Latitude 7220 Rugged Extreme Tablet

Setup and Specifications



Notes, cautions, and warnings

i 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.
 - 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

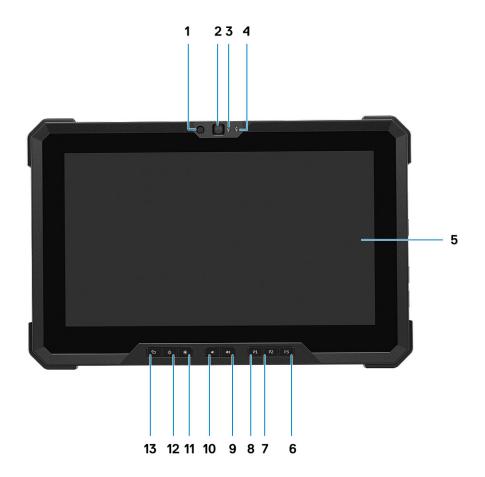
Resources	Description
	Dell Product Registration Register your computer with Dell.
	Dell Help & Support Access help and support for your computer.
DELL	My Dell Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.
	SupportAssist 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 Home PCs User's Guide on www.dell.com/serviceabilitytools. i NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.
l o	Dell Update Updates your computer with critical fixes and latest device drivers as they become available. For more information about using Dell Update, see the knowledge base article 000149088 at www.dell.com/support.
	Dell Digital Delivery Download software applications, which are purchased but not pre-installed on your computer. For more information about using Dell Digital Delivery, see the knowledge base article 000129837 at www.dell.com/support.

Chassis overview

Topics:

- Front view
- Left view
- Right view
- Back view
- Top view
- Bottom view

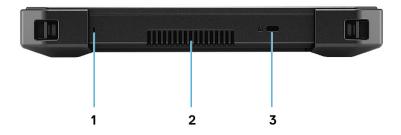
Front view



- 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

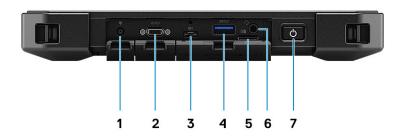
- 8. User programmable button 1
- 9. Volume increase button
- 10. Volume decrease button
- 11. Brightness increase button
- 12. Brightness decrease button
- 13. Screen rotate lock button

Left view



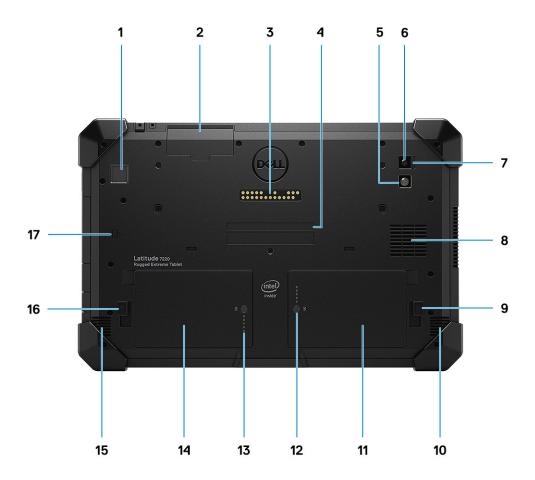
- 1. Microphone
- 2. Quad cool vent output
- 3. Kensington lock slot.

Right view



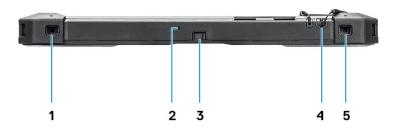
- 1. Power connector port
- 2. Mini serial RS-232 port
- 3. USB 3.0 Type-C port with DisplayPort Alt mode/PowerShare
- 4. USB 3.1 Type-A with Power Delivery
- 5. Micro SD-card slot
- 6. Universal audio jack

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
 - i NOTE: Used for docking a docking station or a rugged keyboard.
- 4. Docking retention clips

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.

Topics:

- Processors
- Chipset
- Operating system
- Memory
- Storage
- Internal slots
- External ports
- Audio
- Video
- Camera
- Communications
- Media-card reader
- Power adapter
- Battery
- Dimensions and weight
- Display
- Fingerprint reader
- Security
- Data security
- Regulatory, Environmental Compliance and Trusted Platform Module (TPM)
- Computer environment
- Support policy

Processors

Table 2. 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 3. Chipset

Description	Values
Chipset	Intel
Processor	Whiskey lake - 8th Gen Intel Core
DRAM bus width	Two channels, 64 bits
Flash EPROM	32 MB
PCle bus	Upto Gen 3

Operating system

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

- Windows 11 Pro, 64-bit
- Windows 10 Pro, 64-bit

Memory

Table 4. Memory specifications

Description	Values
Slots	Two integrated on system board
Туре	LPDDR3
Speed	2133 MHz
Maximum memory	16 GB
Minimum memory	8 GB
Configurations supported	8 GB LPDDR3 at 2133 MHz 16 GB LPDDR3 at 2133 MHz

Storage

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

Table 5. Storage specifications

Storage type	Interface type	Capacity
One M.2 2230 solid-state drive	PCle Gen3 x4 NVMe, Class 35 SSD	128 GB
One M.2 2280 solid-state drive	PCle 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

Internal slots

The following table lists the internal slots of your Latitude 7220 Rugged Extreme Tablet.

Table 6. Internal slots

Description	Values
M.2	 One M.2 2230 slot for solid-state drive 128 GB One M.2 2280 slot for solid-state drive 256 GB/512 GB/1 TB/2 TB NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article 000144170 at www.dell.com/support.

External ports

The following table lists the external ports of your Latitude 7220 Rugged Extreme Tablet.

Table 7. External ports

Description	Values
Network port	Ethernet connection available through optional Expansion Module or dock.
USB ports	 One USB 3.2 Type-A with Power Delivery One USB 3.0 Type-C port with DisplayPort Alt mode/ PowerShare
Audio port	One headset (headphone and microphone combo) port
Video port	Supported via dock or directly through USB Type-C DP Alt mode
Media-card reader	One micro SD-card slot
Power-adapter port	4.5 mm barrel-type
Security-cable slot	Kensington lock slot

Audio

Table 8. 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

Table 8. Audio specifications (continued)

Description	Values
Speaker Output Peak	2.5 W

Video

Table 9. 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 10. Camera specifications

Desc	cription	Values
Number of cameras Two		Two
Window ● Rear Ca		Windows Hello feature
Location • Front Camera - 5 MP • Rear Camera - 8 MP		
Sensor type		CMOS sensor technology
	Camera	
	Still image	Front Camera - 5.03 megapixelsRear Camera - 7.99 megapixels
	Video	 Front Camera - 2592 x 1944 (5 MP) at 30 fps Rear Camera - 3264 x 2448 (8 MP) at 15 fps
Diag	onal viewing angle	
	Camera	Front Camera - 88.9°Rear Camera - 77.3°

Communications

Wireless module

Table 11. 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	 WiFi 802.11a/b/g WiFi 4 (WiFi 802.11n) WiFi 5 (WiFi 802.11ac) 	 WiFi 802.11a/b/g WiFi 4 (WiFi 802.11n) WiFi 5 (WiFi 802.11ac) WiFi 6 (WiFi 802.11ax) 	 WiFi 802.11a/b/g WiFi 4 (WiFi 802.11n) WiFi 5 (WiFi 802.11ac) WiFi 6 (WiFi 802.11ax) 	 WCDMA (DB-DC-HSDPA, DC-HSUPA) TD-SCDMA CDMA 1x EV-DO GSM/EDGE
Encryption	64-bit and 128-bit WEPAES-CCMPTKIP	 64-bit and 128-bit WEP AES-CCMP TKIP 	 64-bit and 128-bit WEP AES-CCMP TKIP 	NA
Bluetooth	Bluetooth 5	Not supported	Bluetooth 5	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 12. GPS and RF Antenna passthrough (WLAN)

	For WLAN Main Antenna						
Frequency (MHz)	Switch Circuit Loss (dB)		Jump Cable Loss (dB)	Total Loss (dB)			
(1011 12)	Non-ATEX (MU2)	ATEX (MU2)	Non-ATEX (DVT1)	51 mm, 1.37LL	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 13. GPS and RF Antenna passthrough (LTE)

For LTE Main Antenna							
Frequency (MHz)	Switch Circuit Loss (dB)		Jump Cable Loss (dB)	Total Loss (dB)			
(IVII 12)	Non-ATEX (MU2)	ATEX (MU2)	Non-ATEX (DVT1)	51 mm, 1.37LL	Non-ATEX	ATEX	DVT1

Table 13. GPS and RF Antenna passthrough (LTE) (continued)

	For LTE Main Antenna						
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

Media-card reader

Table 14. Media-card reader specifications

Description	Values
Туре	Micro SD-card slot
Cards supported	 Micro Secure Digital (mSD) Micro Secure Digital High Capacity (mSDHC) Micro Secure Digital Extended Capacity (mSDXC)

Power adapter

Table 15. Power adapter specifications

Description	Valu	es	
Туре	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	Val	Values				
Туре	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:	<u> </u>					
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)	 0 °C - 15 °C: 0-100% RSOC within 4 hours 15 °C - 45 °C: 0-100% RSOC within 2 hours 46 °C - 50 °C: 0-100% RSOC within 3 hours 	 0 °C - 15 °C: 0-100% RSOC within 4 hours 15 °C - 45 °C: 0-100% RSOC within 2 hours 46 °C - 50 °C: 0-100% RSOC within 3 hours 				
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.				

Dimensions and weight

Table 17. Dimensions and weight

Description	Values
Height:	
Front	203 mm (7.99 in.)
Rear	209 mm (8.23 in.)
Width	with bumpers: 318.2 (12.52 in.)without bumpers: 312.20 mm

Table 17. Dimensions and weight (continued)

Description	Values
Depth	with bumpers: 27.7 mm (1.09 in.)without bumpers: 24.7 mm (0.97 in.)
Weight	1.31 kg (2.9 lb) (i) NOTE: The weight of your tablet depends on the configuration ordered and the manufacturing variability.

Display

Table 18. Display specifications

Decsription		Values	
Туре		Full High Definition (FHD)	
Panel technology		Wide View Angle (WVA)	
Luminance (typical)		1000 nits outdoor readable	
Dimensions (active a	rea):		
	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)	
Refresh rate		60 Hz	
Horizontal view angle	9	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 3	

Fingerprint reader

Table 19. 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 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
Kensington security lock slot	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
ТРМ	Hardware trusted Platform Module (Discrete TPM Enabled)

Table 22. Regulatory, Environmental Compliance and TPM (continued)

Features	Specifications	
	Firmware Trusted Platform Module only (Discrete TPM Disabled)	
Environmental, Ergonomic, and Regulatory standards	 Energy Star EPEAT* Registered CEL WEEE Japan Energy Law South Korea Eco-label EU RoHS China RoHS MIL 810G See your local representative or www.dell.com for specific details. *For specific country participation and rating, please see https://www.epeat.net 	

Computer environment

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

Table 23. 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)

 $[\]ensuremath{^{*}}$ Measured using a random vibration spectrum that simulates user environment.

Support policy

For more information on support policy, see the knowledge base articles PNP13290, PNP18925, and PNP18955.

 $[\]ensuremath{\uparrow}$ 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	www.dell.com	
My Dell app	DELL	
Tips	*	
Contact Support	In Windows search, type Contact Support, and press Enter.	
Online help for operating system	www.dell.com/support/windows	
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 www.dell.com/support. For more information on how to find the Service Tag for your computer, see Locate the Service Tag on your computer.	
Dell knowledge base articles for a variety of computer concerns	 Go to www.dell.com/support. On the menu bar at the top of the Support page, select Support > Knowledge Base. 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. 	

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.

- (i) 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.