

# Latitude 7220 Rugged Extreme Tablet

## 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 tablet

## Steps

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

**i** | **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.

**i** | **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

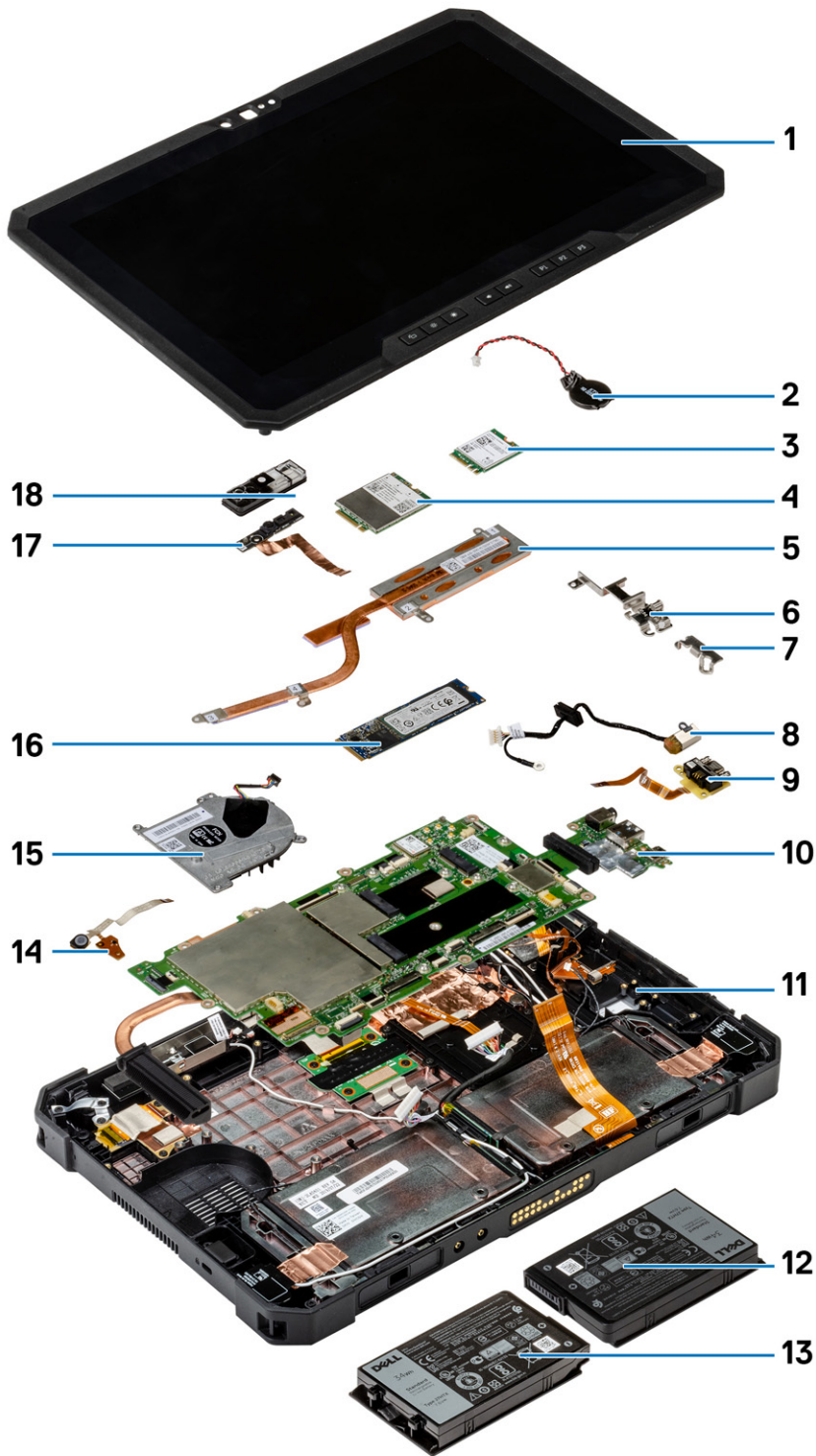
Dell apps	Details
	<b>My Dell</b>
	<p>Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.</p>
	<b>Dell Product Registration</b>
	<p>Register your computer with Dell.</p>
	<b>Dell Help &amp; Support</b>
	<p>Access help and support for your computer.</p>
	<b>SupportAssist</b>
	<p>Proactively checks the health of your computer's hardware and software.</p> <p><b>NOTE:</b> Renew or upgrade your warranty by clicking the warranty expiry date in SupportAssist.</p>
	<b>Dell Update</b>
	<p>Updates your computer with critical fixes and important device drivers as they become available.</p>
	<b>Dell Digital Delivery</b>
	<p>Download software applications including software that is purchased but not preinstalled on your computer.</p>

# Chassis overview

**Topics:**

- [Exploded view](#)
- [Front view](#)
- [Left view](#)
- [Right view](#)
- [Back view](#)
- [Top view](#)
- [Bottom view](#)

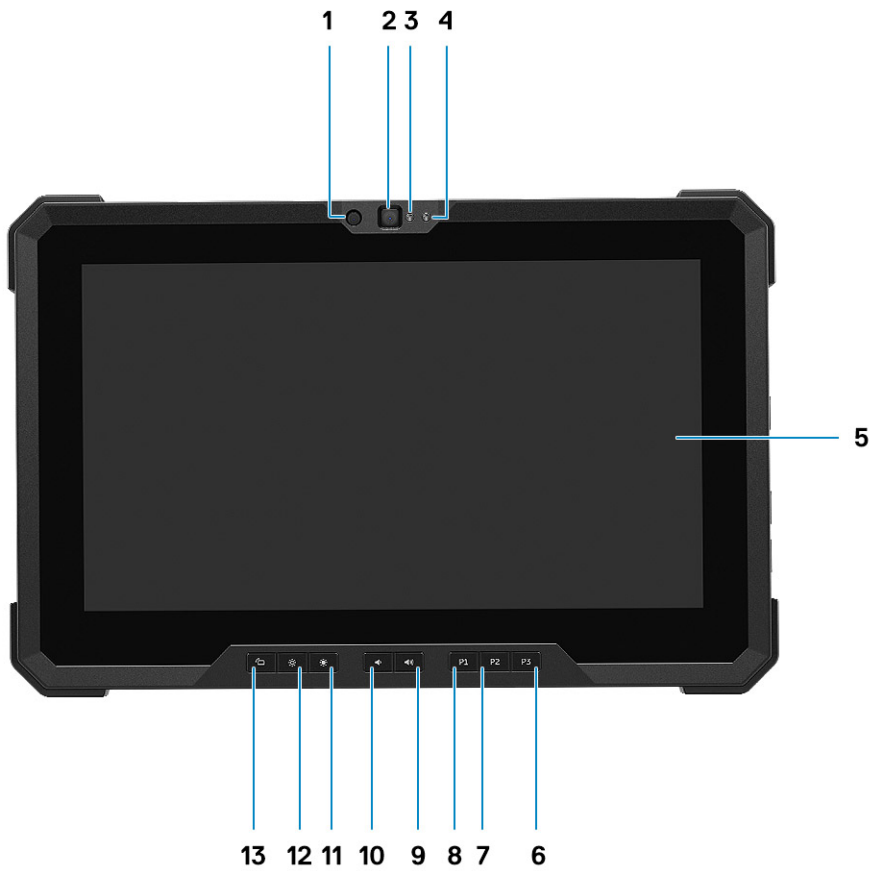
# Exploded view



1. Display assembly
2. Coin-cell battery
3. WLAN card
4. WWAN card
5. Heat-sink
6. USB Type-C bracket
7. Mini-serial bracket

- 8. Power adapter port
- 9. Mini-serial port
- 10. System board
- 11. NFC antenna
- 12. Left battery (as viewed from the back)
- 13. Right battery (as viewed from the back)
- 14. Microphone assembly circuit board
- 15. System fan
- 16. Solid-state drive
- 17. Front camera cable
- 18. Front camera cover

## Front view

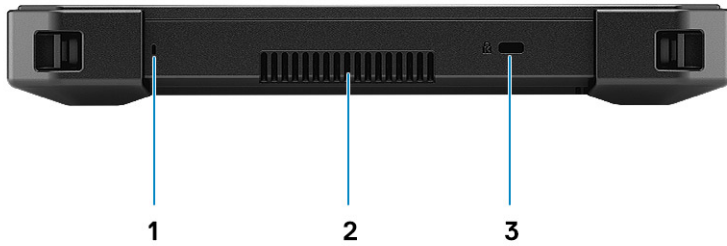


- 1. LED Lens
- 2. Camera
- 3. Camera status light
- 4. Ambient light sensor
- 5. Display
- 6. User programmable button 3
- 7. User programmable button 2
- 8. User programmable button 1
- 9. Volume increase button
- 10. Volume decrease button
- 11. Brightness increase button
- 12. Brightness decrease button



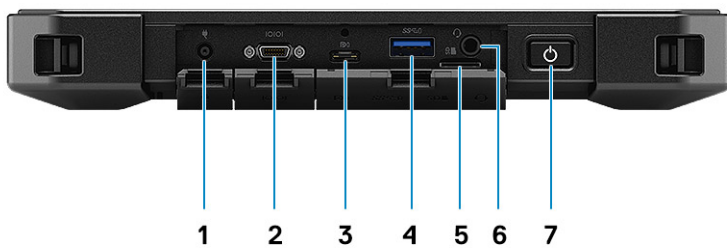
13. Screen rotate lock button

## Left view



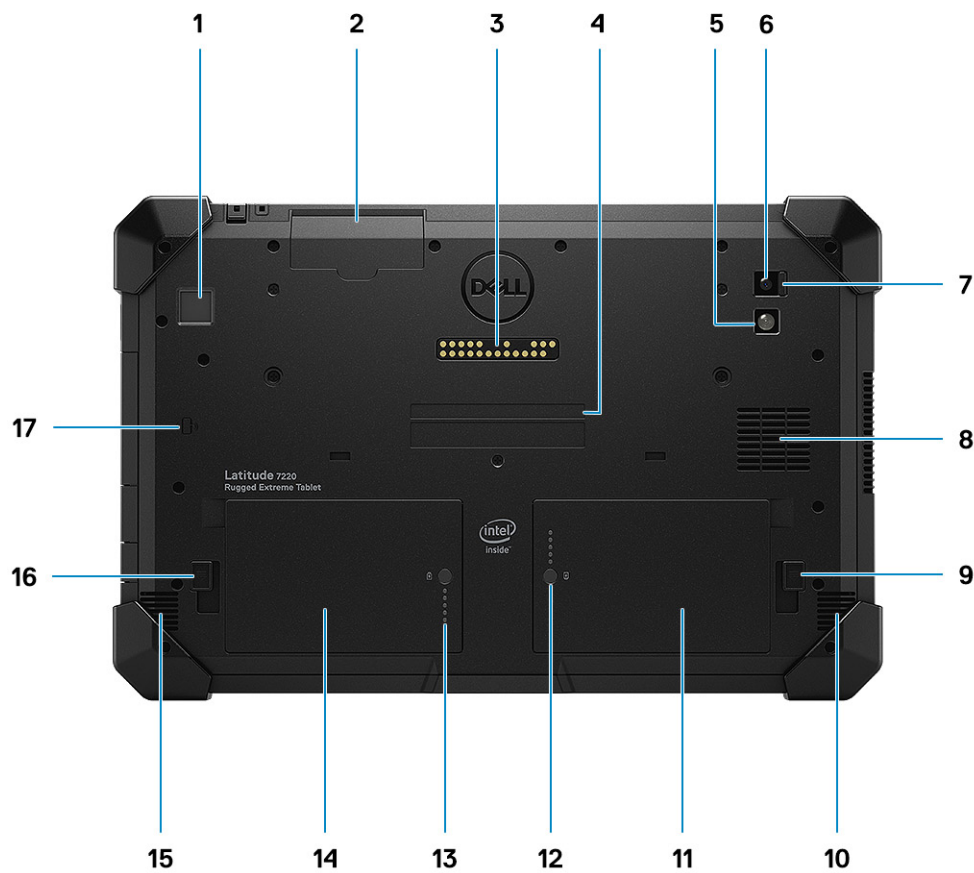
- 1. Microphone
- 2. Quad cool vent output
- 3. Kensington lock slot.

## Right view



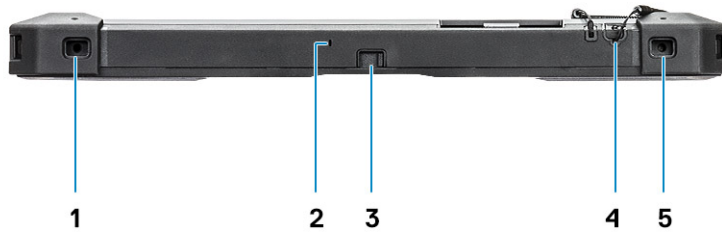
- 1. Power connector port
- 2. Mini serial RS-232 port
- 3. USB 3.0 Type-C port with DisplayPort Alt mode/PowerShare
- 4. USB 3.1 Type-A with Power Delivery
- 5. Micro SD-card slot
- 6. Universal audio jack
- 7. Power button/ LED status light

# Back view



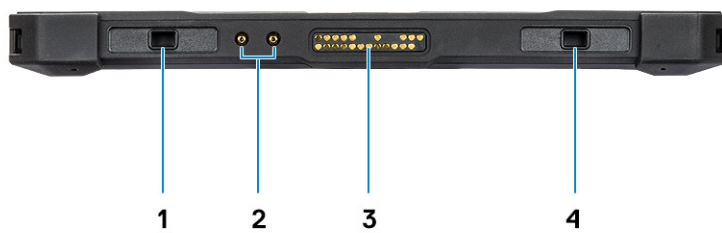
- |  |   |
|--|---|
| 1. Fingerprint reader (optional)             | 2. Smart card reader slot                     |
| 3. OpExpansion module pogo connector         | 4. Service tag and Express service code label |
| 5. LED flash                                 | 6. Rear camera                                |
| 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) |   |

## Top view



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

## Bottom view



1. Docking/Keyboard retention alignment features
2. Radio antennae pass-through connector
3. Docking pogo connector
4. Docking retention clips

**i** **NOTE: Used for docking a docking station or a rugged keyboard.**

# Technical specifications

## Product overview

Latitude 7220 Rugged Extreme Tablet is a 11.6 in. tablet that offers the following:

- Fully Rugged MIL-810 Certified Tablet
- 8th Generation Intel Core i3/i5/i7 processor
- 1000 nit 11.6 in. FHD Outdoor View Glove Touch LCD AG/AS/Polarizer
- Integrated IO + Modular backpack expansion
- Backwards compatible desk/vehicle docking
- Power button with optional fingerprint reader
- Type-C Latitude cable docking compatibility
- 5MP RGB + IR user facing camera/8MP world facing camera
- 2 of 3 selectable RF Pass-through (WWAN, WLAN, GPS)
- ANSI 12.12.01 hazardous location certification

## Product comparison

This topic details the product comparison with the predecessor.

**Table 2. Product comparison**

Features	Latitude 7212	Latitude 7220
Processor Type	<ul style="list-style-type: none"> <li>• 7th Generation Intel Core U i3, i5, and i7 dual core processor</li> <li>• 6th Generation Intel Core i5 dual-core processor</li> </ul>	8th Generation Intel Core U i3, i5, and i7 processor
Chipset	Integrated on the CPU 16 MB/4 MB Quad-SPI	Integrated on the CPU Whiskey lake
Memory	LPDDR3, 1866 MHz (integrated on system board) 8 GB or 16 GB	LPDDR3, 2133 MHz (integrated on system board) 8 GB, or 16 GB
Storage	<ul style="list-style-type: none"> <li>• SSD M.2 2280 PCIE and SATA both supported: up to 1 TB</li> </ul>	<ul style="list-style-type: none"> <li>• SSD M.2 2230 PCIE Gen3 x4 NVMe, Class 35: 128 GB</li> <li>• SSD M.2 2280 PCIE Gen3 x4 NVMe, Class 40: 256 GB to 2 TB</li> <li>• Self-Encrypting SSD M.2 2280 PCIE Gen3 x4 NVMe, Class 40: 256 GB to 1 TB</li> </ul>
Graphic Solutions	<ul style="list-style-type: none"> <li>• Intel-Integrated HD Graphics</li> </ul>	<ul style="list-style-type: none"> <li>• Intel-Integrated UHD Graphics 620</li> </ul>
Audio	Realtek ALC3235	Realtek ALC3254
Communications	Wireless LAN options: <ul style="list-style-type: none"> <li>• Intel Dual Band Wireless-AC 8265 with Bluetooth 4.2 + vPro Mobile broadband</li> <li>• Qualcomm QCA61x4A 802.11ac Dual Band (2x2) Wireless Adapter + Bluetooth 4.1</li> </ul>	Wireless LAN options: <ul style="list-style-type: none"> <li>• Intel Wireless-AC 9560, 2 x2, 802.11ac with Bluetooth 5.0</li> <li>• Intel Wi-Fi 6 AX200, 2x 2, 802.11ax with MUMIMO, without Bluetooth</li> </ul>

Features	Latitude 7212	Latitude 7220
	<ul style="list-style-type: none"> <li>• NFC</li> <li>• WWAN</li> <li>• LTE</li> </ul>	<ul style="list-style-type: none"> <li>• Intel Wi-Fi 6 AX200, 2 x2, 802.11ax with MUMIMO, Bluetooth 5.0</li> <li>• DW5821E Snapdragon X20 4G/LTE Wireless WAN card</li> </ul>
I/O Connectors	<p>Audio:</p> <ul style="list-style-type: none"> <li>• Universal audio jack (headset/input) 1x 3.5 mm jack</li> </ul> <p>Video:</p> <ul style="list-style-type: none"> <li>• Supported through Type-C output (or docks can provide different video outputs).</li> </ul> <p>USB:</p> <ul style="list-style-type: none"> <li>• One USB 3.1 Gen 1 Type-C</li> <li>• One DisplayPort with PowerShare over USB Type-C</li> </ul> <p>Memory-card reader</p> <ul style="list-style-type: none"> <li>• One microSD card reader</li> </ul> <p>Network adapter:</p> <ul style="list-style-type: none"> <li>• One Dual (WLAN/WWAN) RF passthrough</li> </ul> <p>SIM card:</p> <ul style="list-style-type: none"> <li>• One micro-SIM slot with security feature</li> </ul> <p>Serial port:</p> <ul style="list-style-type: none"> <li>• 1x micro serial connector</li> </ul> <p>Modular expansion:</p> <ul style="list-style-type: none"> <li>• One Pogo pin modular expansion port</li> </ul>	<p>Audio:</p> <ul style="list-style-type: none"> <li>• Universal audio jack (headset/input) 1x 3.5 mm jack</li> </ul> <p>Video:</p> <ul style="list-style-type: none"> <li>• Supported via dock or directly through USB Type-C DP Alt mode</li> </ul> <p>USB:</p> <ul style="list-style-type: none"> <li>• One USB 3.1 Type-A with Power Delivery</li> <li>• One USB 3.0 Type-C port with DisplayPort Alt mode/ PowerShare</li> </ul> <p>Memory-card reader</p> <ul style="list-style-type: none"> <li>• One microSD card reader</li> </ul> <p>Network adapter:</p> <ul style="list-style-type: none"> <li>• One Dual (WLAN/WWAN) RF passthrough</li> </ul> <p>SIM card:</p> <ul style="list-style-type: none"> <li>• One micro-SIM slot with security feature</li> </ul> <p>Serial port:</p> <ul style="list-style-type: none"> <li>• 1x micro serial connector</li> </ul> <p>Modular expansion:</p> <ul style="list-style-type: none"> <li>• One Pogo pin modular expansion port</li> </ul>
Operating Systems	<ul style="list-style-type: none"> <li>• Microsoft Windows 10.x (Professional, Enterprise, and IoT editions)</li> <li>• Windows 7 Professional 64 bit (available through downgrade rights from Windows10 Pro License) (supported only for Intel 6th generation processors)</li> </ul>	Microsoft Windows 10 Professional (64-bit)
BIOS	UEFI BIOS	UEFI BIOS
AC Adapter	<ul style="list-style-type: none"> <li>• 45 W adapter; USB Type-C</li> <li>• 65 W adapter; USB Type-C</li> <li>• 90 W adapter; USB Type-C</li> </ul>	<ul style="list-style-type: none"> <li>• E4 45 W</li> <li>• 45 W USB Type-C</li> <li>• E5 90 W</li> </ul>
Battery	<ul style="list-style-type: none"> <li>• 2-cell (34 WHr) lithium-ion battery</li> <li>• 2-cell (26 WHr) lithium-ion battery</li> <li>• Up to 12 hours battery life with two 2-cell batteries</li> </ul>	<ul style="list-style-type: none"> <li>• 2-cell (34 WHr) lithium-ion battery, ExpressCharge, user replaceable</li> <li>• 2-cell (34 WHr - LCL)</li> </ul>
Weight	1.27 kg (2.82 lb)	1.31 kg (2.9 lb)

# System 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.

## Processors

Table 3. Processors

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics
8th Generation Intel Core i3-8145U	15 W	2	4	2.10 GHz to 3.90 GHz Turbo	4 MB SmartCache	Intel UHD Graphics 620
8th 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
8th 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 - 8th Gen Intel Core
DRAM bus width	Two channels, 64 bits
Flash EPROM	32 MB
PCIe bus	Upto Gen 3

## Operating system

Windows 10 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

Description	Values
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>

## Storage

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

**Table 6. 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

## Ports and connectors

**Table 7. 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 3.1 Type-A with Power Delivery</li> <li>One USB 3.0 Type-C port with DisplayPort Alt mode/PowerShare</li> </ul>
Audio	One headset (headphone and microphone combo) port
Video	Supported via dock or directly through USB Type-C DP Alt mode
Power adapter port	4.5 mm barrel-type
Security	Kensington lock slot
Card slot	SD card slot
Serial port	RS-232 mini connector
Expansion port	Pogo Connector (back)
Dock/Keyboard	Pogo Connector (bottom)

**Table 8. Internal ports and connectors**

Description	Values
<b>Internal:</b>	
One M.2 Key-M (2280 or 2230) for solid-state drive	<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>
One M.2 3042 Key-B for WWAN	
One M.2 2230 Key-E for WLAN	

Description	Values
SIM card	uSIM card slot

**NOTE:** To learn more about the features of different types of M.2 cards, see the knowledge base article [SLN301626](#).

## Audio

**Table 9. Audio specifications**

Description	Values
Controller	Realtek ALC3254
Stereo conversion	Supported
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

## Video

**Table 10. 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

## Camera

**Table 11. 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>
Sensor type	CMOS sensor technology
<ul style="list-style-type: none"> <li>Camera</li> <li>Still image</li> </ul>	<ul style="list-style-type: none"> <li>Front Camera - 5.03 megapixels</li> </ul>



Description	Values
Video	<ul style="list-style-type: none"> <li>Rear Camera - 7.99 megapixels</li> <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>

## Communications

### Wireless module

Table 12. Wireless module specifications

Description	Values			
Model number	Intel Wireless-AC 9560, 2 x2, 802.11ac with Bluetooth 5.0	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 5.0	DW5821E Snapdragon X20 4G/LTE Wireless WAN card
Transfer rate	Up to 1.73 Gbps	Up to 1.73 Gbps	Up to 1.73 Gbps	Up to 1.2 Gbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz	2.4 GHz/5 GHz	5 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>WCDMA (DB-DC-HSDPA, DC-HSUPA)</li> <li>TD-SCDMA</li> <li>CDMA 1x</li> <li>EV-DO</li> <li>GSM/EDGE</li> </ul>
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	Not supported	Bluetooth 5	NA

## 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>

# Power adapter

**Table 14. 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 15. 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.)
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

Description	Values	
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.

## Dimensions and weight

Table 16. 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>
Weight	1.31 kg (2.9 lb)
	<p><b>NOTE:</b> The weight of your tablet depends on the configuration ordered and the manufacturing variability.</p>

## 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)
Response time (max)	40 ms (max)

Description	Values
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
Glass	Gorilla glass 5

## 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

## Security

**Table 19. Security**

Features	Specifications
Trusted Platform Module (TPM) 2.0	Integrated on system board
Fingerprint reader	Optional
Contacted Smartcard reader	Optional
Contactless Smartcard reader	Optional
Kensington security lock slot	Standard
Protected slot/vent openings	Standard

## Data security

**Table 20. 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

Features	Specifications
Microsoft Device Guard and Credential Guard (Windows Enterprise)	Optional
Microsoft Windows Bitlocker	Optional

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

Table 21. 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="http://www.dell.com">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 22. Computer environment

Description	Operating	Storage
Temperature range	-29°C to 63°C (-20.2°F to 145.4°F)	-57°C to 71°C (-70.6°F to 159.8°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	5% to 95% (non-condensing)
Vibration (maximum)*	0.26 GRMS	1.37 GRMS
Shock (maximum)	105 G†	40 G†
Altitude (maximum)	-16 m to 12192 m (3.2 ft to 21977.6 ft)	-15.2 m to 12192 m (4.64 ft to 21977.6 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.

## Support policy

For more information on support policy, see the knowledge base articles [PNP13290](#), [PNP18925](#), and [PNP18955](#).


# Getting help

## Topics:

- [Contacting Dell](#)

## Contacting Dell

### Prerequisites

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

### About this task

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

### Steps

1. Go to **Dell.com/support**.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.