

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.

 **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

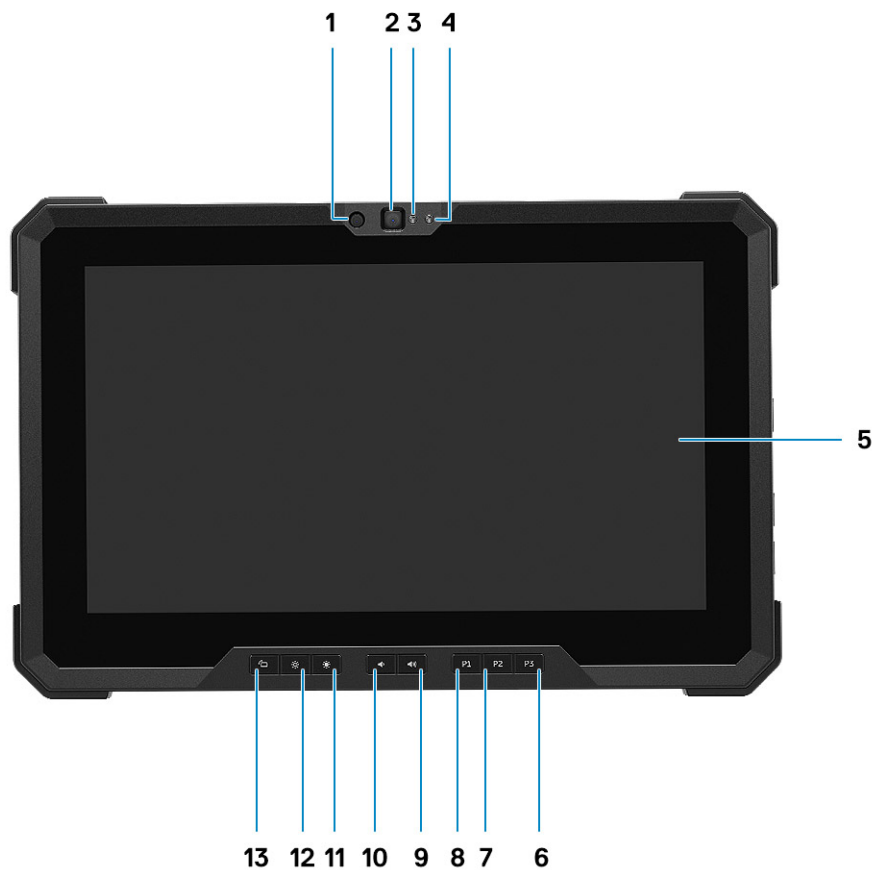
Dell apps	Details
	My Dell Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.
	Dell Product Registration Register your computer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

Chassis overview

Topics:

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

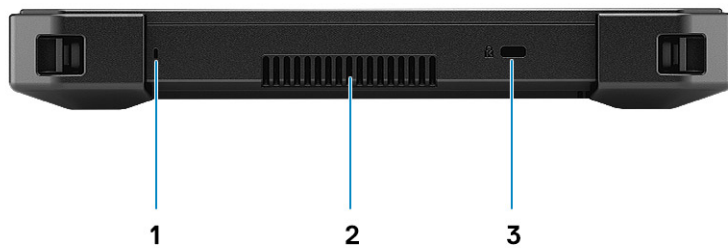
Front view



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

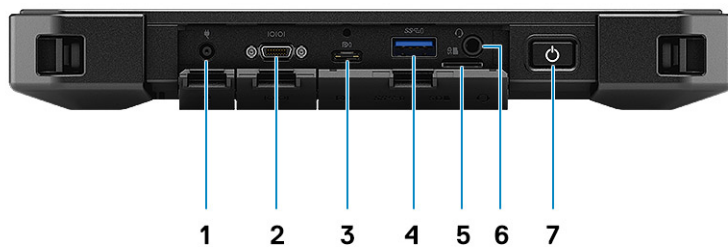
8. User programmable button 1
9. Volume increase button
10. Volume decrease button
11. Brightness increase button
12. Brightness decrease button
13. Screen rotate lock button

Left view



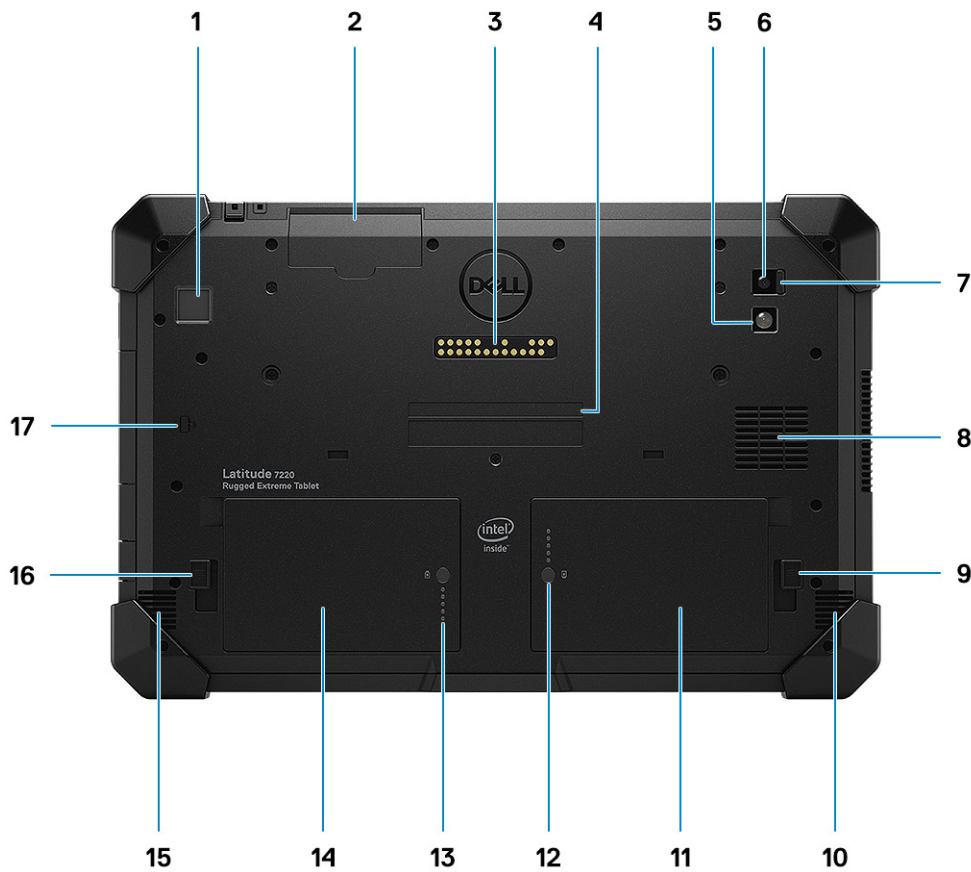
1. Microphone
2. Quad cool vent output
3. Kensington lock slot.

Right view



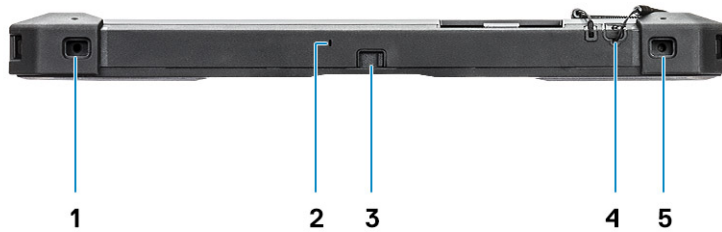
1. Power connector port
2. Mini serial RS-232 port
3. USB 3.0 Type-C port with DisplayPort Alt mode/PowerShare
4. USB 3.1 Type-A with Power Delivery
5. Micro SD-card slot
6. Universal audio jack

Back view



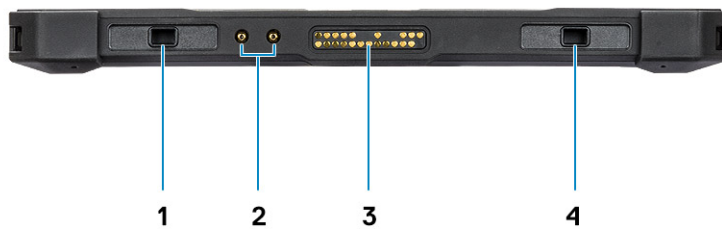
1. Fingerprint reader (optional)
2. Smart card reader slot
3. OpExpansion module pogo connector
4. Service tag and Express service code label
5. LED flash
6. Rear camera
7. Rear camera shutter switch
8. Quad cool intake vent
9. Right battery release latch
10. Speaker
11. Right battery
12. Right battery 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
 4. Docking retention clips
- NOTE:** Used for docking a docking station or a rugged keyboard.

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
- Ports and connectors
- 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
PCIe bus	Upto Gen 3

Operating system

Windows 10 Professional (64-bit)

Memory

Table 4. 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	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	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 6. External ports and connectors

Description	Values
External:	
Network	Ethernet connection available through optional Expansion Module or dock.
USB	- One USB 3.2 Type-A with Power Delivery - One USB 3.0 Type-C port with DisplayPort Alt mode/PowerShare
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 7. Internal ports and connectors

Description	Values
Internal:	
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	- 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 SLN301626.
SIM card	uSIM card 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

Table 8. Audio specifications (continued)

Description	Values
Speakers	2
Speaker Output Average	2 W RMS
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

Description		Values
Number of cameras		Two
Type		- Front Camera - 5 MP, RGBIr camera with Windows Hello feature - Rear Camera - 8 MP, RGB camera with Auto Focus and Flash LED
Location		- Front Camera - 5 MP - Rear Camera - 8 MP
Sensor type		CMOS sensor technology
	Camera	
	Still image	- Front Camera - 5.03 megapixels - Rear 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
Diagonal 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 x 2, 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	• Wi-Fi 802.11a/b/g • Wi-Fi 4 (Wi-Fi 802.11n) • Wi-Fi 5 (Wi-Fi 802.11ac)	• Wi-Fi 802.11a/b/g • Wi-Fi 4 (Wi-Fi 802.11n) • Wi-Fi 5 (Wi-Fi 802.11ac) • Wi-Fi 6 (Wi-Fi 802.11ax)	• Wi-Fi 802.11a/b/g • Wi-Fi 4 (Wi-Fi 802.11n) • Wi-Fi 5 (Wi-Fi 802.11ac) • Wi-Fi 6 (Wi-Fi 802.11ax)	• WCDMA (DB-DC-HSDPA, DC-HSUPA) • TD-SCDMA • CDMA 1x • EV-DO • GSM/EDGE
Encryption	• 64-bit and 128-bit WEP • AES-CCMP • TKIP	• 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) 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 13. 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

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
Type	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	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.)
	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>i</i> NOTE: The weight of your tablet depends on the configuration ordered and the manufacturing variability.

Display

Table 18. Display specifications

Decsription	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)
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 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
TPM	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)

* 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.