Latitude 3510

Setup and specifications guide

Regulatory Model: P101F
Regulatory Type: P101F001, P101F002
June 2021
Rev. A03

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.

© 2020-2021 Dell Inc. or its subsidiaries. All rights reserved. Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

Contents

Chapter 1: Set up your computer....4

Chapter 2: Chassis....6
Display view....6
Left view....7
Right view....7
Palmrest view....8
Bottom view....9

Chapter 3: Technical specifications....10
Processors....10
Chipset....11
Operating system....11
Memory....11
Storage....12
Intel UHD Graphics....12
Ports and connectors....13
Audio....13
Video....14
Camera....14
Communications....15
Keyboard....16
Touchpad....17
Media-card reader....17
Power adapter....17
Battery....18
Dimensions and weight....19
Display....19
Fingerprint reader....20
Security....20
Security Software....20
Computer environment....21
Support policy....21

Chapter 4: Keyboard shortcuts....22

Chapter 5: Getting help and contacting Dell....23

1

Set up your computer

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, Dell recommends 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
	Dell Product Registration Register your computer with Dell.
	Dell Help & Support Access help and support for your computer.

Table 1. Locate Dell apps (continued)

Dell apps	Details
	**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.

2

Chassis

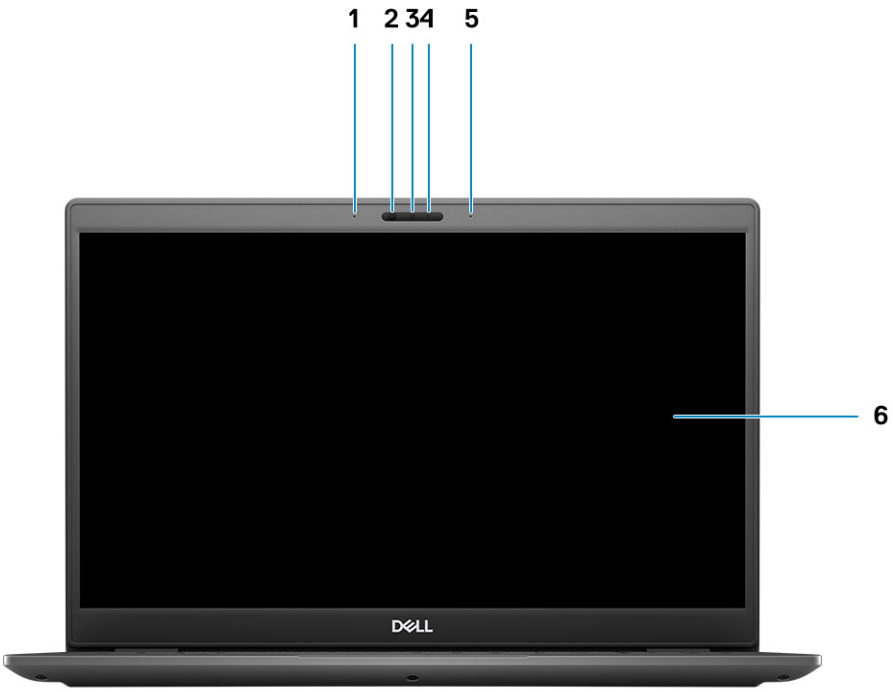
This chapter illustrates the multiple chassis views along with the ports and connectors and also explains the FN hot key combinations.

Topics:

- Display view
- Left view
- Right view
- Palmrest view
- Bottom view

Display view

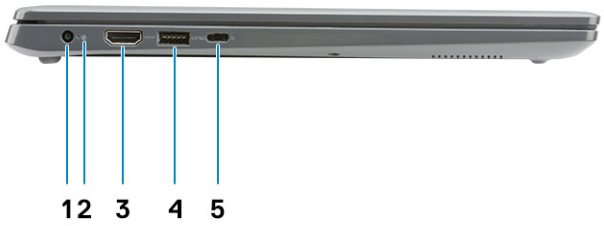
Latitude 3510 display



1. Left Microphone
2. IR sensors
3. Camera
4. Camera-status light
5. Right Microphone

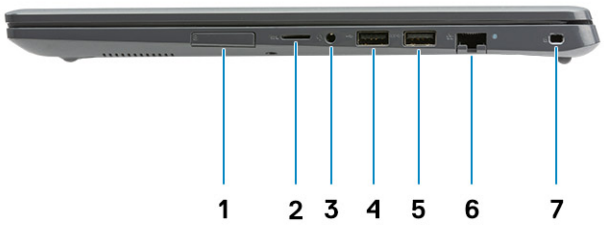
6. LCD Panel

Left view



1. DC-in port
2. LED activity light
3. HDMI 1.4 port
4. USB 3.2 Gen 1 port with PowerShare
5. USB 3.2 Gen 1 Type-C port with DisplayPort 1.2 Alt mode

Right view



1. SIM card slot
2. Micro-SD 3.0 card reader slot
3. Universal audio jack
4. USB 2.0 Type-A port
5. USB 3.2 Gen 1 Type-A port
6. Network port
7. Wedge-shaped security slot

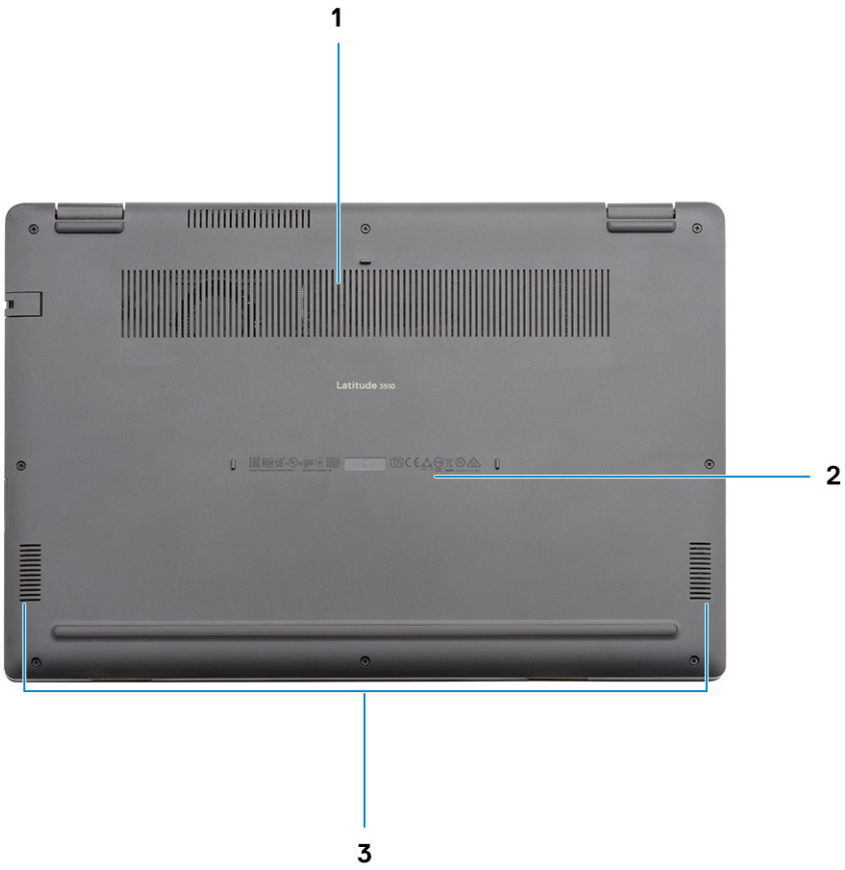
Palmrest view



1. Power button with optional fingerprint reader
2. Keyboard
3. Touchpad

NOTE: There is no LED on the power button. The power and battery status LED is located next to the charging port.

Bottom view



1. Air vent
2. Service tag location
3. Speakers

3

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
- Intel UHD Graphics
- Ports and connectors
- Audio
- Video
- Camera
- Communications
- Keyboard
- Touchpad
- Media-card reader
- Power adapter
- Battery
- Dimensions and weight
- Display
- Fingerprint reader
- Security
- Security Software
- Computer environment
- Support policy

Processors

Table 2. Processors

Description	Values				
Processors	Intel Celeron 5205U Processors	10th Generation Intel Core i3 Processors, i3-10110U	10th Generation Intel Core i5 Processors, i5-10210U	10th Generation Intel Core i5 Processors, i5-10310U	10th Generation Intel Core i7 Processors, i7-10510U
Wattage	15 W	15 W	15 W	15 W	15 W
Core count	2	2	4	4	4
Thread count	2	4	8	8	8
Speed	Up to 1.9 GHz	Up to 4.1 GHz	Up to 4.2 GHz	Up to 4.4 GHz	Up to 4.9 GHz
Cache	2 MB	4 MB	6 MB	6 MB	8 MB

Table 2. Processors (continued)

Description	Values				
Integrated graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics	Intel UHD Graphics

Chipset

Table 3. Chipset

Description	Values	
Processor	Intel 10th Generation Core i3 / i5 / i7	Intel Celeron 5000 series
Chipset	Intel	Intel
DRAM bus width	Two channels, 64-bit	Two channels, 64-bit
PCIe bus	Up to Gen 3	Up to Gen 2

Operating system

Your Latitude 3510 supports the following operating systems:

- Windows 10 Professional (64-bit)
- Ubuntu 18.04
- Neokylin 7.0 (PRTS)

Memory

Table 4. Memory specifications

Description	Values
Slots	Two SODIMM
Type	DDR4
Speed	• 2400 MHz (Intel Celeron) • 2667 MHz (Intel Core i3 / i5 / i7)
Maximum memory	32 GB
Minimum memory	4 GB
Configurations supported	• 4 GB DDR4 at 2400 MHz/2667 MHz (1x4 GB) • 8 GB DDR4 at 2400 MHz/2667 MHz (2 x 4 GB) • 8 GB DDR4 at 2400 MHz/2667 MHz (1 x 8 GB) • 16 GB DDR4 at 2400 MHz/2667 MHz (1 x 16 GB) • 16 GB DDR4 at 2400 MHz/2667 MHz (2 x 8 GB) • 32 GB DDR4, 2400 MHz/2667 MHz (2 x 16 GB)

Storage

Your computer supports one of the following configurations:

- 2.5-in. 5400/7200 RPM, SATA hard drive
- M.2 2230/2280 for solid-state drive

The primary drive of your computer varies with the storage configuration. For computers:

- 2.5-in. 5400/7200 RPM, SATA hard drive
- M.2 2230/2280 for solid-state drive

NOTE: System's configured with 53 Whr battery would only support M.2 solid-state drives for storage.

Table 5. Storage specifications

Form factor	Interface type	Capacity
2.5-in. 5400 rpm, hard drive	SATA	1 TB
2.5-in. 7200 rpm, hard drive	SATA	500 GB
M.2 2230/2280 solid-state drive	PCIe NVMe 3x4	Upto 512 GB
M.2 2280 Intel Optane Memory (10th Gen Processors)	PCIe NVMe 3x4	512 GB

NOTE: Intel Celeron 5000 Series Processors would support PCIe Gen 2 speeds only.

Intel UHD Graphics

Table 6. Intel UHD Graphics specifications

Intel UHD Graphics	
Bus Type	Integrated
Memory Type	UMA
Graphics Level	i3/i5/i7: GT2 (UHD)
Estimated Maximum Power Consumption (TDP)	15 W (included in the CPU power)
Overlay Planes	Yes
Operating Systems Graphics/ Video API Support	DirectX 12, OpenGL (4.5 from Intel CML POR)
Maximum Vertical Refresh Rate	• HDMI 1.4: 4096 x 2160 @ 60 Hz, 24bpp, Via optional USB Type-C to HDMI dongle • Max Digital: (DP 1.2 over Type-C Port) 4096 x 2304 @ 60 Hz, 24bpp
Number of display supported	Up to three displays supported via DisplayPort Multi-Streaming Technology (MST)
Multiple Display Support	Via Type-C: HDMI 1.4 (via optional USB-C cable to HDMI cable); DisplayPort 1.2 (via optional USB-C cable or USB-C to DP cable);
External Connectors	• USB Type–C port • HDMI 1.4 port

Ports and connectors

Table 7. External ports and connectors

Description	Values
External:	
Network	One Flip-down RJ 45 10/100/1000 Mbps
USB	• One USB 3.2 Gen 1 Type-C port with DisplayPort alt mode/Power Delivery • One USB 3.2 Gen 1 Type-A port with PowerShare • One USB 3.2 Gen 1 Type-A port • One USB 2.0 Type-A port
Audio	One Universal Audio Jack
Video	One HDMI 1.4 port
Power adapter port	4.5 mm barrel-type
Security	One Wedge shaped lock slot
Card slot	One microSD 3.0 card slot

Table 8. 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 Wi-Fi • One M.2 slot for 2230/2280 solid-state drive • One M.2 3042 slot for WWAN **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 9. Audio specifications

Description	Values
Controller	Realtek ALC3204
Stereo conversion	Supported
Internal interface	Intel HDA (High definition audio)
External interface	Universal Audio Jack
Speakers	2
Speaker Output Average	2 W

Table 9. Audio specifications (continued)

Description	Values
Speaker Output Peak	2.5 W

Video

Table 10. Discrete graphics specifications

Discrete graphics			
Controller	**External display support**	**Memory size**	**Memory type**
NVIDIA GeForce MX230	Not Supported	2 GB	GDDR5

Table 11. Integrated graphics specifications

Integrated graphics			
Controller	**External display support**	**Memory size**	**Processor**
Intel UHD Graphics	• One HDMI 1.4 • One USB 3.2 Gen 1 Type-C port with DisplayPort alt mode	Shared system memory	• Intel Celeron Processor 5000 series processors • Intel 10th Generation Core i3 / i5 / i7 processors

Camera

Table 12. Camera specifications

Standard Webcam		
Description		**Values**
Number of cameras		One
Type		HD RGB camera
Location		Front Camera
Sensor type		CMOS sensor technology
Resolution:		
	Still image	0.92 megapixel
	Video	1280 x 720 (HD) at 30 fps
Diagonal viewing angle		87 degrees

Table 13. IR Webcam specifications

IR Webcam	
Description	
Number of cameras	One
Type	HD RGB-IR camera

Table 13. IR Webcam specifications (continued)

IR Webcam		
Description		
Location		Front Camera
Sensor type		CMOS sensor technology
Resolution		
Camera		
Still image (megapixel)		0.92
	Video	1280 x 720 (HD) at 30 fps
	Infrared camera	
Still image		0.23 megapixel
Video		640 x 360 at 30 fps
Diagonal viewing angle		
	Camera	87 degree
	Infrared camera	87 degree

Communications

Ethernet

Table 14. Ethernet specifications

Description	Values
Model number	Integrated Realtek RTL8111H
Transfer rate	e.g. 10/100/1000 Mbps

Wireless module

Table 15. Wireless module specifications

Description	Values	
Model number	Intel Wi-Fi 6 AX201	Qualcomm QCA61x4A
Transfer rate	Up to 2400 Mbps	Up to 867 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	• WiFi 802.11a/b/g • Wi-Fi 4 (Wi-Fi 802.11n) • Wi-Fi 5 (Wi-Fi 802.11ac) • Wi-Fi 6 (WiFi 802.11ax) • Wi-Fi 6 (WiFi 802.11ax)	• WiFi 802.11a/b/g • Wi-Fi 4 (Wi-Fi 802.11n) • Wi-Fi 5 (Wi-Fi 802.11ac Wave 2)
Encryption	• 64-bit/128-bit WEP • AES-CCMP • TKIP	• 64-bit/128-bit WEP • AES-CCMP • TKIP

Table 15. Wireless module specifications (continued)

Description	Values	
Bluetooth	Bluetooth 5.1	Bluetooth 5.0

Table 16. WWAN module

Feature	Specifications
Model number	Dell DW5820e Intel 7360 LTE-A
Host interface	M.2 3042 form factor
Network standard	LTE FDD/TDD, WCDMA/HSPA+, GNSS/Beidou
Transfer rate	Up to 450 Mbps DL/50 Mbps UL (Cat 9)
Operating Frequency Bands	(1,2,3,4,5,7,8,11,12,13,17,18,19,20,21,26,28,29,30,38,39,40,41,66), HSPA+ (1, 2, 4,5, 8)
Data Rate	• LTE FDD: 450 Mbps DL/50 Mbps UL (Cat 9) • LTE TDD: 347 Mbps DL/30 Mbps UL (Cat 9) • UMTS/HSPA+: UMTS 384 kbps DL/384 kbps UL
Power supply	DC 3.135 V to 4.4 V, Typical 3.3 V
Antenna Diversity	Supported
Radio On/Off	Supported
Wake On Wireless	Supported
Temperature	• Normal operating temperature: -10°C to + 55°C • Extended Operating temperature: -20°C to +65°C **NOTE:** Variation in temperature can affect the performance of the WWAN card.
Antenna connector	• WWAN Main Antenna X 1 • WWAN Diversity Antenna X 1

Keyboard

The following table lists the keyboard specifications of your Latitude 3510.

Table 17. Keyboard specifications

Description	Values
Keyboard type	• Standard keyboard • White Backlight keyboard
Keyboard layout	QWERTY
Number of keys	• United States and Canada: 101 keys • United Kingdom: 102 keys • Japan: 105 keys
Keyboard size	X=18.7 mm key pitch Y=18.05 mm key pitch
Keyboard shortcuts	Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to

Table 17. Keyboard specifications (continued)

Description	Values
	perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key. **NOTE:** You can define the primary behavior of the function keys (F1–F12) changing **Function Key Behavior** in BIOS setup program.

Touchpad

The following table lists the touchpad specifications of your Latitude 3510.

Table 18. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	305
	Vertical	305
Touchpad dimensions:		
	Horizontal	105 mm (4.13 in.)
	Vertical	80 mm (3.15 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows 10, see the Microsoft knowledge base article 4027871 at support.microsoft.com.

Media-card reader

Table 19. Media-card reader specifications

Description	Values
Type	One Micro SD 3.0 card
Cards supported	• Micro Secure Digital (mSD) • Micro Secure Digital High Capacity(mSDHC) • Micro Secure Digital Extended Capacity(mSDXC)

Power adapter

Table 20. Power adapter specifications

Description	Values		
Type	45W	65W	65W Type-C (Optional)
Connector dimensions:	2.9 mm x 4.5 mm	2.9 mm x 4.5 mm	48.26 mm x 129.54 mm x 215.9 mm
Input voltage	100 VAC x 240 VAC	100 VAC x 240 VAC	100 VAC x 240 VAC

Table 20. Power adapter specifications (continued)

Description		Values		
Input frequency		50 Hz x 60 Hz	50 Hz x 60 Hz	50 Hz x 60 Hz
Input current (maximum)		1.30 A	1.60 A / 1.70 A	1.70 A
Output current (continuous)		2.31 A	3.34 A	3.25 A
Rated output voltage		19.50 VDC	19.50 VDC	20 VDC
Temperature range:				
	Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
	Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

Battery

Table 21. Battery specifications

Description		Values	
Type		40 Whr	53 Whr
Voltage		11.40 VDC	15.20 VDC
Weight (maximum)		0.18 kg (0.40 lb)	0.24 kg (0.53 lb)
Dimensions:			
	Height	184.10 mm (7.25 in.)	239.10 mm (9.41 in.)
	Width	90.73 mm (3.57 in.)	90.73 mm (3.57 in.)
	Depth	5.75 mm (0.23 in.)	5.75 mm (0.23 in.)
Temperature range:			
	Operating	0°C to 35°C (32°F to 95°F)	0°C to 35°C (32°F to 95°F)
	Storage	-40°C to 65°C (-40°F to 149°F)	-40°C to 65°C (-40°F to 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)		4 hours (when the computer is off) **NOTE:** Control the charging time, duration, start and end time, and so on using the Dell Power Manager application.	4 hours (when the computer is off) **NOTE:** Control the charging time, duration, start and end time, and so on using the Dell Power Manager application.
Life span (approximate)		300 discharge/charge cycles	300 discharge/charge cycles
Coin-cell battery		CR2032	CR2032

Table 21. Battery specifications (continued)

Description	Values	
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 22. Dimensions and weight

Description	Values
Height:	
Front	17.97 mm (0.71 in.)
Rear	17.97 mm (0.71 in.)
Width	361.40 mm (14.23 in.)
Depth	247.85 mm (9.76 in.)
Starting weight	1.79 kg (3.95 lb) **NOTE:** The weight of your tablet depends on the configuration ordered and the manufacturing variability.

Display

Table 23. Display specifications

Decsription		Values		
Type		High Definition (HD)	Full High Definition (FHD)	Full High Definition (FHD)
Panel technology		TN	WVA	WVA
Luminance (typical)		220 nits	220 nits	220 nits
Dimensions (active area):				
	Height	193.60 mm (7.62 in.)	193.60 mm (7.62 in.)	193.60 mm (7.62 in.)
	Width	344.20 mm (13.55 in.)	344.20 mm (13.55 in.)	344.20 mm (13.55 in.)
	Diagonal	394.90 mm (15.54 in.)	394.90 mm (15.54 in.)	394.90 mm (15.54 in.)
Native resolution		1366 x 768	1920 x 1080	1920 x 1080
Megapixels		1.05M	2.07M	2.07M
Color gamut		NTSC 45% Typ.	NTSC 45% Typ.	NTSC 45% Typ.
Pixels per inch (PPI)		100	141	141
Contrast ratio (min)		500:1	700:1	700:1
Response time (max)		25 ms	25 ms	25 ms

Table 23. Display specifications (continued)

Decsription	Values		
Refresh rate	60 Hz	60 Hz	60 Hz
Horizontal view angle	40 degrees (Left/Right)	80 degrees (Left/Right)	80 degrees (Left/Right)
Vertical view angle	10 degrees (Up) / 30 degrees (Down)	80 degrees (Up/Down)	80 degrees (Up/Down)
Pixel pitch	0.252 mm	0.179 mm	0.179 mm
Power consumption (maximum)	4.2 W	4.2 W	4.2 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare
Touch options	No	No	Yes

Fingerprint reader

Table 24. Fingerprint reader specifications

Description	Values
Sensor technology	Capacitive
Sensor resolution	500 dpi
Sensor area	4.06mm x 3.25 mm
Sensor pixel size	80 x 64

Security

Table 25. Security specifications

Features	Specifications
Trusted Platform Module (TPM) 2.0	Integrated on system board
Fingerprint reader	Optional
Wedge-shaped lock slot	Standard

NOTE: Systems with Intel Celeron 5000 series processors ship with firmware TPM only.

Security Software

Table 26. Security Software specifications

Specifications
Dell Client Command Suite
Optional Dell Data Security and Management Software Dell Client Command Suite

Table 26. Security Software specifications (continued)

Specifications
Dell BIOS Verification
Optional Dell Endpoint Security and Management Software
VMware Carbon Black Endpoint Standard
VMware Carbon Black Endpoint Standard + Secureworks Threat Detection and Response
Dell Encryption Enterprise
Dell Encryption Personal
Carbonite
VMware Workspace ONE
Absolute® Endpoint Visibility and Control
Netskope
Dell Supply Chain Defense

Computer environment

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

Table 27. Computer environment

Description	Operating	Storage
Temperature range	0°C to 35°C (32°F to 95°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	110 G†	160 G†
Altitude (maximum)	-15.2 m to 3048 m (4.64 ft to 5518.4 ft)	-15.2 m to 10668 m (4.64 ft to 19234.4 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 PNP181418, PNP43920 and PNP179097.

4

Keyboard shortcuts

NOTE: Keyboard characters may differ depending on the keyboard language configuration. Keys that are used for shortcuts remain the same across all language configurations.

Table 28. List of keyboard shortcuts

Keys	Primary behavior
Fn + F1	Mute audio
Fn + F2	Decrease volume
Fn + F3	Increase volume
Fn + F4	Play/Pause
Fn + F5	Turn on/off keyboard backlight
Fn + F6	Decrease brightness
Fn + F7	Increase brightness
Fn + F8	Switch to external display
Fn + F10	Print screen
Fn + F11	Home
Fn + 12	End
Fn + Ctrl	Open application menu

5

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 29. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell app	
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	1. Go to www.dell.com/support. 2. On the menu bar at the top of the Support page, select **Support** > **Knowledge Base**. 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.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see 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.