Precision 3480

Technical Guidebook

Regulatory Model: P165G
Regulatory Type: P165G001/P165G002/P165G003
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DELL Technologies

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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Contents

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Views of Precision 3480

Right

1. **Universal audio jack**

   Connect headphones or a headset (headphone and microphone combo).

2. **USB 3.2 Gen 1 port with PowerShare**

   Connect devices such as external storage devices and printers.

   Provides data transfer speeds up to 5 Gbps. PowerShare enables you to charge your USB devices even when your computer is turned off.

   NOTE: If your computer is turned off or in hibernate state, you must connect the power adapter to charge your devices using the PowerShare port. You must enable this feature in the BIOS setup program.

   NOTE: Certain USB devices may not charge when the computer is turned off or in sleep state. In such cases, turn on the computer to charge the device.

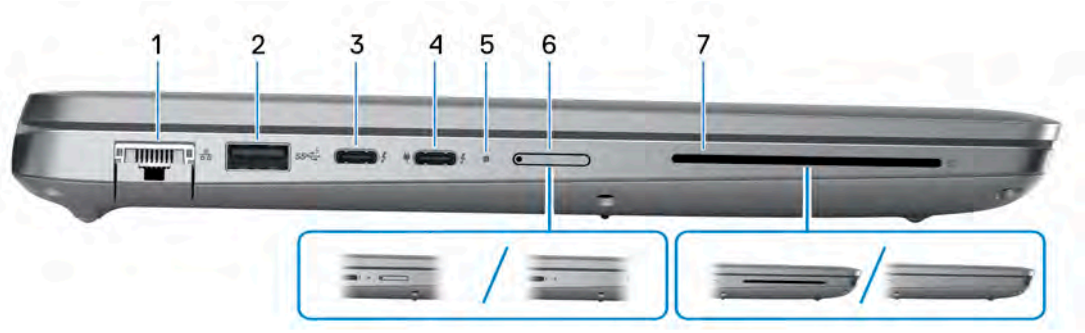
3. **HDMI port**

   Connect to a TV, external display or another HDMI-in enabled device. Provides video and audio output.

4. **Security-cable slot**

   Connect a security cable to prevent unauthorized movement of your computer.

Left



1. **Network port**

   Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or Internet access, with a transfer rate of 10/100/1000 Mbps.

2. **USB 3.2 Gen 1 port**

   Connect devices such as external storage devices and printers. Provides data transfer speeds up to 5 Gbps.

3. **Thunderbolt 4.0 with DisplayPort Alt Mode/USB Type-C/USB4/Power Delivery**

   Supports USB4, DisplayPort 1.4, Thunderbolt 4 and also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for USB4 and Thunderbolt 4.

   NOTE: You can connect a Dell Docking Station to the Thunderbolt 4 ports. For more information, search in the Knowledge Base Resource at www.dell.com/support.

   NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

   NOTE: USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

   NOTE: Thunderbolt 4 supports two 4K displays or one 8K display.

4. **Thunderbolt 4.0 with DisplayPort Alt Mode/USB Type-C/USB4/Power Delivery**

   Supports USB4, DisplayPort 1.4, Thunderbolt 4 and also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for USB4 and Thunderbolt 4.

   NOTE: You can connect a Dell Docking Station to the Thunderbolt 4 ports. For more information, search in the Knowledge Base Resource at www.dell.com/support.

   NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

   NOTE: USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

   NOTE: Thunderbolt 4 supports two 4K displays or one 8K display.

5. **Power and battery-status light**

   Indicates the power state and battery state of the computer.

   Solid white—Power adapter is connected and the battery is charging.

   Solid amber—Battery charge is low or critical.

   Off—Battery is fully charged.

   NOTE: On certain computer models, the power and battery-status light are also used for diagnostics. For more information, see the *Troubleshooting* section in your computer's *Service Manual*.

6. **nano-SIM slot (optional)**

   Insert a nano-SIM card to connect to a mobile broadband network.

7. **Smart-card reader (optional)**

   Using smart card provides authentication in corporate networks.

Top

1. **Touchpad**

   Move your finger on the touchpad to move the mouse pointer. Tap to left-click and two fingers tap to right-click.

2. **NFC/Contactless smart card reader (optional)**

   Provides contactless access of cards in corporate networks.

3. **Power button with optional fingerprint reader**

   Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

   When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for 10 seconds to force shut-down the computer.

   If the power button has a fingerprint reader, place your finger on the power button steadily to log in.

   NOTE: The power-status light on the power button is available only on computers without the fingerprint reader. Computers that are shipped with the fingerprint reader that is integrated on the power button will not have the power-status light on the power button.

   NOTE: You can customize the power-button behavior in Windows.

Display

1. **Left microphone**

   Provides digital sound input for audio recording and voice calls.

2. **Infrared emitter (optional)**

   Emits infrared light, which enables the infrared camera to sense and track motion.

3. **Infrared camera (optional)**

   Enhances security when paired with Windows Hello face authentication.

4. **Camera shutter**

   Slide the camera shutter to turn the camera on or off.

5. **Camera**

   Enables you to video chat, capture photos, and record videos.

6. **Camera-status light**

   Turns on when the camera is in use.

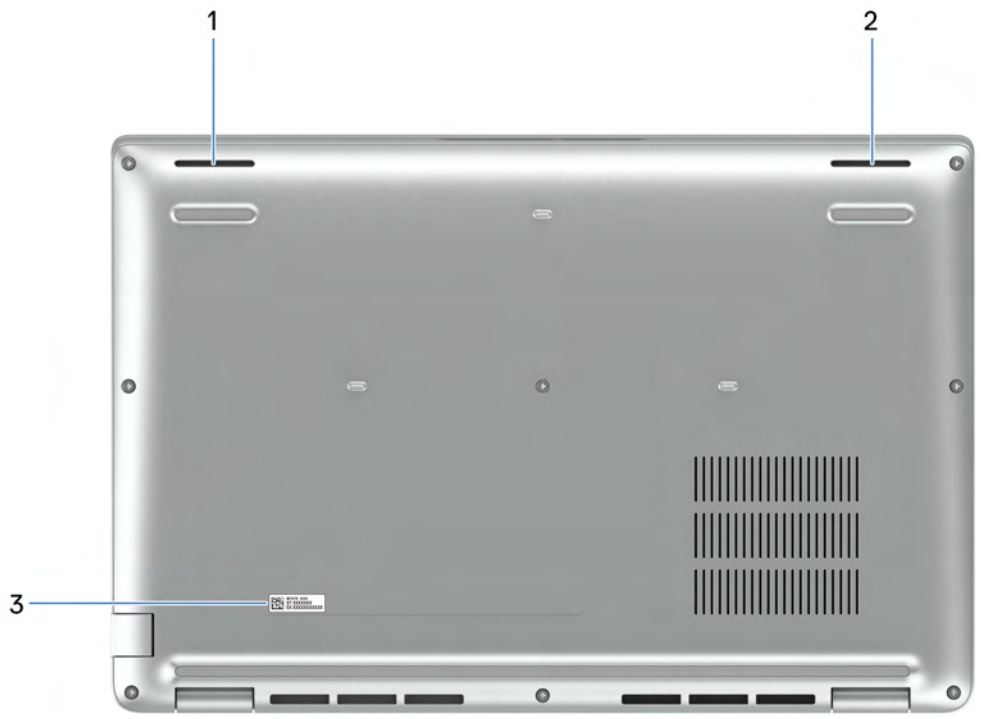
7. **Ambient-light sensor**

   The sensor detects the ambient light and automatically adjusts the display brightness.

8. **Right microphone**

   Provides digital sound input for audio recording and voice calls.

Bottom



1. **Left speaker**

   Provides audio output.

2. **Right speaker**

   Provides audio output.

3. **Service Tag label**

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

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.

Battery charge and status light

The following table lists the battery charge and status light behavior of your Precision 3480.

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.

2

Specifications of Precision 3480

Dimensions and weight

The following table lists the height, width, depth, and weight of your Precision 3480.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	19.06 mm (0.75 in.)
Rear height	21.04 mm (0.83 in.)
Width	321.35 mm (12.65 in.)
Depth	212 mm (8.35 in.)
Weight **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.	1.39 kg (3.06 lb)

Processor

The following table lists the details of the processors supported by your Precision 3480.

Table 3. Processor

Description	Option one	Option two	Option three	Option four	Option five	Option six
Processor type	13th Generation Intel Core i5-1335U vPro Essentials	13th Generation Intel Core i7-1355U vPro Essentials	13th Generation Intel Core i5-1340P vPro Essentials	13th Generation Intel Core i5-1350P vPro Enterprise	13th Generation Intel Core i7-1360P vPro Essentials	13th Generation Intel Core i7-1370P vPro Enterprise
Processor wattage	15 W	15 W	28 W	28 W	28 W	28 W
Processor total core count	10	10	12	12	12	14
Performance-cores	2	2	4	4	4	6
Efficient-cores	8	8	8	8	8	8
Processor total thread counts **NOTE:** Intel Hyper-Threading Technology is only available on Performanc e-cores.	12	12	16	16	16	20
Processor speed	Up to 4.60 GHz	Up to 5 GHz	Up to 4.60 GHz	Up to 4.70 GHz	Up to 5 GHz	Up to 5.20 GHz
Performance-cores frequency						
Processor base frequency	1.30 GHz	1.70 GHz	1.90 GHz	1.90 GHz	2.20 GHz	1.90 GHz
Maximum turbo frequency	4.60 GHz	5 GHz	4.60 GHz	4.70 GHz	5 GHz	5.20 GHz
Efficient-cores frequency						
Processor base frequency	0.90 GHz	1.20 GHz	1.40 GHz	1.40 GHz	1.60 GHz	1.40 GHz
Maximum turbo frequency	3.40 GHz	3.70 GHz	3.40 GHz	3.50 GHz	3.70 GHz	3.90 GHz
Processor cache	12 MB	12 MB	12 MB	12 MB	18 MB	24 MB
Integrated graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics

Chipset

The following table lists the details of the chipset supported by your Precision 3480.

Table 4. Chipset

Description	Values
Chipset	Integrated in the processor
Processor	13th Generation Intel Core i5/i7
DRAM bus width	64-bit
Flash EPROM	Up to 64 MB
PCIe bus	Up to Gen 4

Operating system

Your Precision 3480 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit
- Microsoft Windows 11 Pro downgrade (Win 10 Pro image FI + Win 11 Pro DPK)
- Windows 10 China G-SKU, 64-bit
- Ubuntu 22.04 LTS, 64-bit

Memory

The following table lists the memory specifications of your Precision 3480.

Table 5. Memory specifications

Description	Values
Memory slots	Two-SODIMM slots
Memory type	• Dual-channel DDR4 • Dual-channel DDR5
Memory speed	• 3200 MHz • 4800 MHz
Maximum memory configuration	64 GB
Minimum memory configuration	8 GB
Memory size per slot	8 GB, 16 GB, or 32 GB
Memory configurations supported	• 8 GB, 1 x 8 GB, DDR4, 3200 MHz, single-channel • 16 GB, 2 x 8 GB, DDR4, 3200 MHz, dual-channel • 16 GB, 1 x 16 GB, DDR4, 3200 MHz, single-channel • 32 GB, 2 x 16 GB, DDR4, 3200 MHz, dual-channel • 64 GB, 2 x 32 GB, DDR4, 3200 MHz, dual-channel • 8 GB, 1 x 8 GB, DDR5, 4800 MHz, single-channel • 16 GB, 2 x 8 GB, DDR5, 4800 MHz, dual-channel

Table 5. Memory specifications (continued)

Description	Values
	• 16 GB, 1 x 16 GB, DDR5, 4800 MHz, single-channel • 32 GB, 2 x 16 GB, DDR5, 4800 MHz, dual-channel • 64 GB, 2 x 32 GB, DDR5, 4800 MHz, dual-channel

External ports

The following table lists the external ports of your Precision 3480.

Table 6. External ports

Description	Values
Network port	One RJ45 port
USB ports	• Two Thunderbolt 4 port with DisplayPort Alt Mode/USB Type-C/USB4/Power Delivery **NOTE:** You can connect a Dell Docking Station to this port. For more information, search in the Knowledge Base Resource at www.dell.com/support. • One USB 3.2 Gen 1 port with PowerShare • One USB 3.2 Gen 1 port
Audio port	One Universal audio jack
Video port	One HDMI 2.0 port
Media-card reader	One smart card reader slot (optional)
Power-adapter port	Supported through USB-C
Security-cable slot	One security-cable slot (wedge-shaped)
SIM-card slot	Nano-SIM card slot (optional)

Internal slots

The following table lists the internal slots of your Precision 3480.

Table 7. Internal slots

Description	Values
M.2	• One M.2 2230 slot for WiFi and Bluetooth combo card • One M.2 2230 slot for solid-state drive • One M.2 3042/3052 for WWAN slot (optional) **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.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Precision 3480.

Table 8. Ethernet specifications

Description	Values
Model number	• Intel Jacksonville I219-LM 10/100/Gb (1000BASE-T) for vPRO configurations • Intel Jacksonville I219-V 10/100/Gb (1000BASE-T) for non-vPRO configurations
Transfer rate	10/100/1000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) modules supported on your Precision 3480.

Table 9. Wireless module specifications

Description	Option one	Option two
Model number	Realtek RTL8852BE	Intel AX211
Transfer rate	Up to 1201 Mbps	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz/6 GHz
Wireless standards	• WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6 (WiFi 802.11ax)	• WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6E (WiFi 802.11ax) **NOTE:** Wi-Fi 6 is supported in regions where Wi-Fi 6E is unavailable.
Encryption	• 64-bit/128-bit WEP • AES-CCMP • TKIP	• 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth	Bluetooth wireless card	Bluetooth wireless card

WWAN module

The following table lists the Wireless Wide Area Network (WWAN) module supported on your Precision 3480.

Table 10. WWAN module specifications

Description	Option one	Option two
Model number	4G DW5823, Intel XMM 7560 R Global LTE-Advanced, CAT16	5G DW5931e, Intel 5G 5000 Global Gigabit NR/LTE, 3GPP Release 15
Form factor	M.2 3042 Key-B	M.2 3042 Key-B
Host interface	PCIe Gen2	PCIe Gen3

Table 10. WWAN module specifications (continued)

Description	Option one	Option two
Network standard	LTE FDD/TDD, WCDMA/HSPA+, GPS/ GLONASS/BDS/Galileo	LTE FDD/TDD, WCDMA/HSPA+, GNSS/ Beidou NR FR1(Sub6) FDD/TDD, LTE FDD/TDD, WCDMA/HSPA+, GPS/ GLONASS/Galileo/BDS/QZSS
Transfer data rate	• Up to 1 Gbps DL (Cat 16) • Up to 150 Mbps UL	• SA: DL 4.67 Gbps/UL 1.25Gbps • NSA: DL 3.74 Gbps/UL 700Mbps • LTE: DL 1.6 Gbps (CAT19)/UL 150 Mbps • UMTS: DL 384 Kbps / UL 384 Kbps DL DC-HSPA+: 42 Mbps (CAT24)/UL 11.5 Mbps (CAT7)
Operating frequency bands	• LTE (B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41(HPUE), B42, B43, B46(receiver only), B48, B66, B71 • WCDMA/HSPA+ (1, 2, 4,5, 8)	• NR (n1, n2, n3, n5, n7, n8, n20, n25, n28, n30, n38, n40, n41, n48, n66, n71, n77, n78, n79) • LTE (B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71) • WCDMA/HSPA+ (1, 2, 4, 5, 8)
Power supply	DC 3.135 V to 4.4 V, Typical 3.3 V	DC 3.135 V to 4.4 V, Typical 3.3 V
SIM card	Supported through external SIM slot	Supported through external SIM slot
eSIM with dual SIM (DSSA)	Supported	Supported
Antenna diversity	Supported	Supported
Radio On/Off	Supported	Supported
Wake on wireless	Supported	Supported
Temperature	• Normal operating temperature: -10°C to + 55°C • Extended Operating temperature: -20°C to +65°C	• Normal operating temperature: -10°C to + 55°C • Extended Operating temperature: -30°C to +75°C • Storage temperature: -40°C to +85°C
Antenna connector	• WWAN Main Antenna x 4 • Supports 4x4 MIMO	• WWAN Main Antenna x 4 • Supports 4x4 MIMO
NOTE: For instructions on how to find your computer's IMEI (International Mobile Station Equipment Identity) number, search in the Knowledge Base Resource at www.dell.com/support.		

Audio

The following table lists the audio specifications of your Precision 3480.

Table 11. Audio specifications

Description		Values
Audio controller		Realtek Waves, MaxxAudio 12.0
Stereo conversion		Supported
Internal audio interface		High definition audio interface
External audio interface		Universal Audio Jack
Number of speakers		2
Internal-speaker amplifier		Not supported
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W
	Peak speaker output	2 W
Subwoofer output		Not supported
Microphone		Digital-array microphones in camera assembly

Storage

This section lists the storage options on your Precision 3480.

Table 12. Storage matrix

Storage	Single M.2 socket	2nd M.2 socket
M.2 2230 solid-state drive	Yes	Not supported

Table 13. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid-state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	Up to 2 TB
M.2 2230 Self-Encrypting solid-state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	Up to 256 GB

Keyboard

The following table lists the keyboard specifications of your Precision 3480.

Table 14. Keyboard specifications

Description	Values
Keyboard type	Standard keyboard

Table 14. Keyboard specifications (continued)

Description	Values
Keyboard layout	QWERTY
Number of keys	• English US, English International, Arabic, Canada bilingual (MUI), Chinese traditional, French-Canadian, Greek, Hebrew, Korean, Russian, Thai, Ukrainian: 79 keys • French-Canadian Quebec, Brazilian, Spanish, Belgian, Bulgarian, Czech & Slovakian (MUI), Danish, English UK, Estonian, French European, German, Hungarian, Icelandic, Italian, Nordic (MUI), Norwegian, Portugese Iberian, Slovenian, Spanish (Castillian), Spanish (Latin America), Swedish/Finnish, Swiss European (MUI), Turkish, Turkish F: 80 keys • Japanese: 83 keys
Keyboard size	X=19.05 mm key pitch Y=18.05 mm key pitch
Key distance (Key size (X/Y)	X=16.05 mm Y=15.05 mm
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. For more information, see Keyboard function keys.

Camera

The following table lists the camera specifications of your Precision 3480.

Table 15. Camera specifications

Description		Values
Number of cameras		One
Camera type		• FHD RGB camera • FHD RGB+IR camera • FHD RGB+IR camera with Ambient Light Sensor, Express Sign-In with Presence Detection and Intelligent Privacy
Camera location		Front camera
Camera sensor type		CMOS sensor technology
Camera resolution:		
	Still image	2.07 megapixel
	Video	1920 x 1080 (FHD) at 30 fps
Infrared camera resolution:		
	Still image	0.23 megapixel
	Video	640 x 360 at 30 fps

Table 15. Camera specifications (continued)

Description		Values
Diagonal viewing angle:		
	Camera	80 degrees
	Infrared camera	86.60 degrees

Touchpad

The following table lists the touchpad specifications of your Precision 3480.

Table 16. Touchpad specifications

Description		Values
Touchpad resolution:		> 300 DPI
Touchpad dimensions:		
	Horizontal	115 mm
	Vertical	67 mm
Touchpad gestures		For more information about touchpad gestures available on: • Windows, see the Microsoft knowledge base article at support.microsoft.com • Ubuntu, see ubuntu.com/support

Power adapter

The following table lists the power adapter specifications of your Precision 3480.

Table 17. Power adapter specifications

Description		Option one	Option two	Option three
Type		Pecos 65 W, USB-C	100 W, USB-C	130 W, USB-C
Power-adapter dimensions:				
	Height	28 mm (1.10 in.)	26.50 (1.04 in.)	22 mm (0.87 in.)
	Width	51 mm (2.01 in.)	60 mm (2.36 in.)	66 mm (2.60 in.)
	Depth	112 mm (4.41 in.)	122 mm (4.80 in.)	143 mm (5.63 in.)
Input voltage		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
Input current (maximum)		1.70 A	1.70 A	1.80 A
Output current (continuous)		• 20 V/3.25 A (continuous) • 15 V/3 A (continuous) • 9 V/3 A (continuous) • 5 V/3 A (continuous)	• 20 V/5 A (continuous) • 15 V/3 A (continuous) • 9 V/3 A (continuous) • 5 V/3 A (continuous)	• 20 V/6.50 A (continuous) • 5 V/1 A (continuous)

Table 17. Power adapter specifications (continued)

Description		Option one	Option two	Option three
Rated output voltage		• 20 VDC • 15 VDC • 9 VDC • 5 VDC	• 20 VDC • 15 VDC • 9 VDC • 5 VDC	• 20 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)
	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)
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.				
Compliance				
Erp Lot3 Tier 2 requirement		Yes	Yes	Yes
Energy Star 8.0 compliant		Yes	Yes	Yes
GS mark compliant		Not applicable	Not applicable	Not applicable
NCTC Anti Power Surge certification		Not applicable	Not applicable	Not applicable
NCTC Anti Lightning Strike certification		Not applicable	Not applicable	Not applicable

Battery

The following table lists the battery specifications of your Precision 3480.

Table 18. Battery specifications

Description		Option one	Option two	Option three	Option four
Battery type		3 cell, 42 Wh, ExpressCharge, ExpressCharge Boost	3 cell, 42 Wh, Long Cycle Life, ExpressCharge	3 cell, 54 Wh, ExpressCharge, ExpressCharge Boost	3 cell, 54 Wh, Long Cycle Life, ExpessCharge
Battery voltage		11.40 VDC	11.40 VDC	11.40 VDC	11.40 VDC
Battery weight (minimum)		0.19 kg (0.41 lb)	0.19 kg (0.41 lb)	0.22 kg (0.48 lb)	0.22 kg (0.48 lb)
Battery dimensions:					
	Height	5.73 mm (0.22 in.)	5.73 mm (0.22 in.)	5.73 mm (0.22 in.)	5.73 mm (0.22 in.)
	Width	263 mm (10.35 in.)	263 mm (10.35 in.)	263 mm (10.35 in.)	263 mm (10.35 in.)
	Depth	68.90 mm (2.71 in.)	68.90 mm (2.71 in.)	68.90 mm (2.71 in.)	68.90 mm (2.71 in.)
Temperature range:					

Table 18. Battery specifications (continued)

Description		Option one	Option two	Option three	Option four
	Operating	• 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	-20°C to 65°C (-4°F to 149°F)	-20°C to 65°C (-4°F to 149°F)	-20°C to 65°C (-4°F to 149°F)	-20°C to 65°C (-4°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 charging time (approximate) **NOTE:** Control the charging time, duration, start and end time, and so on using the Dell Power Manager application. For more information about Dell Power Manager, search in the Knowledge Base Resource at www.dell.com/support.		**Express Charge Method:** • 0°C - 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours • 16°C - 45°C normal express charge • 46°C - 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours **Standard Charge/ Predominately AC User Charge Method:** • 0°C - 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours • 16°C - 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°C - 45°C target charge time from 0% to 35% RSOC is 20 mins	**Express Charge Method:** • 0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours • 16°C to 45°C normal express charge • 46°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours **Standard Charge/ Predominately AC User Charge Method:** • 0°C - 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours • 16°C - 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours	**Express Charge Method:** • 0°C - 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours • 16°C - 45°C normal express charge • 46°C - 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours **Standard Charge/ Predominately AC User Charge Method:** • 0°C - 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours • 16°C - 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°C - 45°C target charge time from 0% to 35% RSOC is 20 mins	**Express Charge Method:** • 0°C to 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours • 16°C to 45°C normal express charge • 46°C to 50°C maximum allowable charge time from 0% to 100% RSOC is 3 hours **Standard Charge/ Predominately AC User Charge Method:** • 0°C - 15°C maximum allowable charge time from 0% to 100% RSOC is 4 hours • 16°C - 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
	for Accelerated Charge		for Accelerated Charge	
Coin-cell battery	CR2032	CR2032	CR2032	CR2032

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.

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.

Display

The following table lists the display specifications of your Precision 3480.

Table 19. Display specifications

Description		Option one	Option two	Option three
Display type		14-inch Full High Definition (FHD)	14-inch Full High Definition (FHD)	14-inch Full High Definition (FHD), ComfortView Plus Low Blue Light, battery saving
Touch options		No	Yes	No
Display-panel technology		In-Plane Switching (IPS)	In-Plane Switching (IPS)	In-Plane Switching (IPS)
Display-panel dimensions (active area):				
	Height	173.95 mm (6.84 in.)	173.95 mm (6.84 in.)	173.95 mm (6.84 in.)
	Width	309.40 mm (12.18 in.)	309.40 mm (12.18 in.)	309.40 mm (12.18 in.)
	Diagonal	355.60 mm (14 in.)	355.60 mm (14 in.)	355.60 mm (14 in.)
Display-panel native resolution		1920 x 1080	1920 x 1080	1920 x 1080
Luminance (typical)		250 nits	300 nits	400 nits
Megapixels		2.07	2.07	2.07
Color gamut		45% NTSC (typical)	72% NTSC (typical)	100% sRGB (typical)
Color depth		6-bit	6-bit + FRC	True 8-bit
Color		262 K	16.2 M	16.7 M
Pixels Per Inch (PPI)		157	157	157
Contrast ratio (typical)		600:1	600:1	1000:1
Response time (maximum)		35 ms	35 ms	35 ms
Refresh rate		60 Hz	60 Hz	60 Hz

Table 19. Display specifications (continued)

Description	Option one	Option two	Option three
Horizontal view angle	+/- 85 degrees	+/- 85 degrees	+/- 85 degrees
Vertical view angle	+/- 85 degrees	+/- 85 degrees	+/- 85 degrees
Pixel pitch	0.161 x 0.161 mm	0.161 x 0.161 mm	0.161 x 0.161 mm
Power consumption (maximum)	3.10 W	4.60 W	2.50 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare

Fingerprint reader (optional)

The following table lists the specifications of the optional fingerprint-reader of your Precision 3480.

Table 20. Fingerprint reader specifications

Description	Values
Fingerprint-reader sensor technology	Capacitive
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	108 x 88

Sensor

The following table lists the sensor of your Precision 3480.

Table 21. Sensor

Sensor support
Ambient Light Sensor
Accelerometer in the base: ST Micro LIS2DW12TR
Accelerometer in the hinge-up (Upsell config with Emza/ALS/IR camera): ST Micro LNG2DMTR

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Precision 3480.

Table 22. GPU—Integrated

Controller	Memory size	Processor
Intel Iris Xe Graphics	Dual-channel memory	13th Generation Intel Core i5/i7

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Precision 3480.

Table 23. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA RTX A500	4 GB	GDDR6

External display support

The following table lists the external display support for your Precision 3480.

Table 24. External display support

Graphics card	Supported external displays with laptop display enabled	Supported external displays with laptop display disabled
Intel Iris Xe Graphics	3	4

Hardware security

The following table lists the hardware security of your Precision 3480.

Table 25. Hardware security

Hardware security
Trusted Platform Module (TPM) 2.0 discrete
FIPS 140-2 certification for TPM
TCG Certificatication for TPM (Trusted Computing Group)
Finger Print Reader in Power Button tied to ControlVault 3 (optional)
ControlVault 3 Advanced Authentication with FIPS 140-2 Level 3 Certification
Contacted Smart Card and ControlVault 3
Contactless Smart Card, NFC, and ControlVault 3
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 Precision 3480.

Table 26. 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

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

Title	Description	Dell ControlVault 3 contactless smart-card reader with NFC
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
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

NOTE: 125 Khz proximity cards are not supported.

Table 27. Supported cards

Manufacturer	Card
HID	jCOP readertest3 A card (14443a)
	1430 1L

Table 27. Supported cards (continued)

Manufacturer	Card
	DESFire D8H
	iClass (Legacy)
	iClass SEOS
NXP/Mifare	Mifare DESFire 8K White PVC Cards
	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 Precision 3480.

Table 28. Contacted smart-card reader specifications

Title	Description	Dell ControlVault 3 smart-card reader
ISO 7816 -3 Class A Card Support	Reader capable of reading 5 V powered smart mcard	Yes
ISO 7816 -3 Class B Card Support	Reader capable of reading 3 V powered smart card	Yes
ISO 7816 -3 Class C Card support	Reader capable of reading 1.8 V 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

Table 28. Contacted smart-card reader specifications (continued)

Title	Description	Dell ControlVault 3 smart-card reader
CCID driver compliance	Common driver support for Integrated Circuit Card Interface Device for OS level drivers.	Yes
Windows Certified	Device certified by WHCK	Yes
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 Precision 3480.

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

Table 29. 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	-15.20 m to 3048 m (-49.87 ft to 10000 ft)	-15.20 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.

* Measured using a random vibration spectrum that simulates user environment.

† Measured using a 2 ms half-sine pulse.

Dell Support policy

For information on Dell support policy, search in the Knowledge Base Resource at www.dell.com/support.

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.
2. Slide the privacy shutter to the right to cover the camera lens.

Figure 1. Camera shutter

Dell Optimizer

This section provides the Dell Optimizer specifications of your Precision 3480.

On Precision 3480 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*.

3

Engineering specifications

Ethernet

Integrated Connection I219-LM/I219-V

Table 30. Integrated Connection I219-LM/I219-V

Data Rates supported	10/100/1000 Mbps
Controller Details	
Controller Bus Architecture	PCIe-based interface for S0 state, SMBus for Sx low power state
Wake On LAN	Wake-on-LAN and remote wake-up support (Magic Packet and Pattern Match)
Integrated Memory	Not applicable
Interface/BUS	PCIe x1
Data Transfer Mode (example: Bus-Master DMA)	Not applicable
Power Consumption (full operation per data rate connection speed)	542 mW (maximum)
Power Consumption (standby operation)	1000 Mb/S Idle 439 mW
IEEE Standards Compliance	802.3
Hardware Certifications	Not applicable
Boot ROM Support	EEPROM (located in SPI)
Network Transfer Mode	
10BASE-T (half-duplex)	10 Mb (full/half-duplex)
100BASE-TX (half-duplex)	100 Mb (full/half-duplex)
1000BASE-T (full-duplex)	1000 Mb (full-duplex)
Environmental	
Operating Temperature	0°C to 85°C (32°F to 185°F)
Operating Humidity	20% to 80% (non-condensing)
Operating System Driver Support	Win7 32/64 bit, Win 8.1/10 64 bit, Linux
Manageability	WOL, PXE
Management Capabilities Alerting	Intel vPro support with appropriate Intel chipset components

This term does not connote an actual operating speed of 1 Gb per second. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

Wireless module

Realtek RTL8852BE, 2x2, Wi-Fi 6 (Wi-Fi 802.11 a/b/g/n/ac/ax), Bluetooth wireless card

The following table lists the Realtek RTL8852BE specifications.

Table 31. Realtek RTL8852BE specifications

Host interface	• Wi-Fi - PCIe • Bluetooth - USB
Network standard	IEEE 802.11a/b/g/n/ac/ax, MU-MIMO
Wi-Fi Alliance certifications	• Wi-Fi certified a/b/g/n/ac/ax • WMM* • WPA • WPA2* • WPA3* • Wi-Fi Direct (Windows only)
Operating frequency bands	• 2.4 GHz • 5 GHz
Data rate	• 2.4 GHz 40M: Up to 574 Mbps • 5 GHz 80M: Up to 1201 Mbps
Power consumption	Optimized power modes (sleep states) reduce power consumption during periods of inactivity
Authentication	• WPA* and WPA2* Personal and Enterprise • WPA3* Personal and Enterprise
Client utility	Native Wi-Fi and Bluetooth Microsoft UI support
Software support	• Microsoft WHQL certified for Windows • Linux
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 • BLE
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
Operating temperature	0°C to +70°C
Storage temperature	-40°C to +85°C
NOTE: *Other names and brands may be claimed as the property of others	

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

The following table lists the Intel AX211 specifications.

NOTE: Wi-Fi 6 is supported in regions where Wi-Fi 6E is unavailable.

Table 32. Intel AX211 specifications

Host interface	CNVio
Network standard	IEEE 802.11a/b/g/n/ac/ax, 160 MHz channel use, MU-MIMO, new 6 GHz band
Wi-Fi Alliance certifications	Wi-Fi CERTIFIED 6, Wi-Fi CERTIFIED a/b/g/n/ac,WMM, WMM-Power Save, WPA2, WPA3, WPS, PMF,Wi-Fi Direct, Wi-Fi Agile Multiband **NOTE:** Other names and brands may be claimed as the property of others.
Operating frequency bands	• 2.4 GHz • 5 GHz • 6 GHz
Data rate	• 2.4 GHz 40M: Up to 574 Mbps • 5/6 GHz 80M: Up to 1.2 Gbps • 5/6 GHz 160M: Up to 2.4 Gbps
Power consumption	Optimized power modes (sleep states) reduce power consumption during periods of inactivity
Security methods	• WPA2 Personal and Enterprise • WPA3
Authentication protocols	• 802.1X EAP-TLS • EAP-TTLS/MSCHAPv2 • PEAPv0 -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	• UL • C-UL • CB (IEC60950-1)
Management capabilities alerting	Support for Intel AMT
Government compliance	• FIPS 140-2 • FISMA
Client utility	Intel PRO/Set wireless software v22 and later
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

Table 32. Intel AX211 specifications (continued)

	• BLE
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)

WWAN module

Intel XMM 7560 R Global LTE-Advanced

The following table lists the Intel XMM 7560 R Global LTE-Advanced specifications.

Table 33. Intel XMM 7560 R Global LTE-Advanced specifications

Form factor	M.2 3042 Key-B
Host interface	PCIe Gen2
Network standard	• LTE FDD/TDD • WCDMA/HSPA+ • GPS/GLONASS/BDS/Galileo
Transfer rate	• DL CAT16 - Up to 1 Gbps • UL - Up to 150 Mbps
Operating frequency bands	• LTE (B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41 (HPUE), B42, B43, B46 (receiver only), B48, B66, B71) • WCDMA/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)	Supported (the availability of eSIM functionality embedded on the module is dependent on the region and specific carrier requirements)
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 Antenna x 4 • Supports 4x4 MIMO

Intel 5000 Global 5G Modem

The following table lists the Intel 5000 Global 5G Modem specifications.

Table 34. Intel 5000 Global 5G Modem specifications

Form factor	M.2 3052 Key-B
Host interface	PCIe Gen3
Network standard	• NR FR1 (Sub6) FDD/TDD • LTE FDD/TDD • WCDMA/HSPA+ • GPS/GLONASS/Galileo/BDS/QZSS
Transfer rate	Up to 3Gbps DL/250 Mbps UL (3GPP Release15 NR/LTE CAT19)
Operating frequency bands	• NR(n1, n2, n3, n5, n7, n8, n20, n25, n28, n30, n38, n40, n41, n48, n66, n71, n77, n78, n79) • LTE (B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66) • WCDMA/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)	Supported **NOTE:** The availability of eSIM functionality embedded on the module is dependent on the region and specific carrier requirements.
Antenna diversity	Supported
Radio On/Off	Supported
Wake on wireless	Supported
Normal operating temperature	-10°C to +55°C
Extended operating temperature	-30°C to +75°C
Storage temperature	-40°C to +85°C
Antenna connector	• WWAN Antenna x 4 • Supports 4x4 MIMO

GPU—Integrated

Intel Iris Xe Graphics

The following table lists the Intel Iris Xe Graphics specifications.

Table 35. Intel Iris Xe Graphics specifications

Bus type	Integrated graphics **NOTE:** Intel Iris Xe Graphics uses the computers memory as video memory. **NOTE:** System with single-channel memory is shown as Intel UHD Graphics in Intel Graphics Command Centre (IGCC).

Table 35. Intel Iris Xe Graphics specifications (continued)

Memory type	Shared with system memory
Memory interface	Not applicable (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 **NOTE:** The refresh rate depends on the resolution.
External ports	HDMI 2.0 port, DisplayPort over USB Type-C
Multiple display support	Up to four displays including laptop display

Intel UHD Graphics

The following table lists the Intel UHD Graphics specifications.

Table 36. Intel UHD Graphics specifications

Bus type	Integrated graphics
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 at 60 Hz, 24bpp (HDMI or optional USB Type-C to HDMI dongle) • Max Digital: 7680 x 4320 at 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 four displays through DisplayPort Multi-Streaming Technology (MST)

GPU—Discrete

NVIDIA RTX A500, 4 GB, GDDR6

The following table lists the NVIDIA RTX A500 specifications.

Table 37. NVIDIA RTX A500 specifications

Feature	Values
GPU	QN20-E3 MQ
Cores	CUDA cores 8192, Tensor cores 256, RT cores 64
Memory bandwidth	448 Gbps
Memory type	GDDR6

Table 37. NVIDIA RTX A500 specifications (continued)

Feature	Values
Memory size	4 GB
Memory interface	256-bit
Memory configuration	8 x 16 GB (2CH x 512M x 16,14 Gbps)
GPU package	GB5-256
TDP	• GPU - 71 W • Memory - 15.9 W
TGP	90 W
GPU base clock	870 MHz
GPU boost clock	1455 MHz
Vram clock	5501 MHz
PCIe	Gen 4 x 8
Display	eDP/mDP/HDMI/Type-C
eDP panel	FHD/UHD (HDR 400/600)
Maximum color depth	Up to 10 bit/color
Features	• Dynamic boost • Extension Display ID 2.0 • eDP DSC • Configurable TGP • Brightness adjustment under BIOS menu • DP-In/MUX switching • DDS (Hardware circuit reserved)
VR	Dell VR Ready
Concurrency	• 80W - 70% CPU + 100% GPU • 90W - 55% CPU + 100% GPU
Operating Systems Graphics/Video API Support	• DirectX 12.0 • OpenGL 4.6 • DisplayPort 1.4 • DirectX 12.1
Supported resolutions and maximum refresh rates	• Max Digital : Single DisplayPort 1.4 - 7680 x 4320 (8k) @ 30 Hz (mDP/Type-C to DP) • Max Digital : Dual DisplayPort 1.4 - 7680 x 4320 (8k) @ 60Hz (mDP/Type-C to DP)
Number of displays supported	Up to 4 displays

Video port and resolution matrix

The following table lists the Video port and resolution matrix of your Precision 3480.

Table 38. Video port and resolution matrix

Port type	USB Type-C Thunderbolt 4 with DisplayPort 1.4	HDMI 2.0 port
Maximum resolution—single display	7680 x 4320 at 60 Hz	4096 x 2160 at 60 Hz
Maximum resolution—dual MST	Two 4096 x 2304 at 60 Hz	Not applicable

Table 38. Video port and resolution matrix (continued)

Port type	USB Type-C Thunderbolt 4 with DisplayPort 1.4	HDMI 2.0 port
Maximum resolution—triple MST	Three 4096 x 2304 at 60 Hz	Not applicable

Storage

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 39. 256 GB SSD specifications

Capacity	256 GB
Height (approximate)	3.5 mm (0.17 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)
MTTF	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 40. 512 GB SSD specifications

Capacity	512 GB
Height (approximate)	3.5 mm (0.17 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)

Table 40. 512 GB SSD specifications (continued)

MTTF	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 41. 1 TB SSD specifications

Capacity	1 TB
Height (approximate)	3.5 mm (0.17 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
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, 2 TB, PCIe NVMe Gen4 x4, Class 25 SSD

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

Table 42. 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)	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	4,000,797,360
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, 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 43. 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	PCIe 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)	

Table 43. 256 GB SSD, self-encrypting drive specifications (continued)

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 Precision 3480.

Table 44. Power adapter specifications

Description		Option one	Option two	Option three
Type		Pecos 65 W, USB-C	100 W, USB-C	130 W, USB-C
Power-adapter dimensions:				
	Height	28 mm (1.10 in.)	26.50 (1.04 in.)	22 mm (0.87 in.)
	Width	51 mm (2.01 in.)	60 mm (2.36 in.)	66 mm (2.60 in.)
	Depth	112 mm (4.41 in.)	122 mm (4.80 in.)	143 mm (5.63 in.)
Input voltage		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
Input current (maximum)		1.70 A	1.70 A	1.80 A
Output current (continuous)		• 20 V/3.25 A (continuous) • 15 V/3 A (continuous) • 9 V/3 A (continuous) • 5 V/3 A (continuous)	• 20 V/5 A (continuous) • 15 V/3 A (continuous) • 9 V/3 A (continuous) • 5 V/3 A (continuous)	• 20 V/6.50 A (continuous) • 5 V/1 A (continuous)
Rated output voltage		• 20 VDC • 15 VDC • 9 VDC • 5 VDC	• 20 VDC • 15 VDC • 9 VDC • 5 VDC	• 20 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)
	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)
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.				
Compliance				
Erp Lot3 Tier 2 requirement		Yes	Yes	Yes

Table 44. Power adapter specifications (continued)

Description	Option one	Option two	Option three
Energy Star 8.0 compliant	Yes	Yes	Yes
GS mark compliant	Not applicable	Not applicable	Not applicable
NCTC Anti Power Surge certification	Not applicable	Not applicable	Not applicable
NCTC Anti Lightning Strike certification	Not applicable	Not applicable	Not applicable

Accessories

The following table lists the supported accessories on your Precision 3480.

Table 45. Accessories

Accessories
Audio: Dell Pro Wireless Headset - WL5022
Adapters: Dell 7-in-1 USB-C Multiport Adapter - DA310
Carrying case: Dell EcoLoop Pro Backpack - CP5723
Dock: Dell Thunderbolt 4 Dock - WD22TB4 Dell Thunderbolt Dock- WD19TBS Dell Performance Dock - WD19DCS Dell Dock - WD19S
Mouse: Dell Premier Rechargeable Wireless Mouse - MS7421W
Keyboard: Dell Pro Wireless Keyboard and Mouse - KM5221W
Monitor: • Dell UltraSharp 27 4K USB-C HUB Monitor - U2723QE • Dell UltraSharp 34 Curved USB-C HUB Monitor - U3423WE • Dell UltraSharp 24 Monitor - U2422H
Webcam: Dell Pro Webcam - WB5023

Security

Software security

The following table lists the software security details of your Precision 3480.

Table 46. 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 Precision 3480.

Table 47. Fingerprint reader specifications

Sensor technology	Capacitive
Sensor resolution	500 dpi
Sensor pixel size	108 x 88 pixels
Dell ControlVault support	Yes
Dell ControlVault 3.0 support	Yes
Anti-spoofing	Yes
Template storage	Dell ControlVault HW protected and encrypted

Table 47. Fingerprint reader specifications (continued)

Match on chip	Yes
FIPS 201 certified	No

Dell ControlVault 3.0

The following table lists the Dell ControlVault 3.0 specifications of your Precision 3480.

Table 48. Dell ControlVault 3.0 specifications

Title	Description	Dell ControlVault 3.0
CPU technology	Not applicable	1 GHz ARM Cortex A7
RAM	Not applicable	1 MB
ROM	Not applicable	16 MB
TPM included	TPM enumeration included within ControlVault	No
Host Interface	Not applicable	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 Precision 3480.

Table 49. Trusted Platform Module (TPM)

TPM: ST/ST33 HTPH2X32AHE4
SPI interface
TPM 2.0
FIPs 140-2 certificate

Thermal and acoustic improvements

The following table lists the thermal and acoustic improvements of your Precision 3480.

Table 50. 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
Linear fan control	Fan speed ramp more smoothly for better user experience, no more significant acoustic changing

Table 50. Thermal and acoustic improvements (continued)

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 protected • Protected 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, and so on.

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 un-reachable 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).

4

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.

5

Using the privacy shutter

1. Slide the privacy shutter to the left to access the camera lens.
2. Slide the privacy shutter to the right to cover the camera lens.

Figure 2. Camera shutter

6

Dell Optimizer

This section provides the Dell Optimizer specifications of your Precision 3480.

On Precision 3480 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*.

7

Color, material, and finish

This section provides the color, material, and finish (CMF) specifications of your Precision 3480.

Figure 3. Color, material, and finish

Table 51. CMF specifications

A Cover (Top)	• CFRP + Bi-Injection • Painted: Titan Gray Satin
B Cover (Hinge up)	• PC/ABS + Elastomer Double Injection • Fine Texture
C Cover (Palmrest)	• PC • Painted Titan Gray Satin
D Cover (Bottom)	• CFRP • Painted Titan Gray Satin

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

8

Keyboard function keys

The **F1**-**F12** keys at the top of the keyboard are function keys. By default, these keys are used to perform specific functions defined by the software application in use.

You can run the secondary tasks that are indicated by the symbols on the function keys by pressing the function key with **fn**, for example, **fn** and **F1**. See the table below for the list of secondary tasks and the key combinations to run them.

NOTE: Keyboard characters may differ depending on the keyboard language configuration. Keys that are used for tasks remain the same, regardless of the keyboard language.

NOTE: You can define the primary behavior of function keys in the **Function Key Behavior** menu of the BIOS setup program.

Table 52. Secondary tasks of keyboard keys

Key combination for task	What the task does
fn and **F1**	Operating system and application specific F1 behavior
fn and **F2**	Operating system and application specific F2 behavior
fn and **F3**	Operating system and application specific F3 behavior
fn and **F4**	Operating system and application specific F4 behavior
fn and **F5**	Operating system and application specific F5 behavior
fn and **F6**	Operating system and application specific F6 behavior
fn and **F8**	Operating system and application specific F8 behavior
fn and **F9**	Operating system and application specific F9 behavior
fn and **F10**	Operating system and application specific F10 behavior
fn and **F11**	Operating system and application specific F11 behavior
fn and **F12**	Operating system and application specific F12 behavior
fn and **Right Ctrl**	Open application menu
fn and **Cursor up**	Page up
fn and **Cursor down**	Page down

Keys with alternate characters

There are other keys on your keyboard with alternate characters. The symbols that are shown at the bottom of these keys are the main characters that are displayed when the key is pressed; the symbols that are shown at the top of these keys are displayed when the key is pressed with the shift key. For example, if you press **2**, **2** is displayed; if you press **Shift** and **2**, **@** is displayed.

9

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 53. 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.