Latitude 7220 Rugged Extreme Tablet supports the following operating systems:

Windows 10/11 Professional (64-bit)

# Memory

Table 5. Memory specifications

Description	Values
Slots	Two integrated on system board
Type	LPDDR3
Speed	2133 MHz
Maximum memory	16 GB
Minimum memory	8 GB
Configurations supported	<ul style="list-style-type: none"><li>• 8 GB LPDDR3 at 2133 MHz</li><li>• 16 GB LPDDR3 at 2133 MHz</li></ul>

# Ports and connectors

Table 6. External ports and connectors

Description	Values
<b>External:</b>	
Network	Ethernet connection available through optional Expansion Module or dock.
USB	<ul style="list-style-type: none"><li>• One USB 3.2 Gen 2 Type-A with PowerShare</li><li>• One USB Type-C DisplayPort Alt Mode/USB3.2 Gen2/ Power Delivery</li></ul>
Audio	One headset (headphone and microphone combo) port

**Table 6. External ports and connectors (continued)**

Description	Values
Video	Supported via dock or directly through USB Type-C DP Alt mode
Power adapter port	4.5 mm barrel-type
Security	Lock slot (T-bar)
Card slot	micro-SD card
Serial port	RS-232 mini connector
Expansion port	Pogo Connector (back)
Dock/Keyboard	Pogo Connector (bottom)

**Table 7. Internal ports and connectors**

Description	Values
<b>Internal:</b>	
One M.2 Key-M (2280 or 2230) for solid-state drive One M.2 3042 Key-B for WWAN One M.2 2230 Key-E for WLAN	<ul style="list-style-type: none"> <li>One M.2 2230 slot for solid-state drive 128 GB</li> <li>One M.2 2280 slot for solid-state drive 256 GB/512 GB/1 TB/2 TB</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="#">SLN301626</a>.</p>
SIM card	uSIM card slot

## Communications

### Wireless module

**Table 8. Wireless module specifications**

Description	Values				
Model number	Intel Wireless-AC 9560, 2 x2, 802.11ac with Bluetooth 5.1	Intel Wi-Fi 6 AX200, 2 x 2, 802.11ax with MU-MIMO, without Bluetooth	Intel Wi-Fi 6 AX200, 2 x 2, 802.11ax with MU-MIMO, Bluetooth 5.2	DW5821E Snapdragon X20 4G/LTE Wireless WAN card	DW5930e, Snapdragon SDX55, 5G Wireless WAN card
Transfer rate	Up to 1.73 Gbps	Up to 2.40 Gbps	Up to 2.40 Gbps	Up to 1.2 Gbps	Up to 3 Gbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz	5 x 20 MHz	7 x 20 MHz
Wireless standards	<ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> <li>WiFi 4 (WiFi 802.11n)</li> <li>WiFi 5 (WiFi 802.11ac)</li> </ul>	<ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> <li>WiFi 4 (WiFi 802.11n)</li> <li>WiFi 5 (WiFi 802.11ac)</li> <li>WiFi 6 (WiFi 802.11ax)</li> </ul>	<ul style="list-style-type: none"> <li>WiFi 802.11a/b/g</li> <li>WiFi 4 (WiFi 802.11n)</li> <li>WiFi 5 (WiFi 802.11ac)</li> <li>WiFi 6 (WiFi 802.11ax)</li> </ul>	<ul style="list-style-type: none"> <li>LTE FDD/TDD</li> <li>WCDMA/HSPA+</li> <li>GPS/GLONASS/Beidou/Galileo</li> </ul>	<ul style="list-style-type: none"> <li>NR FR1(Sub6) FDD/TDD</li> <li>LTE FDD/TDD</li> <li>WCDMA/HSPA+</li> <li>GPS/GLONASS/Beidou/Galileo</li> </ul>

**Table 8. Wireless module specifications (continued)**

Description	Values				
	Encryption	<ul style="list-style-type: none"> <li>64-bit and 128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>	<ul style="list-style-type: none"> <li>64-bit and 128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>	<ul style="list-style-type: none"> <li>64-bit and 128-bit WEP</li> <li>AES-CCMP</li> <li>TKIP</li> </ul>	NA
Bluetooth	Bluetooth 5.1	Not supported	Bluetooth 5.2	NA	NA

## GPS and RF antenna passthrough

This section provides the GPS passthrough and RF antenna passthrough information for the Dell Latitude 7220 Rugged Extreme Tablet.

**Table 9. GPS and RF Antenna passthrough (WLAN)**

For WLAN Main Antenna							
Frequency (MHz)	Switch Circuit Loss (dB)			Jump Cable Loss (dB) 51 mm, 1.37LL	Total Loss (dB)		
	Non-ATEX (MU2)	ATEX (MU2)	Non-ATEX (DVT1)		Non-ATEX	ATEX	DVT1
2400~2500	-1.18	-0.60	-0.85	-0.24	-1.42	-0.84	-1.09
5150~5850	-1.91	-1.31	-1.37	-0.35	-2.26	-1.66	-1.72

**Table 10. GPS and RF Antenna passthrough (LTE)**

For LTE Main Antenna							
Frequency (MHz)	Switch Circuit Loss (dB)			Jump Cable Loss (dB) 51 mm, 1.37LL	Total Loss (dB)		
	Non-ATEX (MU2)	ATEX (MU2)	Non-ATEX (DVT1)		Non-ATEX	ATEX	DVT1
600~1000	-0.5	-0.26	-0.4	-0.14	-0.64	-0.40	-0.54
1700~1880	-1.2	-0.45	-0.77	-0.18	-1.38	-0.63	-0.95
1880~2330	-1.52	-0.48	-0.89	-0.21	-1.73	-0.69	-1.10
2330~2700	-1.54	-0.53	-0.85	-0.24	-1.78	-0.77	-1.09
3300~3800	-1.58	-0.63	-0.98	-0.27	-1.85	-0.90	-1.25
5150~5930	-1.96	-1.38	-1.28	-0.35	-2.31	-1.73	-1.63

## Audio

**Table 11. Audio specifications**

Description	Values
Controller	Realtek ALC3254
Stereo conversion	Supported

**Table 11. Audio specifications (continued)**

Description	Values
Internal interface	Intel high definition audio (HDA)
External interface	Universal Audio Jack
Speakers	2
Speaker Output Average	2 W RMS
Speaker Output Peak	2.5 W

## Storage

Your tablet supports one M.2 2230/2280 slot for solid-state drive.

**Table 12. Storage specifications**

Storage type	Interface type	Capacity
One M.2 2230 solid-state drive	PCIe Gen3 x4 NVMe, Class 35 SSD	128 GB
One M.2 2280 solid-state drive	PCIe Gen3 x4 NVMe, Class 40 SSD	256 GB to 2 TB
One M.2 2280 solid-state drive	PCIe Gen3 x4 NVMe, Class 40 Self-Encrypting SSD	256 GB to 1 TB

## Media-card reader

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

Description	Values
Type	Micro SD-card slot
Cards supported	<ul style="list-style-type: none"> <li>• Micro Secure Digital (mSD)</li> <li>• Micro Secure Digital High Capacity (mSDHC)</li> <li>• Micro Secure Digital Extended Capacity (mSDXC)</li> </ul>

## Camera

**Table 14. Camera specifications**

Description	Values
Number of cameras	Two
Type	<ul style="list-style-type: none"> <li>• Front Camera - 5 MP, RGBIr camera with Windows Hello feature</li> <li>• Rear Camera - 8 MP, RGB camera with Auto Focus and Flash LED</li> </ul>
Location	<ul style="list-style-type: none"> <li>• Front Camera - 5 MP</li> <li>• Rear Camera - 8 MP</li> </ul>

**Table 14. Camera specifications (continued)**

Description		Values
Sensor type		CMOS sensor technology
Camera		
	Still image	<ul style="list-style-type: none"> <li>• Front Camera - 5.03 megapixels</li> <li>• Rear Camera - 7.99 megapixels</li> </ul>
	Video	<ul style="list-style-type: none"> <li>• Front Camera - 2592 x 1944 (5 MP) at 30 fps</li> <li>• Rear Camera - 3264 x 2448 (8 MP) at 15 fps</li> </ul>
Diagonal viewing angle		
Camera		<ul style="list-style-type: none"> <li>• Front Camera - 88.9°</li> <li>• Rear Camera - 77.3°</li> </ul>

## Power adapter

**Table 15. Power adapter specifications**

Description	Values	
Type	E4 45 W	E5 90 W
Input voltage	100 VAC x 240 VAC	100 VAC - 240 VAC
Input frequency	50 Hz x 60 Hz	50 Hz - 60 Hz
Input current (maximum)	1.3 A	1.56A
Output current (continuous)	2.31 A (continuous)	4.62 A (continuous)
Rated output voltage	19.50 VDC	19.50 VDC
Temperature range:		
Operating	0 °C – 40 °C (32 °F - 104 °F)	0 °C - 40 °C (32 °F - 104 °F)
Storage	-40 °C - 70 °C (-40 °F - 158 °F)	-40 °C - 70 °C (-40 °F - 158 °F)

## Battery

**Table 16. Battery specifications**

Description	Values	
Type	34 WHr, 2-Cell, ExpressCharge, user-replaceable	34 WHr (LCL)
Voltage	7.6 VDC	7.6 VDC
Weight (maximum)	220 g (0.48 lb)	220 g (0.48 lb)
Dimensions:		
Height	15.00 mm (0.59 in.)	15.00 mm (0.59 in.)

**Table 16. Battery specifications (continued)**

Description		Values	
	Width	62.70 mm (2.46 in.)	62.70 mm (2.46 in.)
	Depth	103.60 mm (4.07 in.)	103.60 mm (4.07 in.)
Temperature range:			
	Operating	0 °C - 60 °C (32 °F - 140 °F)	0 °C - 60 °C (32 °F - 140 °F)
	Storage	-20 °C - 65 °C (-4 °F - 149 °F)	-20 °C - 65 °C (-4 °F - 149 °F)
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.
Charging time (approximate)		<ul style="list-style-type: none"> <li>● 0 °C - 15 °C: 0-100% RSOC within 4 hours</li> <li>● 15 °C - 45 °C: 0-100% RSOC within 2 hours</li> <li>● 46 °C - 50 °C: 0-100% RSOC within 3 hours</li> </ul>	<ul style="list-style-type: none"> <li>● 0 °C - 15 °C: 0-100% RSOC within 4 hours</li> <li>● 15 °C - 45 °C: 0-100% RSOC within 2 hours</li> <li>● 46 °C - 50 °C: 0-100% RSOC within 3 hours</li> </ul>
Life span (approximate)		300 discharge/charge cycles	300 discharge/charge cycles
Coin-cell battery		CR2032	CR2032
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.

## Display

**Table 17. Display specifications**

Description		Values
Type		Full High Definition (FHD)
Panel technology		Wide View Angle (WVA)
Luminance (typical)		1000 nits outdoor readable
Dimensions (active area):		
	Height	256.32 mm (10.09 in.)
	Width	144.18 mm (5.67 in.)
	Diagonal	294.64 mm (11.6 in.)
Native resolution		1920 x 1080
Megapixels		16.7 million
Color gamut		72% NTSC
Pixels Per Inch (PPI)		190
Contrast ratio (min)		1500 : 1 (Typ)

**Table 17. Display specifications (continued)**

Description	Values
Response time (max)	40 ms (max)
Refresh rate	60 Hz
Horizontal view angle	89 degrees
Vertical view angle	89 degrees
Pixel pitch	0.1335 mm x 0.1335 mm
Power consumption (maximum)	8.02 W
Anti-glare vs glossy finish	Anti-glare, Anti-smudge
Touch options	Yes, Glove-capable touchscreen with 10-point touch support
Glass	Gorilla Glass 3

## Fingerprint reader

**Table 18. Fingerprint reader specifications**

Description	Values
Sensor technology	Trans-capacitive sensing
Sensor resolution	363 dpi
Sensor area	7.42 mm x 5.95 mm
Sensor pixel size	70 um x 70 um

## Video

**Table 19. Integrated graphics specifications**

Integrated graphics			
Controller	External display support	Memory size	Processor
Intel UHD 620 Graphics	USB Type-C DisplayPort	Shared system memory	8th Generation Intel Core i3/i5/i7

## Security

**Table 20. Security**

Features	Specifications
Trusted Platform Module (TPM) 2.0	Integrated on system board
Fingerprint reader	Optional
Contacted Smartcard reader	Optional
Contactless Smartcard reader	Optional

**Table 20. Security (continued)**

Features	Specifications
Lock slot (T-bar)	Standard
Protected slot/vent openings	Standard

## Data security

**Table 21. Data security**

Features	Specifications
Dell Data Protection - Endpoint Security Suite Enterprise (DDP ESSE)	Optional
Dell Data Protection - Software Encryption (DDPE)	Optional
Dell ControlVault 3.0	Optional
Microsoft Device Guard and Credential Guard (Windows Enterprise)	Optional
Microsoft Windows Bitlocker	Optional

## Regulatory, Environmental Compliance and Trusted Platform Module (TPM)

**Table 22. Regulatory, Environmental Compliance and TPM**

Features	Specifications
Energy Star	Energy Star 7 compliant
TPM	<ul style="list-style-type: none"> <li>• Hardware Trusted Platform Module (Discrete TPM Enabled)</li> <li>• Firmware Trusted Platform Module only (Discrete TPM Disabled)</li> </ul>
Environmental, Ergonomic, and Regulatory standards	<ul style="list-style-type: none"> <li>• Energy Star</li> <li>• EPEAT* Registered</li> <li>• CEL</li> <li>• WEEE</li> <li>• Japan Energy Law</li> <li>• South Korea Eco-label</li> <li>• EU RoHS</li> <li>• China RoHS</li> <li>• MIL 810G</li> </ul> <p>See your local representative or <a href="https://www.dell.com">https://www.dell.com</a> for specific details.</p> <p>*For specific country participation and rating, please see <a href="https://www.epeat.net">https://www.epeat.net</a>.</p>

## Computer environment

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

**Table 23. Computer environment**

<b>Description</b>	<b>Operating</b>	<b>Storage</b>
Temperature range	-29°C to 63°C (-20.2°F to 145°F)	-51°C to 71°C (-70.6°F to 160°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	5% to 95% (non-condensing)
Vibration (maximum)*	<ul style="list-style-type: none"><li>• 1.04 GRMS</li><li>• 0.20 GRMS</li><li>• 0.74 GRMS</li></ul>	<ul style="list-style-type: none"><li>• 2.24 GRMS</li><li>• 1.45 GRMS</li><li>• 1.32 GRMS</li></ul>
Shock (maximum)	40 G <sup>†</sup> , 11ms, saw-tooth, 3 shocks +/- per axis, 3 axes	185 G <sup>†</sup> , 2ms half sine; 2 shocks/axis/direction for a total of 12 shocks
Altitude (maximum)	Chamber at 15,000 ft for 1 hour	Chamber at 30,000 ft for 1 hour

\* 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.

# Getting help and contacting Dell

## Self-help resources


You can get information and help on Dell products and services using these self-help resources:


**Table 24. Self-help resources**

Self-help resources	Resource location
Information about Dell products and services	<a href="http://www.dell.com">www.dell.com</a>
My Dell app	
Tips	
Contact Support	In Windows search, type <code>Contact Support</code> , and press Enter.
Online help for operating system	<a href="http://www.dell.com/support/windows">www.dell.com/support/windows</a> <a href="http://www.dell.com/support/linux">www.dell.com/support/linux</a>
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals and documents.	Your Dell computer is uniquely identified by a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, enter the Service Tag or Express Service Code at <a href="http://www.dell.com/support">www.dell.com/support</a> .  For more information on how to find the Service Tag for your computer, see <a href="#">Locate the Service Tag on your computer</a> .
Dell knowledge base articles for a variety of computer concerns	<ol style="list-style-type: none"> <li>1. Go to <a href="http://www.dell.com/support">www.dell.com/support</a>.</li> <li>2. On the menu bar at the top of the Support page, select <b>Support &gt; Knowledge Base</b>.</li> <li>3. In the Search field on the Knowledge Base page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.</li> </ol>

## Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see [www.dell.com/contactdell](http://www.dell.com/contactdell).

 **NOTE:** Availability varies by country/region and product, and some services may not be available in your country/region.

 **NOTE:** If you do not have an active Internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell product catalog.