Latitude 5330

Technical Guidebook



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.

MARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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MediaTek MT7921, 2x2, Wi-Fi 6 (WiFi 802.11ax), Bluetooth 5.2	
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Views of Latitude 5330

Right



- 1. SIM-card slot
- 2. Universal audio port
- 3. USB 3.2 Gen 1 port with PowerShare
- **4.** HDMI 2.0 port
- 5. Wedge-shaped lock slot

Left



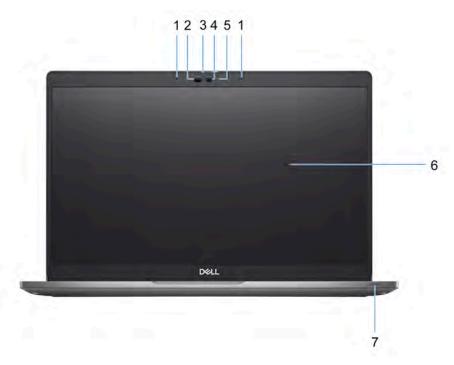
- 1. Thunderbolt 4 port with DisplayPort Alt Mode/USB Type-C/USB4/Power Delivery
- 2. Thunderbolt 4 port with DisplayPort Alt Mode/USB Type-C/USB4/Power Delivery
- 3. USB 3.2 Gen 1 port
- 4. microSD-card slot
- 5. Smart-card reader slot (optional)

Top



- 1. Power button with fingerprint reader (optional)
- 2. Keyboard
- 3. NFC/Contactless smart card reader (optional)
- 4. Clickpad

Front



- 1. Dual array microphone
- 2. IR emitter/Ambient Light Sensor (ALS) (optional)

- 3. Camera shutter
- 4. HD RGB camera / FHD IR camera / FHD IR camera with Proximity Sensor (optional)
- 5. Camera status LED (optional)
- 6. LCD panel
- 7. Battery indicator LED

Bottom



- 1. Speaker
- 2. Fan vents
- 3. Service tag label

Service Tag

The service tag is a unique alphanumeric identifier that allows Dell service technicians to identify the hardware components in your computer and access warranty information.



Modes

The following modes are applicable for your 2-in-1 computers (optional).

Notebook



Tablet



Stand



Tent



Battery charge and status light

The following table lists the battery charge and status light behavior of your Latitude 5330.

Table 1. Battery charge and status light behavior

Power Source	LED Behavior	System Power State	Battery Charge Level
AC Adapter	Off	S0 - S5	Fully Charged
AC Adapter	Solid White	S0 - S5	< Fully Charged
Battery	Off	S0 - S5	11-100%
Battery	Solid Amber (590+/-3 nm)	S0 - S5	< 10%

- S0 (ON) System is turned on.
- S4 (Hibernate) The system consumes the least power compared to all other sleep states. The system is almost at an OFF state, expect for a trickle power. The context data is written to hard drive.
- S5 (OFF) The system is in a shutdown state.

Specifications of Latitude 5330

Dimensions and weight

The following table lists the height, width, depth, and weight of your Latitude 5330.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	16.92 mm (0.67 in.)
Rear height	18.43 mm (0.73 in.)
Width	305.70 mm (12.04 in.)
Depth	207.50 mm (8.17 in.)
Weight (minimum)	Laptop: 1.20 kg (2.65 lb)2-in-1: 1.32 kg (2.91 lb)
	(i) NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.

Processor

The following table lists the details of the processors supported by your Latitude 5330.

Table 3. Processor

Description	Option one	Option two	Option three	Option four
Processor type	12 th Generation Intel Core i3-1215U	Intel vPro Enterprise with Intel Core i5-1235U	Intel vPro Enterprise with Intel Core i5-1245U	Intel vPro Enterprise with Intel Core i7-1265U
Processor wattage	15 W	15 W	15 W	15 W
Processor core count	2+4	2+8	2+8	2+8
Processor thread count	8	12	12	12
Processor speed	1.20 GHz to 4.40 GHz	1.30 GHz to 4.40 GHz	1.60 GHz to 4.40 GHz	1.80 GHz to 4.80 GHz
Processor cache	10 MB	12 MB	12 MB	12 MB
Integrated graphics	Intel UHD Graphics	Intel Iris Xe Graphics (i) NOTE: System with single- channel memory is shown as Intel UHD Graphics	Intel Iris Xe Graphics i NOTE: System with single- channel memory is shown as Intel UHD Graphics	Intel Iris Xe Graphics (i) NOTE: System with single-channel memory is shown as Intel UHD Graphics in Intel

Table 3. Processor (continued)

Description	Option one	Option two	Option three	Option four
		in Intel Graphics Command Centre (IGCC).	in Intel Graphics Command Centre (IGCC).	Graphics Command Centre (IGCC).

Chipset

The following table lists the details of the chipset supported by your Latitude 5330.

Table 4. Chipset

Description	Values
Chipset	Intel PCH-LP
Processor	12 th Generation Intel Core i3/i5/i7 processors
DRAM bus width	64-bit (for dual-channel)
Flash EPROM	vPro: 16 MB + 32 MBNon-vPro: 32 MB
PCle bus	Up to Gen 4.0

Operating system

Your Latitude 5330 supports the following operating systems:

- Windows 11 Home
- Windows 11 Pro
- Windows 11 Pro Downgrade (Windows 10 Pro Image-factory installed)
- Ubuntu Linux 20.04 LTS

Memory

The following table lists the memory specifications of your Latitude 5330.

Table 5. Memory specifications

Description	Values
Memory slots	Dual Channel On-board Memory
Memory type	DDR4
Memory speed	3200 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, 32 GB
Memory configurations supported	8 GB, DDR4, 3200 MHz, dual-channel

Table 5. Memory specifications (continued)

Description	Values	
	16 GB, DDR4, 3200 MHz, dual-channel32 GB, DDR4, 3200 MHz, dual-channel	

External ports

The following table lists the external ports on your Latitude 5330.

Table 6. External ports

Description	Values	
USB ports	 One USB 3.2 Gen 1 port One USB 3.2 Gen 1 port with PowerShare Two Thunderbolt 4 ports with DisplayPort Alt Mode/USB-C/USB4/Power Delivery 	
Audio port	One Universal audio port	
Video port/ports	One HDMI 2.0 port	
Media-card reader	One microSD-card slot	
Power-adapter port	USB Type-C power input	
Security-cable slot	One wedge-shaped lock slot	

Internal slots

The following table lists the internal slots of your Latitude 5330.

Table 7. Internal slots

Description	Values
M.2	 One M.2 2230 slot for WiFi and Bluetooth card One M.2 2230/2280 slots for solid-state drive NOTE: To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at www.dell.com/support.

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module specifications of your Latitude 5330.

Table 8. Wireless module specifications

Description	Option one	Option two	Option three
Model number	Realtek RTL8822CE	Intel AX211	MediaTek MT7921
Transfer rate	Up to 867 Mbps	Up to 2400 Mbps	Up to 1200 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz/6 GHz	2.4 GHz/5 GHz

Table 8. Wireless module specifications (continued)

Description	Option one	Option two	Option three
Wireless standards	WiFi 802.11a/b/gWi-Fi 4 (WiFi 802.11n)Wi-Fi 5 (WiFi 802.11ac)	 WiFi 802.11a/b/g Wi-Fi 4 (WiFi 802.11n) Wi-Fi 5 (WiFi 802.11ac) Wi-Fi 6E (WiFi 802.11ax) 	 WiFi 802.11a/b/g Wi-Fi 4 (WiFi 802.11n) Wi-Fi 5 (WiFi 802.11ac) Wi-Fi 6 (WiFi 802.11ax)
Encryption	64-bit/128-bit WEP AES-CCMP TKIP	64-bit/128-bit WEPAES-CCMPTKIP	64-bit/128-bit WEPAES-CCMPTKIP
Bluetooth	Bluetooth 5.0	Bluetooth 5.2	Bluetooth 5.2

WWAN module

The following table lists the Wireless Wide Area Network (WWAN) module supported on your Latitude 5330.

Table 9. WWAN module specifications

Description	Values	
Model number	Intel 7360 (DW5820e)	
Transfer rate	Up to 450 Mbps DL/50 Mbps UL (Cat 9)	
Frequency bands supported	 LTE FDD: 450 Mbps DL/50 Mbps UL (Cat 9) LTE TDD: B347 Mbps DL/30 Mbps UL (Cat 9) UMTS/HSPA+: UMTS 384 Kbps DL/384 Kbps UL 	
Wireless standards	LTE Category 9UMTS/HSPA+	
Encryption	Not supported	
Global Navigation Satellite System (GNSS)	Supports GPS, BDS, and GLONASS	
i NOTE: For instructions on how to find your computer's IMEI (International Mobile Station Equipment Identity) number		

see the knowledge base article 000143678 at www.dell.com/support.

Audio

The following table lists the audio specifications of your Latitude 5330.

Table 10. Audio specifications

Description	Values
Audio controller	Realtek ALC3204 with Waves MaxxAudio Pro
Stereo conversion	24-bit Digital-to-Analog (DAC) and Analog-to-Digital (ADC)
Internal audio interface	High definition audio interface
External audio interface	Universal audio jack
Number of speakers	Two

Table 10. Audio specifications (continued)

Description		Values	
Internal-speaker ampli	ifier	Supported (audio codec integrated)	
External volume controls		Keyboard shortcut controls	
Speaker output:			
	Average speaker output	2 W	
	Peak speaker output	2.5 W	
Subwoofer output		Not supported	
Microphone		Dual-array microphones	

Storage

This section lists the storage options on your Latitude 5330.

Table 11. Storage matrix

Storage	Single M.2 socket
M.2 2230, Gen 3 PCle x4 NVMe	Yes
M.2 2280, Gen 3 PCle x4 NVMe	Yes
M.2 2280, Gen 4 PCle x4 NVMe	Yes
M.2 2280, Gen 3 PCle x4 NVMe, SED	Yes

Table 12. Storage specifications

Storage type	Interface type	Capacity
M.2 2230, Class 35 SSD	PCle NVMe Gen3 x4	Up to 1 TB
M.2 2230, Class 35 SSD	PCle NVMe Gen4 x4	Up to 1 TB
M.2 2230, Class 35 SSD, self-encrypting drive	PCIe NVMe Gen3 x4	256 GB
M.2 2230, Class 35 SSD, self-encrypting drive	PCIe NVMe Gen4 x4	256 GB
M.2 2280, Class 40 SSD	PCle NVMe Gen3x4	Up to 1 TB
M.2 2280, Class 40 SSD	PCle NVMe Gen4 x4	Up to 2 TB
M.2 2280, Class 40 SSD, self-encrypting drive	PCle NVMe Gen3 x4	Up to 1 TB
M.2 2280, QLC PCIe NVMe	PCle NVMe	512 GB

Media-card reader

The following table lists the media-card reader specifications of your Latitude 5330.

Table 13. Media-card reader (standard offering)

Media supported (Maximum capacity supported will vary by Flash Media Types)			
Media Supported Micro Secure Digital (mSD)			
Micro Secure Digital High Capacity (mSDHC)			
Micro Secure Digital Extended Capacity (mSDXC)			
Support Specification Versions microSD 4.0 card			

Keyboard

The following table lists the keyboard specifications of your Latitude 5330.

Table 14. Keyboard specifications

Description	Values
Keyboard type	Standard backlit keyboard Standard non-backlit keyboard
Keyboard layout	QWERTY
Number of keys	United States and Canada: 79 keysUnited Kingdom: 80 keysJapan: 83 keys
Keyboard size	X=18.05 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 perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key. (i) NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.

Camera

The following table lists the camera specifications of your Latitude 5330.

Table 15. Camera specifications

Description	Option one	Option two	Option (Only for 2-in-1)	Option (Only for clamshell)
Number of cameras	One	One	One	One
Camera type	Integrated 6 mm HD RGB Webcam		Integrated 6 mm FHD RGB + IR Webcam with proximity sensor and	Integrated 6 mm FHD RGB + IR Webcam with

Table 15. Camera specifications (continued)

De	escription	Option one	Option two	Option (Only for 2-in-1)	Option (Only for clamshell)
				Ambient light sensor (Optional)	Human presence detection
Ca	amera location	Front camera	Front camera	Front camera	Front camera
Са	amera sensor type	CMOS sensor technology	CMOS sensor technology	CMOS sensor technology	CMOS sensor technology
Са	amera resolution:				
	Still image	0.92 megapixel	0.92 megapixels	0.92 megapixels	0.92 megapixels
	Video	1280 x 720 (HD) at 30 fps	1920 x 1080 (FHD) at 30 fps	1920 x 1080 (FHD) at 30 fps	1920 x 1080 (FHD) at 30 fps
	frared camera solution:				
	Still image	NA	0.23	0.23	0.23
	Video	NA	640 x 360	640 x 360	640 x 360
Dia	agonal viewing angle:				
	Camera	78.60 degrees	87 degrees	87.60 degrees	87.60 degrees
	Infrared camera	NA	87 degrees	87.60 degrees	87.60 degrees

Clickpad

The following table lists the touchpad specifications of your Latitude 5330.

Table 16. Clickpad specifications

Description		Values	
Clickpad reso	olution:	>300 dpi	
Clickpad dim	ensions:		
	Horizontal	115 mm (4.53 in.)	
	Vertical	67 mm (2.64 in.)	
Clickpad gestures		For more information about clickpad gestures available on Windows, see the Microsoft knowledge base article 4027871 at support.microsoft.com.	

Power adapter

The following table lists the power adapter specifications of your Latitude 5330.

Table 17. Power adapter specifications

Description	Option one	Option two	Option three	Option four
Туре	60 W AC adapter, USB-C	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	65 W AC adapter, USB-C	90 W AC adapter, USB-C

Table 17. Power adapter specifications (continued)

De	escription	Option one	Option two	Option three	Option four
Ро	wer-adapter din	nensions:			
	Height	22 mm (0.87 in.)	22 mm (0.87 in.)	28 mm (1.10 in.)	22 mm (0.87 in.)
	Width	55 mm (2.16 in.)	55 mm (2.16 in.)	51 mm (2.01 in.)	66 mm (2.60 in.)
	Depth	66 mm (2.60 in.)	66 mm (2.60 in.)	112 mm (4.41 in.)	130 mm (5.12 in.)
Inp	out voltage	100 VAC-240 VAC	100 VAC-240 VAC	100 VAC x 240 VAC	100 VAC x 240 VAC
Inp	out frequency	50 Hz-60 Hz	50 Hz-60 Hz	50 Hz to 60 Hz	50 Hz to 60 Hz
	out current aximum)	1.70 A	1.70 A	1.70 A	1.50 A
Output current (continuous)		 20 V/3 A (Continuous) 15 V/3 A (Continuous) 9 V/3 A (Continuous) 5 V/3 A (Continuous) 	 20 V/3 A (Continuous) 15 V/3 A (Continuous) 9 V/3 A (Continuous) 5 V/3 A (Continuous) 	 20 V/3.25 A (Continuous) 15 V/3 A (Continuous) 9 V/3 A (Continuous) 5 V/3 A (Continuous) 	 20 V/4.5 A (Continuous) 15 V/3 A (Continuous) 9 V/3 A (Continuous) 5 V/3 A (Continuous)
	ted output Itage	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 VDC
Те	mperature range	e:			
	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)	0°C to 40°C (32°F to 104°F)
	Storage	-20°C to 70°C (-4°F to 158°F)	-20°C to 70°C (-4°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
	CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.				

Battery

The following table lists the battery specifications of your Latitude 5330.

Table 18. Battery specifications

Description		Option one	Option two	Option three	Option four
Battery type		3 cell, 41 WHr, lithium- ion, ExpressCharge Boost	3 cell, 41 WHr, lithium-ion, Long Cycle Life	4 cell, 58 WHr, lithium-ion, ExpressCharge Boost	4 cell, 58 WHr, lithium-ion, Long Cycle Life
Battery voltage		11.25 VDC	11.25 VDC	7.6 VDC	7.6 VDC
Battery weight (minimum)		0.177 kg (0.38 lbs)	0.177 kg (0.38 lbs)	0.23 kg (0.51 lbs)	0.23 kg (0.51 lbs)
Battery dimensions:			^		
	Height	5.70 mm (0.22 in.)	5.70 mm (0.22 in.)	5.70 mm (0.22 in.)	5.70 mm (0.22 in.)

Table 18. Battery specifications (continued)

Description		Option one	Option two	Option three	Option four
	Width	206.4 mm (8.12 in.)	206.4 mm (8.12 in.)	242.0 mm (9.52 in.)	242.0 mm (9.52 in.)
	Depth	89.4 mm (3.51 in.)	89.4 mm (3.51 in.)	89.4 mm (3.51 in.)	89.4 mm (3.51 in.)
Temperature r	ange:	<u> </u>	<u> </u>		
	Operatin g	 Charge: 0 °C to 45 °C (32 °F to 113 °F) Discharge: 0 °C to 70 °C (32 °F to 158 °F) 	 Charge: 0 °C to 45 °C (32 °F to 113 °F) Discharge: 0 °C to 70 °C (32 °F to 158 °F) 	 Charge: 0 °C to 45 °C (32 °F to 113 °F) Discharge: 0 °C to 70 °C (32 °F to 158 °F) 	 Charge: 0 °C to 45 °C (32 °F to 113 °F) Discharge: 0 °C to 70 °C (32 °F to 158 °F)
	Storage	-40 °C to 65 °C (-40 °F to 149 °F)	-40 °C to 65 °C (-40 °F to 149 °F)	-40 °C to 65 °C (-40 °F to 149 °F)	-40 °C to 65 °C (-40 °F to 149 °F)
Battery 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.	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.
Battery chargi (approximate) i NOTE: Co the chargir duration, s end time, a using the D Manager a For more ir on the Dell Manager s and My De www.dell.co	ntrol ng time, tart and and so on Dell Power pplication. nformation Power ee, Me	Express Charge Method: • 0 - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours • 16 - 45°C normal express charge • 46 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours Standard Charge/ Predominately AC User Charge Method: • 0 - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours • 16 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours Express Charge Boost Charge Method (Fast Charge for Initial 35%): • 16 - 45°C target charge time from 0 to 35% RSOC is 20 mins for Accelerated Charge	Standard Charge/ Predominately AC User Charge Method: • 0 - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours • 16 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours	Express Charge Method: O - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours 16 - 45°C normal express charge 46 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours Standard Charge/ Predominately AC User Charge Method: O - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours 16 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours Express Charge Boost Charge Method (Fast	Standard Charge/ Predominately AC User Charge Method: O - 15°C maximum allowable charge time from 0 to 100% RSOC is 4 hours 16 - 50°C maximum allowable charge time from 0 to 100% RSOC is 3 hours

Table 18. Battery specifications (continued)

Description	Option one	Option two	Option three	Option four
			Charge for Initial 35%):	
			16 - 45°C target charge time from 0 to 35% RSOC is 20 mins for Accelerated Charge	
Coin-cell battery	Yes	Yes	Yes	Yes

CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.

Display

The following table lists the display specifications of your Latitude 5330.

Table 19. Display specifications

Description		Option one	Option two	Option three	Option for 2-in-1 only
Display type		Full High Definition (FHD)	Full High Definition (FHD), low blue light	Full High Definition (FHD)	Full High Definition (FHD)
Display-panel technology		Wide Viewing Angle (WVA)	Wide-Viewing Angle (WVA)	Wide Viewing Angle (WVA)	Wide-Viewing Angle (WVA)
Display- dimensi area):	-panel ions (active				
	Height	165.24 mm (6.51 in.)	165.24 mm (6.51 in.)	165.24 mm (6.51 in.)	165.24 mm (6.51 in.)
	Width	293.76 mm (11.57 in.)	293.76 mm (11.57 in.)	293.76 mm (11.57 in.)	293.76 mm (11.57 in.)
	Diagonal	337.08 mm (13.27 in.)	337.08 mm (13.27 in.)	337.08 mm (13.27 in.)	337.08 mm (13.27 in.)
Display- resoluti	-panel native on	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Lumina	nce (typical)	250 nits	400 nits	300 nits	270 nits
Megapixels		2073600	2073600	2073600	2073600
Color gamut		45% NTSC typ.	100% sRGB typ.	72% NTSC typ.	100% sRGB typ.
Pixels Per Inch (PPI)		166	166	166	166
Contras	st ratio (typical)	800:1	1000:1	700:1	600:1

CAUTION: Dell recommends that you charge the battery regularly for optimal power consumption. If your battery charge is completely depleted, connect the power adapter, turn on your computer, and then restart your computer to reduce the power consumption.

Table 19. Display specifications (continued)

Description	Option one	Option two	Option three	Option for 2-in-1 only
Response time (max)	35 ms	35 ms	35 ms	35 ms
Refresh rate	60 Hz	60 Hz	60 Hz	60 Hz
Horizontal view angle	80/80 min. 85/85 typ. +/- degrees	80/80 min. 85/85 typ. +/- degrees	80/80 min. 85/85 typ. +/- degrees	80/80 min. 85/85 typ. +/- degrees
Vertical view angle	80/80 min. 85/85 typ. +/- degrees	80/80 min. 85/85 typ. +/- degrees	80/80 min. 85/85 typ. +/- degrees	80/80 min. 85/85 typ. +/- degrees
Pixel pitch	0.153 x 0.153 mm			
Power consumption (maximum)	3.5 W@Mosaic	2.52 W@Mosaic	4.4 W@Mosaic	4.5 W@Mosaic
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare	(DXC) Anti-reflection/Anti- smudge
Touch options	No	No	Yes	Yes

Fingerprint reader (optional)

The following table lists the specifications of the optional fingerprint-reader of your Latitude 5330.

Table 20. Fingerprint reader specifications

Description	Values
Fingerprint-reader sensor technology	Capacitive
Fingerprint-reader sensor resolution	508 dpi
Fingerprint-reader sensor pixel size	256 x 360

Sensor

The following table lists the sensor of your Latitude 5330.

Table 21. Sensor

Sensor support
Ambient Light Sensor on the hinge-up (optional)
P-sensor on the hinge-up (optional)
1 Accelerometer in the base (system board) for both Clamshell and 2-in-1
1 Accelerometer (Accelerometer + Gyro) in the hinge-up sensor board (Upsell on clamshell with Proximity/ALS/IR camera and 100% attached on 2-in-1)

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Latitude 5330.

Table 22. GPU—Integrated

Controller	Memory size	Processor
Intel Iris Xe Graphics	Shared system memory	12 th Generation Intel Core i5/i7 processors i NOTE: System with single-channel memory is shown as Intel UHD Graphics in Intel Graphics Command Centre (IGCC).
Intel UHD Graphics	Shared system memory	12 th Generation Intel Core i3 processor

Hardware security

The following table lists the hardware security of your Latitude 5330.

Table 23. Hardware security

Windows Hello - Fingerprint Reader (optional)		
Trusted Platform Module (TPM) 2.0 FIPS 140-2 Certified		
TCG Certification for TPM (Trusted Computing Group)		
One wedge-shaped lock slot		
Fingerprint Reader in Power Button tied to ControlVault 3		
ControlVault 3 Advanced Authentication (optional) FIPS 140-2 Level 3 Certified		
Contacted Smartcard reader with Control Vault 3 (optional) FIPS 201 Certified		
Contactless Smartcard, NFC/FPR with CV3 (optional)		
SED SSD NVMe, SSD and HDD (Opal and non-Opal) per SDL		

Smart-card reader

Contactless smart-card reader

This section lists the contactless smart-card reader specifications of your Latitude 5330.

Table 24. Contactless smart-card reader specifications

Title	Description	Dell ControlVault 3 contactless smart-card reader with NFC
Felica Card Support	Reader and software capable of supporting Felica contactless cards	Yes
ISO 14443 Type A Card Support	Reader and software capable of supporting ISO 14443 Type A contactless cards	Yes
ISO 14443 Type B Card Support	Reader and software capable of supporting ISO 14443 Type B contactless cards	Yes

Table 24. Contactless smart-card reader specifications (continued)

Title	Description	Dell ControlVault 3 contactless smart-card reader with NFC
ISO/IEC 21481	Reader and software capable of supporting ISO/IEC 21481 compliant contactless cards and tokens	Yes
ISO/IEC 18092	Reader and software capable of supporting ISO/IEC 21481 compliant contactless cards and tokens	Yes
ISO 15693 Card Support	Reader and software capable of supporting ISO15693 contactless cards	Yes
NFC Tag Support	Supports reading and processing of NFC compliant tag information	Yes
NFC Reader Mode	Support for NFC Forum Defined Reader mode	Yes
NFC Writer Mode	Support for NFC Forum Defined Writer mode	Yes
NFC Peer-to-Peer Mode	Support for NFC Forum Defined Peer to Peer mode	Yes
EMVCo Compliant	Compliant with EMVCO smart card standards as posted to www.emvco.com	Yes
EMVCo Certified	Formally certified based on EMVCO smart card standards	Yes
NFC Proximity OS Interface	Enumerates NFP (Near Field Proximity) device for OS to utilize	Yes
PC/SC OS interface	Personal Computer/Smart Card specification for integration of hardware readers into personal computer environments	Yes
CCID driver compliance	Common driver support for Integrated Circuit Card Interface Device for OS level drivers	Yes
Windows Certified	Device certified by Microsoft WHCK	Yes
Dell ControlVault support	Device connects to Dell ControlVault for usage and processing	Yes
FIDO2 compliance	Dell ControlVault 3 Smart-card reader is compliant with the FIDO SPEC	Yes

(i) NOTE: 125 Khz proximity cards are not supported.

Table 25. Supported cards

Manufacturer	Card
HID	jCOP readertest3 A card (14443a)
	1430 1L
	DESFire D8H
	iClass (Legacy)
	iClass SEOS
NXP/Mifare	Mifare DESFire 8K White PVC Cards

Table 25. Supported cards (continued)

Manufacturer	Card
	Mifare Classic 1K White PVC Cards
	NXP Mifare Classic S50 ISO Card
G&D	idOnDemand - SCE3.2 144K
	SCE6.0 FIPS 80K Dual+ 1 K Mifare
	SCE6.0 nonFIPS 80K Dual+ 1 K Mifare
	SCE6.0 FIPS 144K Dual + 1K Mifare
	SCE6.0 nonFIPS 144K Dual + 1 K Mifare
	SCE7.0 FIPS 144K
Oberthur	idOnDemand - OCS5.2 80K
	ID-One Cosmo 64 RSA D V5.4 T=0 card

Contacted smart-card reader

The following table lists the contacted smart-card reader specifications of your Latitude 5330.

Table 26. Contacted smart-card reader specifications

Title	Description	Dell ControlVault 3 smart-card reader
ISO 7816 -3 Class A Card Support	Reader capable of reading 5V powered smart mcard	Yes
ISO 7816 -3 Class B Card Support	Reader capable of reading 3V powered smart card	Yes
ISO 7816 -3 Class C Card support	Reader capable of reading 1.8V powered smart card	Yes
ISO 7816-1 Compliant	Specification for the reader	Yes
ISO 7816 -2 Compliant	Specification for smart card device physical characteristics (size, location of connection points, etc.)	Yes
T=0 support	Cards support character level transmission	Yes
T=1 support	Cards support block level transmission	Yes
EMVCo Compliant	Compliant with EMVCo (for electronic payment standards) smart card standards as posted to www.emvco.com	Yes
EMVCo Certified	Formally certified based on EMVCO smart card standards	Yes
PC/SC OS interface	Personal Computer/Smart Card specification for integration of hardware readers into personal computer environments	Yes
CCID driver compliance	Common driver support for Integrated Circuit Card Interface Device for OS level drivers.	Yes
Windows Certified	Device certified by WHCK	Yes

Table 26. Contacted smart-card reader specifications (continued)

Title	Description	Dell ControlVault 3 smart-card reader
FIPS 201 (PIV/HSPD-12) Compliant via GSA	Device compliant with FIPS 201/PIV/ HSPD-12 requirements	Yes
FIDO2 compliance	Dell ControlVault 3 Smart-card reader is compliant with the FIDO SPEC	Yes

Operating and storage environment

This table lists the operating and storage specifications of your Latitude 5330.

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 range	-15.2 m to 3048 m (-49.87 ft to 10000 ft)	-15.2 m to 10668 m (-49.87 ft to 35000 ft)

CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.

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

 $[\]dagger$ Measured using a 2 ms half-sine pulse.

Engineering specifications

Wireless module

Realtek RTL8822CE, 1x1, Wi-Fi 5 (WiFi 802.11ac), Bluetooth 5.0

The following table lists the Realtek RTL8822CE specifications.

Table 28. Realtek RTL8822CE specifications

Host interface	Wi-Fi - PCleBluetooth - USB
Network standard	IEEE 802.11a/b/g/n/ac, MU-MIMO
Wi-Fi Alliance certifications	 Wi-Fi certified a/b/g/n/ac WMM WPA WPA2 Wi-Fi Direct (Windows only)
Operating frequency bands	2.4 Ghz5 Ghz
Data rate	2.4 GHz 40M: Up to 300 Mbps5 GHz 80M: Up to 867 Mbps
Power consumption	Optimized power modes (sleep states) reduce power consumption during periods of inactivity
Authentication	 Open Shared WPA WPA-PSK WPA2 WPA2-PSK
Client utility	Native Wi-Fi and Bluetooth Microsoft UI support
Software support	 Microsoft WHQL certified for Windows Linux Chrome
Radio On/Off	Supported
Roaming	Support seamless roaming between access points
Wake on wireless	supported
Wireless display	Native Miracast support by Windows
Wireless PAN standard	Dual Mode Bluetooth 5.0BLE
Bluetooth data rates	Up to 3 Mbps
Bluetooth operating frequency bands	2.4 GHz

Table 28. Realtek RTL8822CE specifications (continued)

Bluetooth profiles supported	Support for Microsoft Inbox Bluetooth profiles in Windows
Bluetooth data encryption	128-bit encryption
Operating temperature	0°C to + 70°C
Storage temperature	-40°C to +85°C

Intel AX211, 2x2 MIMO, 2400 Mbps, 2.4/5/6 GHz, Wi-Fi 6E (WiFi 802.11ax), Bluetooth 5.2

The following table lists the Intel AX211 specifications.

Table 29. Intel AX211 specifications

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Table 29. Intel AX211 specifications (continued)

Radio On/Off	Supported
Roaming	Support seamless roaming between access points
Wake on wireless	Supported
Wireless display	Native Miracast support by Windows
Wireless PAN standard	Dual Mode Bluetooth 5.2BLE
Bluetooth data rates	Up to 3 Mbps
Bluetooth operating frequency bands	2.4 GHz
Bluetooth profiles supported	Support for Microsoft Inbox Bluetooth profiles in Windows
Bluetooth data encryption	128-bit encryption
Bluetooth output power	Power class 1
Operating temperature	0°C to + 50°C (Full performance at shield temperatures up to 80°C)
Storage temperature	-40°C to +70°C
Humidity	Up to 90% RH non-condensing (at temperatures of 25° C to 35° C)

MediaTek MT7921, 2x2, Wi-Fi 6 (WiFi 802.11ax), Bluetooth 5.2

The following table lists the MediaTek MT7921 specifications.

Table 30. MediaTek MT7921 specifications

Host interface	Wi-Fi - PCleBluetooth - USB
Network standard	IEEE 802.11a/b/g/n/ac/ax, MU-MIMO
Wi-Fi Alliance certifications	 802.11 a/b/g/n/ac R2/ax R2 WMM WMM-PS WPA3 WPS2 PMF WFD Miracast Passpoint R2 Voice Personal
Operating frequency bands	2.4 Ghz5 Ghz
Data rate	2.4 GHz 40M: Up to 576 Mbps5 GHz 160M: Up to 1.2 Gbps
Power consumption	Optimized power modes (sleep states) reduce power consumption during periods of inactivity
Authentication	WPA and WPA2 Personal and EnterpriseWPA3 Personal and Enterprise
Authentication protocols	• 802.1X EAP-TLS

Table 30. MediaTek MT7921 specifications (continued)

	EAP-TTLS/MSCHAPv2PEAPv0 -MSCHAPv2 (EAP-SIM, EAP-AKA, EAP-AKA)
Encryption	 64-bit and 128-bit WEP TKIP 128-bit AES-CCMP 256-bit AES-GCMP
Product safety	ULC-ULCB (IEC60950-1)
Government compliance	FIPS 140-2FISMA
Antenna diversity	Supported
Radio On/Off	Supported
Roaming	Support seamless roaming between access points
Wake on wireless	supported
Wireless display	Native Miracast support by Windows
Wireless PAN standard	Dual Mode Bluetooth 5.2BLE
Bluetooth data rates	Up to 3 Mbps
Bluetooth operating frequency bands	2.4 GHz
Bluetooth profiles supported	Support for Microsoft Inbox Bluetooth profiles in Windows
Bluetooth data encryption	128-bit encryption
Bluetooth output power	Power class 1
Operating temperature	0° to +50° C (Full performance at shield temperatures up to 80° C)
Storage temperature	-40°C to +70°C
Humidity	Up to 90% RH non-condensing (at temperatures of 25° C to 35° C)

WWAN module

Intel XMM 7360 Global LTE-Advanced

The following table lists the Intel XMM 7360 Global LTE-Advanced specifications.

Table 31. Intel XMM 7360 Global LTE-Advanced specifications

Form factor	M.2 3042 Key-B
Host interface	Windows - PCle Gen1Chrome/Linux - USB 3.0/2.0
Network standard	LTE FDD/TDDWCDMA/HSPA+GNSS/Beidou
Transfer rate	CAT9 - Up to 450 MbpsUL - Up to 50 Mbps

Table 31. Intel XMM 7360 Global LTE-Advanced specifications (continued)

Operating frequency bands	 LTE (B1, B2, B3, B4, B5, B7, B8, B11, B12, B13, B17, B18, B19, B20, B21, B26, B28, B29, B30, B38, B39, B40, B41, B66) HSPA+ (1, 2, 4,5, 8)
Power supply	DC 3.135 V to 4.4 V, Typical 3.3 V
SIM card	Supported through external SIM slot
eSIM with Dual SIM (DSSA)	Not supported
Antenna diversity	Supported
Radio On/Off	Supported
Wake on wireless	Supported
Normal operating temperature	-10°C to +55°C
Extended operating temperature	-20°C to +65°C
Antenna connector	WWAN Main Antenna X 1WWAN Diversity Antenna X 1

GPU—Integrated

Intel Iris X^e Graphics

The following table lists the Intel Iris X^e Graphics specifications.

Table 32. Intel Iris Xe Graphics specifications

Bus type	Integrated graphics i NOTE: Intel Iris Xe Graphics uses the computers memory as video memory. i NOTE: System with single-channel memory is shown as Intel UHD Graphics in Intel Graphics Command Centre (IGCC)
Memory type	Shared with system memory
Memory interface	N/A (Unified Memory Architecture)
Estimated maximum power consumption (TDP)	15 W, included in the CPU power
Maximum color depth	10 bits
Maximum vertical refresh rate	Up to 120 Hz i NOTE: The refresh rate depends on the resolution.
External ports	HDMI 2.0 port, DisplayPort over USB Type-C
Multiple display support	Up to 4 displays including laptop display

Intel UHD Graphics

The following table lists the Intel UHD Graphics specifications.

Table 33. Intel UHD Graphics specifications

Bus type	Integrated graphics
21	3 0 1

Table 33. Intel UHD Graphics specifications (continued)

Memory type	Shared with system memory
Graphics level	i5/i7: GT2 (UHD)
Estimated maximum power consumption (TDP)	15 W
Overlay planes	Yes
Operating systems graphics/ video API support	DirectX 12, OpenGL (4.5 from Intel CML POR)
Maximum vertical refresh rate	 HDMI 2.0: 4096 x 2160 @ 60 Hz, 24bpp (HDMI or optional USB Type-C to HDMI dongle) Max Digital: 4096 x 2304 @ 60 Hz, 24bpp (mDP or DP 1.4 over Type-C Port)
External ports	HDMI 2.0 port DisplayPort over USB Type-C
Multiple display support	Up to 4 displays via DisplayPort Multi-Streaming Technology (MST)

Video port and resolution matrix

The following table lists the Video port and resolution matrix of your Latitude 5330.

Table 34. Video port and resolution matrix

Port type	HDMI 2.0 port
Maximum resolution—single display	4096 x 2160 @ 60 Hz
Maximum resolution—dual MST	Not applicable
Maximum resolution—triple MST	Not applicable

Storage

M.2 2230, 256 GB, PCIe NVMe Gen3 x4, Class 35 SSD

The following table lists the M.2 2230, 256 GB SSD specifications.

Table 35. 256 GB SSD specifications

Capacity	256 GB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22.00 mm (0.87 in.)
Depth (approximate)	30.00 mm (1.18 in.)
Interface type	PCle Gen3
Speed (maximum)	32 Gb/s (up to 4 lanes)
MTBF	1.4M hours
Logical blocks	500,118,192
Power source	
Power consumption (reference only)	• Idle: 5 mW (PS4)

Table 35. 256 GB SSD specifications (continued)

	Active: 3.50 W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C
Relative humidity range	10% to 90%
Op shock	1500G
Environmental non-operating conditions (non-condensing)	
Temperature range	-40°C to 70°C
Relative humidity range	5% to 95%

M.2 2230, 512 GB, PCIe NVMe Gen3 x4, Class 35 SSD

The following table lists the M.2 2230, 512 GB SSD specifications.

Table 36. 512 GB SSD specifications

Capacity	512 GB	
Height (approximate)	2.38 mm (0.09 in.)	
Width (approximate)	22.00 mm (0.87 in.)	
Depth (approximate)	30.00 mm (1.18 in.)	
Interface type	PCIe Gen3	
Speed (maximum)	32 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	1,000,215,216	
Power source		
Power consumption (reference only)	Idle: 5 mW (PS4)Active: 3.50 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2230, 1 TB, PCIe NVMe Gen3 x4, Class 35 SSD

The following table lists the M.2 2230, 1 TB SSD specifications.

Table 37. 1 TB SSD specifications

Capacity	1 TB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22.00 mm (0.87 in.)

Table 37. 1 TB SSD specifications (continued)

Depth (approximate)	30.00 mm (1.18 in.)	
Interface type	PCIe Gen3	
Speed (maximum)	32 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	2,000,409,264	
Power source		
Power consumption (reference only)	Idle: 5 mW (PS4)Active: 3.50 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2230, 256 GB, PCIe NVMe Gen4 x4, Class 35 SSD

The following table lists the M.2 2230, 256 GB SSD specifications.

Table 38. 256 GB SSD specifications

Capacity	256 GB	
Capacity	230 GD	
Height (approximate)	2.38 mm (0.09 in.)	
Width (approximate)	22.00 mm (0.87 in.)	
Depth (approximate)	30.00 mm (1.18 in.)	
Interface type	PCle Gen4	
Speed (maximum)	64 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	500,118,192	
Power source		
Power consumption (reference only)	• Idle: 5 mW (PS4)	
	Active: 4 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2230, 512 GB, PCIe NVMe Gen4 x4, Class 35 SSD

The following table lists the M.2 2230, 512 GB SSD specifications.

Table 39. 512 GB SSD specifications

Capacity	512 GB	
Height (approximate)	2.38 mm (0.09 in.)	
Width (approximate)	22.00 mm (0.87 in.)	
Depth (approximate)	30.00 mm (1.18 in.)	
Interface type	PCIe Gen4	
Speed (maximum)	64 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	1,000,215,216	
Power source		
Power consumption (reference only)	Idle: 5 mW (PS4)Active: 4 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2230, 1 TB, PCIe NVMe Gen4 x4, Class 35 SSD

The following table lists the M.2 2230, 1 TB SSD specifications.

Table 40. 1 TB SSD specifications

Capacity	1 TB	
Height (approximate)	2.38 mm (0.09 in.)	
Width (approximate)	22.00 mm (0.87 in.)	
Depth (approximate)	30.00 mm (1.18 in.)	
Interface type	PCIe Gen4	
Speed (maximum)	64 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	2,000,409,264	
Power source		
Power consumption (reference only)	• Idle: 5 mW (PS4)	
	Active: 4 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	

Table 40. 1 TB SSD specifications (continued)

Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2230, 256 GB, PCIe NVMe Gen3 x4, Opal Self-Encrypting Class 35 SSD

The following table lists the M.2 2230, 256 GB SSD, self-encrypting drive specifications.

Table 41. 256 GB SSD, self-encrypting drive specifications

Capacity	256 GB	
Height (approximate)	2.38 mm (0.09 in.)	
Width (approximate)	22.00 mm (0.87 in.)	
Depth (approximate)	30.00 mm (1.18 in.)	
Interface type	PCle Gen3	
Speed (maximum)	32 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	500,118,192	
Power source		
Power consumption (reference only)	Idle: 5 mW (PS4)Active: 3.50 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2230, 256 GB, PCIe NVMe Gen4 x4, Opal Self-Encrypting, Class 35 SSD

The following table lists the M.2 2230, 256 GB SSD specifications.

Table 42. 256 GB SSD, self-encrypting drive specifications

Capacity	256 GB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22.00 mm (0.87 in.)
Depth (approximate)	30.00 mm (1.18 in.)

Table 42. 256 GB SSD, self-encrypting drive specifications (continued)

Interface type	PCle Gen4	
Speed (maximum)	64 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	500,118,192	
Power source		
Power consumption (reference only)	• Idle: 5 mW (PS4)	
	Active: 4 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2280, 256 GB, PCIe NVMe Gen3 x4, Class 40 SSD

The following table lists the M.2 2280, 256 GB SSD specifications

Table 43. 256 GB SSD specifications

Capacity	256 GB	
Height (approximate)	2.38 mm (0.09 in.)	
Width (approximate)	22.00 mm (0.87 in.)	
Depth (approximate)	80.00 mm (3.15 in.)	
Interface type	PCIe Gen3	
Speed (maximum)	32 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	500,118,192	
Power source		
Power consumption (reference only)	Idle: 5 mW (PS4 - L1.2)Active: 4.50 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2280, 512 GB, PCIe NVMe Gen3 x4, Class 40 SSD

The following table lists the M.2 2280, 512 GB SSD specifications

Table 44. 512 GB SSD specifications

Capacity	512 GB	
Height (approximate)	2.38 mm (0.09 in.)	
Width (approximate)	22.00 mm (0.87 in.)	
Depth (approximate)	80.00 mm (3.15 in.)	
Interface type	PCIe Gen3	
Speed (maximum)	32 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	1,000,215,216	
Power source		
Power consumption (reference only)	Idle: 5 mW (PS4 - L1.2)Active: 4.50 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2280, 1 TB, PCIe NVMe Gen3 x4, Class 40 SSD

The following table lists the M.2 2280, 1 TB SSD specifications

Table 45. 1 TB SSD specifications

Capacity	1 TB
Height (approximate)	3.73 mm (0.15 in.)
Width (approximate)	22.00 mm (0.87 in.)
Depth (approximate)	80.00 mm (3.15 in.)
Interface type	PCIe Gen3
Speed (maximum)	32 Gb/s (up to 4 lanes)
MTBF	1.4M hours
Logical blocks	2,000,409,264
Power source	
Power consumption (reference only)	Idle: 5 mW (PS4 - L1.2)Active: 4.50 W
Environmental operating conditions (non-condensing)	
Temperature range	0°C to 70°C

Table 45. 1 TB SSD specifications (continued)

Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2280, 512 GB, PCIe NVMe Gen4 x4, Class 40 SSD

The following table lists the M.2 2280, 512 GB SSD specifications.

Table 46. 512 GB SSD specifications

512 GB		
2.38 mm (0.09 in.)		
22.00 mm (0.87 in.)		
80.00 mm (3.15 in.)		
PCle Gen4		
64 Gb/s (up to 4 lanes)		
1.4M hours		
1,000,215,216		
Power source		
• Idle: 5 mW (PS4 - L1.2)		
Active: 5 W		
Environmental operating conditions (non-condensing)		
0°C to 70°C		
10% to 90%		
1500G		
Environmental non-operating conditions (non-condensing)		
-40°C to 70°C		
5% to 95%		

M.2 2280, 1 TB, PCIe NVMe Gen4 x4, Class 40 SSD

The following table lists the M.2 2280, 1 TB SSD specifications.

Table 47. 1 TB SSD specifications

Capacity	1 TB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22.00 mm (0.87 in.)
Depth (approximate)	80.00 mm (3.15 in.)
Interface type	PCIe Gen4
Speed (maximum)	64 Gb/s (up to 4 lanes)

Table 47. 1 TB SSD specifications (continued)

MTBF	1.4M hours	
Logical blocks	2,000,409,264	
Power source		
Power consumption (reference only)	Idle: 5 mW (PS4 - L1.2)Active: 5 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2280, 2 TB, PCIe NVMe Gen4 x4, Class 40 SSD

The following table lists the M.2 2280, 2 TB SSD specifications.

Table 48. 2 TB SSD specifications

Capacity	2 TB	
Height (approximate)	2.38 mm (0.09 in.)	
Width (approximate)	22.00 mm (0.87 in.)	
Depth (approximate)	80.00 mm (3.15 in.)	
Interface type	PCIe Gen4	
Speed (maximum)	64 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	4,000,797,360	
Power source		
Power consumption (reference only)	Idle: 5 mW (PS4 - L1.2) Active: 5 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2280, 256 GB, PCIe NVMe Gen3 x4, Class 40 SSD, self-encrypting drive

The following table lists the M.2 2280, 256 GB SSD, self-encrypting drive specifications

Table 49. 256 GB SSD, self-encrypting drive specifications

T		
256 GB		
2.38 mm (0.09 in.)		
22.00 mm (0.87 in.)		
80.00 mm (3.15 in.)		
PCIe Gen3		
32 Gb/s (up to 4 lanes)		
1.4M hours		
500,118,192		
Power source		
Idle: 5 mW (PS4 - L1.2)Active: 4.50 W		
Environmental operating conditions (non-condensing)		
0°C to 70°C		
10% to 90%		
1500G		
Environmental non-operating conditions (non-condensing)		
-40°C to 70°C		
5% to 95%		

M.2 2280, 512 GB, PCIe NVMe Gen3 x4, Class 40 SSD, self-encrypting drive

The following table lists the M.2 2280, 512 GB SSD, self-encrypting drive specifications

Table 50. 512 GB SSD, self-encrypting drive specifications

Capacity	512 GB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22.00 mm (0.87 in.)
Depth (approximate)	80.00 mm (3.15 in.)
Interface type	PCIe Gen3
Speed (maximum)	32 Gb/s (up to 4 lanes)
MTBF	1.4M hours
Logical blocks	1,000,215,216
Power source	
Power consumption (reference only)	Idle: 5 mW (PS4 - L1.2)Active: 4.50 W

Table 50. 512 GB SSD, self-encrypting drive specifications (continued)

Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2280, 1 TB, PCIe NVMe Gen3 x4, Class 40 SSD, self-encrypting drive

The following table lists the M.2 2280, 1 TB SSD, self-encrypting drive specifications

Table 51. 1 TB SSD, self-encrypting drive specifications

Capacity	1 TB	
Height (approximate)	2.38 mm (0.09 in.)	
Width (approximate)	22.00 mm (0.87 in.)	
Depth (approximate)	80.00 mm (3.15 in.)	
Interface type	PCle Gen3	
Speed (maximum)	32 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	2,000,409,264	
Power source		
Power consumption (reference only)	Idle: 5 mW (PS4 - L1.2)Active: 4.50 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

M.2 2280, 512 GB, QLC PCIe NVMe Gen3 x4, SSD

The following table lists the M.2 2280, 512 GB SSD specifications

Table 52. 512 GB SSD specifications

Capacity	512 GB
Height (approximate)	2.38 mm (0.09 in.)
Width (approximate)	22.00 mm (0.87 in.)

Table 52. 512 GB SSD specifications (continued)

Depth (approximate)	80.00 mm (3.15 in.)	
Interface type	PCIe Gen3	
Speed (maximum)	32 Gb/s (up to 4 lanes)	
MTBF	1.4M hours	
Logical blocks	1,000,215,216	
Power source		
Power consumption (reference only)	Idle: 5 mW (PS4 - L1.2)Active: 4.50 W	
Environmental operating conditions (non-condensing)		
Temperature range	0°C to 70°C	
Relative humidity range	10% to 90%	
Op shock	1500G	
Environmental non-operating conditions (non-condensing)		
Temperature range	-40°C to 70°C	
Relative humidity range	5% to 95%	

Power adapter

The following table lists the power adapter specifications of your Latitude 5330.

Table 53. Power adapter specifications

Description	Values			
Туре	60 W AC adapter, USB-C	60 W AC adapter, USB-C, 2-pin	65 W AC adapter, USB-C	90 W AC adapter, USB-C
Diameter (connector)	Not supported	Not supported	Not supported	Not supported
Input voltage	100 VAC-240 VAC	100 VAC-240 VAC	100 VAC-240 VAC	100 VAC-240 VAC
Input frequency	50 Hz-60 Hz	50 Hz-60 Hz	50 Hz-60 Hz	50 Hz-60 Hz
Input current (maximum)	1.60 A	1.60 A	1.70 A	1.50 A
Output current (continuous)	20 V/4.50 A15 V/3 A9 V/3 A5 V/3 A	 20 V/4.50 A 15 V/3 A 9 V/3 A 5 V/3 A 	 20 V/4.50 A 15 V/3 A 9 V/3 A 5 V/3 A 	 20 V/4.50 A 15 V/3 A 9 V/3 A 5 V/3 A
Rated output voltage	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 VDC	20 VDC/15 VDC/9 VDC/5 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)	0°C to 40°C (32°F to 104°F)
Storage	40°C to -40°C (104°F to -40°F)	40°C to -40°C (104°F to -40°F)	40°C to -40°C (104°F to -40°F)	40°C to -40°C (104°F to -40°F)
Compliance	•	•	,	

Table 53. Power adapter specifications (continued)

Description	Values			
Erp Lot3 Tier 2 requirement	Yes	Yes	Yes	Yes
Energy Star 8.0 compliant	Yes	Yes	Yes	Yes
GS mark compliant	NA	NA	NA	NA
NCTC Anti Power Surge certification	NA	NA	NA	NA
NCTC Anti Lightning Strike certification	NA	NA	NA	NA

Accessories

The following table lists the supported accessories on your Latitude 5330.

Table 54. Accessories

Accessor	ies	

Audio:

Dell Pro Wireless Headset - WL5022

Adapters:

- Dell USB-C Mobile Adapter MH3021P
- Dell Mobile Adapter Speaker phone DA310

Carrying case:

• Dell Pro Hybrid Briefcase Backpack 15 - PO1521HB

Dock:

Dell Thunderbolt 4 Dock - WD22TB4

Mouse:

Dell Mobile Pro Wireless Mice - MS5120W

Keyboard:

Dell Pro Wireless Keyboard and Mouse - $\ensuremath{\mathsf{KM5221W}}$

Monitor:

- Dell 24 Monitor P2422H
- Dell 27 Monitor P2722H

Webcam:

Dell Pro Webcam

Security

Software security

The following table lists the software security details of your Latitude 5330.

Table 55. Software security

Security options
Latitude Security software per software functional plan/cycle list
McAfee Small Business Security 30-day trial
McAfee Small Business Security 12-month subscription, digitally delivered
McAfee Small Business Security 24-month subscription, digitally delivered
McAfee Small Business Security 36-month subscription, digitally delivered
Dell Digital Device ID: TPM Platform Root Key provisioning
BIOS complies to Dell SMBIOS implementation spec (DSIS)
SW and Drivers MUP/DUP compliant per spec Agile S01310
Dell Power Manager 3.0 or later version (DPM)
Dell Command Configure 4.0 or later (DCC) with Remote BIOS configuration
Dell Command Monitor 10.0 or later (DCM)
Dell Command Update 3.0 or later (DCU)
Dell Command Update Catalog (DCUC)
Dell Command Deploy (DCP)
Dell Command Integration Suite for System Center 5.0 (DCIS)
Dell Command Intel® vPro™ Out of Band (DCIV)
Dell Command PowerShell Provider 2.0 or later
Dell Command Deploy Driver Pack Catalog 1.0 or later
Dell Client System Repository Manager (RM) - client support
Dell SCOM Managability Pack (SCOM MP) - client support

Fingerprint reader

The following table lists the fingerprint reader specifications of your Latitude 5330.

Table 56. Fingerprint reader specifications

Category	Goodix—GF5288WNC	
Sensor technology	Capacitive sensing	
Sensor resolution	508 dpi	
Sensor size	5.48 mm x 4.47 mm	
Sensor pixel size	256 x 360 pixels	
Dell ControlVault support	Yes	
Dell ControlVault 3.0 support	Yes	

Table 56. Fingerprint reader specifications (continued)

Anti-spoofing	Yes
Template storage	Dell ControlVault HW protected and encrypted
Match on chip	Yes
FIPS 201 certified	No

Dell ControlVault 3.0

The following table lists the Dell ControlVault 3.0 specifications of your Latitude 5330.

Table 57. Dell ControlVault 3.0 specifications

Title	Description	Dell ControlVault 3.0
CPU technology	N/A	1 GHz ARM Cortex A7
RAM	N/A	1 MB
ROM	N/A	16 MB
TPM included	TPM enumeration included within ControlVault	No
Host Interface	N/A	USB 2.0
Fingerprint procession on chip	Fingerprint processing occurs within secure boundary of ControlVault	Yes
Windows WBF support	Support for Windows biometric framework when Fingerprint reader is attached	Yes
FIPS 140-2 level 3 complaint	Device complaint with FIPS 140-2 level 3 requirements	Yes
FIPS 140-2 level 3 certified	Device certified with FIPS 140-2 level 3 requirements	Yes

Trusted Platform Module

The following table lists the Trusted Platform Module (TPM) of your Latitude 5330.

Table 58. Trusted Platform Module (TPM)

TPM: ST/ST33 HTPH2X32AHD8
SPI interface
TPM 2.0
FIPs 140-2 certificate

Thermal and acoustic improvements

The following table lists the thermal and acoustic improvements of your Latitude 5330.

Table 59. Thermal and acoustic improvements

New larger single heat pipe	Increase the heat capacity to improve thermal dissipation
Better system tuning/setting	Get higher performance and good user experience
Pro-OS enhanced thermal setting (Dynamic PL1)	Optimized boot-up time to balance thermals at start-up

Table 59. Thermal and acoustic improvements (continued)

Linear fan control	Fan speed ramp more smoothly for better user experience, no more significant acoustic changing
DDT SSD setting	Protecting the SSD device in high temperature and worse cases to prevent blue screen of death (BSOD)
IEC 60529 ingress protection: IP-54	Dust protectedProtected against dripping water
Better acoustic experience	Enhance acoustic to 0.6 sone during daily working conditions and fan off when system is idle

System management features

Dell commercial systems come with a number of systems management options that are include by default for In-Band management with our Dell Client Command Suite. In-Band management meaning that the Operating System is functional and the device is connected to a network so that it can be managed. The Dell Client Command Suite of tools can be leveraged individually or with a systems management console like SCCM, LANDESK, KACE, etc.

We also offer Out-of-Band management as an option. Out-of-band management is when the system does not have a functional operating system or is turned off and you still want to be able to manage the system in that state.

Dell Client Command Suite for In-Band systems management

Dell Client Command Suite is a free toolkit available for download, for all Latitude Rugged tablets at dell.com/support, that automates and streamlines systems management tasks, saving time, money, and resources. It consists of the following modules that can be used independently, or with a variety of systems management consoles such as SCCM.

Dell Client Command Suite's integration with VMware Workspace ONE Powered by AirWatch, now allows customers to manage their Dell client hardware from the cloud, using a single Workspace ONE console.

Dell Command | Deploy enables easy operating system (OS) deployment across all major OS deployment methodologies and provides numerous system-specific drivers that have been extracted and reduced to an OS-consumable state.

Dell Command I Configure is a graphical user interface (GUI) admin tool for configuring and deploying hardware settings in a pre-OS or post-OS environment, and it operates seamlessly with SCCM and Airwatch and can be self-integrated into LANDesk and KACE. Simply, this is all about the BIOS. Command I Configure allows you to remotely automate and configure over 150+BIOS settings for a personalized user experience.

Dell Command I PowerShell Provider can do the same things as Command I Configure, but with a different method. PowerShell is a scripting language that allows customers to create a customized and dynamic configuration process.

Dell Command I Monitor is a Windows Management Instrumentation (WMI) agent that provides IT admins with an extensive inventory of the hardware and health-state data. Admins can also configure hardware remotely by using command line and scripting.

Dell Command I Power Manager (end-user tool) is a GUI-based factory-installed battery management tool that allows end users to choose the battery management methods that meet their personal preferences or work schedule without sacrificing IT's capability to control those settings with Group Policy.

Dell Command | Update (end-user tool) is factory-installed and allows admins to individually manage and automatically present and install Dell updates to the BIOS, drivers, and software. Command I Update eliminates the time-consuming hunting and pecking process of update installation.

Dell Command I Update Catalog provides searchable metadata that allows the management console to retrieve the latest system-specific updates (driver, firmware or BIOS). The updates are then delivered seamlessly to end-users using the customer's systems management infrastructure that is consuming the catalog (like SCCM).

Dell Command | vPro Out of Band console extends hardware management to systems that are offline or have an unreachable OS (Dell exclusive features).

Dell Command | Integration Suite for System Center - This suite integrates all the key components of the Client Command Suite into Microsoft System Center Configuration Manager 2012 and Current Branch versions.

Out of Band Systems Management

Intel Standard Manageability option **must be configured in our factory at the time of purchase, as it is NOT field upgradable.** It offers out-of-band management and DASH compliance (https://registry.dmtf.org/registry/results/field_initiative_name%3A%22DASH%201.0%22).

ComfortView Plus

WARNING: Prolonged exposure to blue light from the display may lead to long-term effects such as eye strain, eye fatigue, or damage to the eyes.

Blue light is a color in the light spectrum which has a short wavelength and high energy. Chronic exposure to blue light, particularly from digital sources, may disrupt sleep patterns and cause long-term effects such as eye strain, eye fatigue, or damage to the eyes.

The display on this computer is designed to minimize blue light and complies with TÜV Rheinland's requirement for low blue light displays.

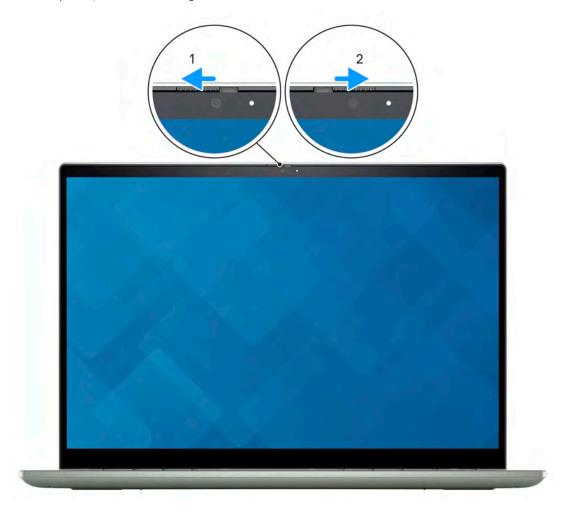
Low blue light mode is enabled at the factory, so no further configuration is necessary.

To reduce the risk of eye strain, it is also recommended that you:

- Position the display at a comfortable viewing distance between 20 and 28 inches (50 and 70 cm) from your eyes.
- Blink frequently to moisten your eyes, wet your eyes with water, or apply suitable eye drops.
- Look away from your display, and gaze at a distant object at 20 ft (609.60 cm) away for at least 20 seconds during each break.
- Take an extended break for 20 minutes every two hours.

Using the privacy shutter

- 1. Slide the privacy shutter to the left to access the camera lens.
- ${\bf 2.}\;\;$ Slide the privacy shutter to the right to cover the camera lens.



Dell Optimizer

This section details the Dell Optimizer specifications of your Latitude 5330.

On Latitude 5330 with Dell Optimizer, the following features are supported:

- ExpressConnect—Automatically joins the access point with the strongest signal, and directs bandwidth to conferencing applications when in use.
- **ExpressSign-in**—The Intel Context Sensing Technology's proximity sensor detects your presence to instantly wake up the computer and login using the IR camera and Windows Hello feature. Windows locks when you walk away.
- ExpressResponse—Prioritizes the most important applications. Applications open faster and perform better.
- ExpressCharge—Extends the battery runtime and improves battery performance by adapting to your patterns.
- Intelligent Audio—Collaborate like you're in the same room. Intelligent Audio enhances your audio quality and reduces background noises, so you can hear and be heard, creating a better conference experience for all.

For more information about configuring and using these features, see Dell Optimizer User Guide.

Color, material, and finish

This section details the color, material, and finish (CMF) specifications of your Latitude 5330.



Table 60. CMF specifications

A Cover (Top)	 CFRP + Bi-Injection Antenna Cover Titan Gray WUVM 10+/-2 GU
B Cover (Bezel)	 PC/ ABS + Elastomer Apollo, Resin Bezel: MT11520, 4+/-1 GU and Bumper: MT 11510, 3+/-1 GU
C Cover (Palmrest)	Plastic (Rustic Pewter, Resin)Titan Gray WUVM10+/-2 GU
D Cover (Bottom)	 Black CFRP PC+50%GF (For 2-in-1) Titan Gray WUVM 10+/-2 GU

i NOTE: Titan Gray, Cool Gray 9C = RGB 117 120 123 HEX/HTML 75787B CMYK 30 22 17 57

Keyboard shortcuts of Latitude 5330

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

Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. The symbol shown on the lower part of the key refers to the character that is typed out when the key is pressed. If you press shift and the key, the symbol shown on the upper part of the key is typed out. For example, if you press **2**, **2** is typed out; if you press **Shift** + **2**, **@** is typed out.

The keys F1-F12 at the top row of the keyboard are function keys for multi-media control, as indicated by the icon at the bottom of the key. Press the function key to invoke the task represented by the icon. For example, pressing F1 mutes the audio (refer to the table below).

However, if the function keys F1-F12 are needed for specific software applications, multi-media functionality can be disabled by pressing \mathbf{Fn} + \mathbf{Esc} . Subsequently, multi-media control can be invoked by pressing \mathbf{Fn} and the respective function key. For example, mute audio by pressing \mathbf{Fn} + $\mathbf{F1}$.

NOTE: You can also define the primary behavior of the function keys (F1–F12) by changing **Function Key Behavior** in BIOS setup program.

Table 61. List of keyboard shortcuts

Function key	Primary behavior
F1	Mute audio
F2	Decrease volume
F3	Increase volume
F4	Mic mute
F5	Keyboard backlight i NOTE: Non-backlight keyboards have F5 function key without the backlight icon and do not support toggle keyboard backlight function. i NOTE: Toggle to cycle the keyboard backlight status through off, low-backlight, and high-backlight
F6	Decrease screen brightness
F7	Increase screen brightness
F8	Switch to external display
F9	Operating system and application specific F9 behavior
F10	Print Screen
F11	Home
F12	End

The \mathbf{Fn} key is also used with selected keys on the keyboard to invoke other secondary functions.

Table 62. Secondary behavior

Function key	Secondary behavior
Fn + F1	Operating system and application specific F1 behavior
Fn + F2	Operating system and application specific F2 behavior
Fn + F3	Operating system and application specific F3 behavior

Table 62. Secondary behavior (continued)

Function key	Secondary behavior
Fn + F4	Operating system and application specific F4 behavior
Fn + F5	Operating system and application specific F5 behavior
Fn + F6	Operating system and application specific F6 behavior
Fn + F8	Operating system and application specific F8 behavior
Fn + F9	Operating system and application specific F9 behavior
Fn + F10	Operating system and application specific F10 behavior
Fn + F11	Operating system and application specific F11 behavior
Fn + F12	Operating system and application specific F12 behavior
Fn + PrtScr	Turn off/on wireless
Fn + B	Pause/Break
Fn + Insert	Sleep
Fn + S	Toggle scroll lock
Fn + H	Toggle between power and battery-status light/hard-drive activity light
Fn + R	System request
Fn + Ctrl	Open application menu
Fn + Esc	Toggle Fn-key lock
Fn + PgUp	Page up
Fn + PgDn	Page down
Fn + Left Arrow	Home
Fn + Right Arrow	End

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 63. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell app	(DOCAL)
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.