

Precision 3440 Small Form Factor

Setup and specifications guide



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Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

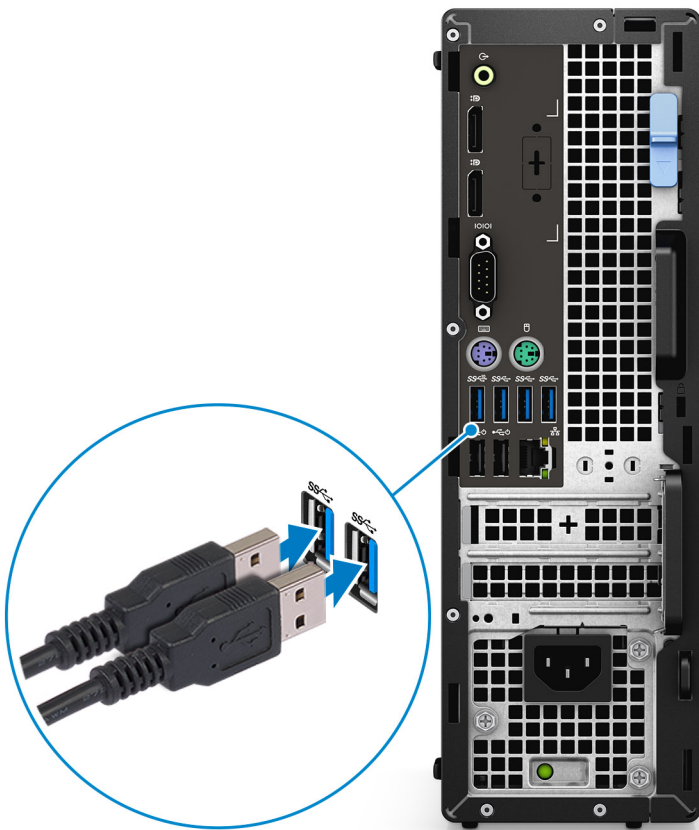
 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

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

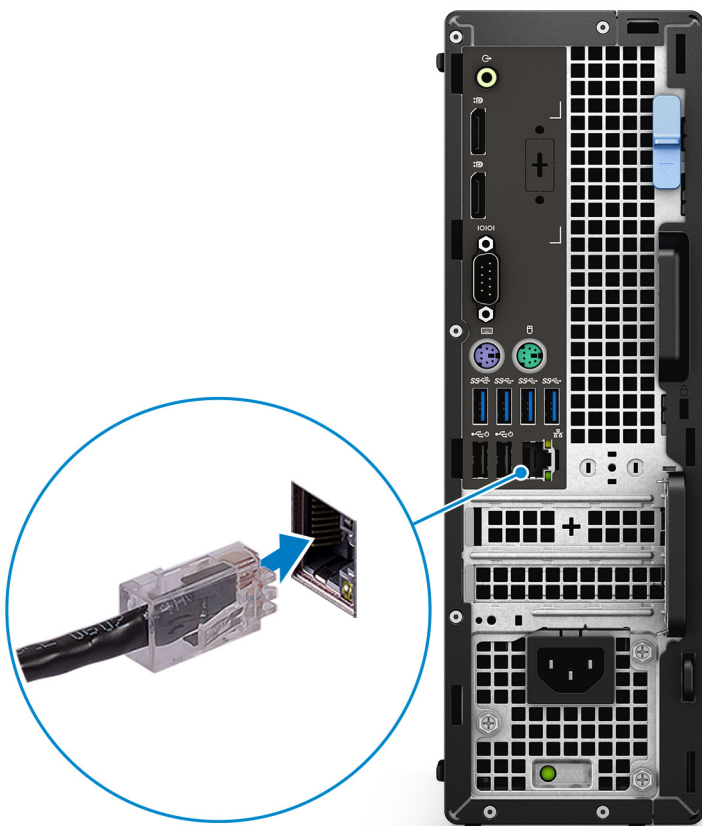
Set up your computer

Steps

1. Connect the keyboard and mouse.



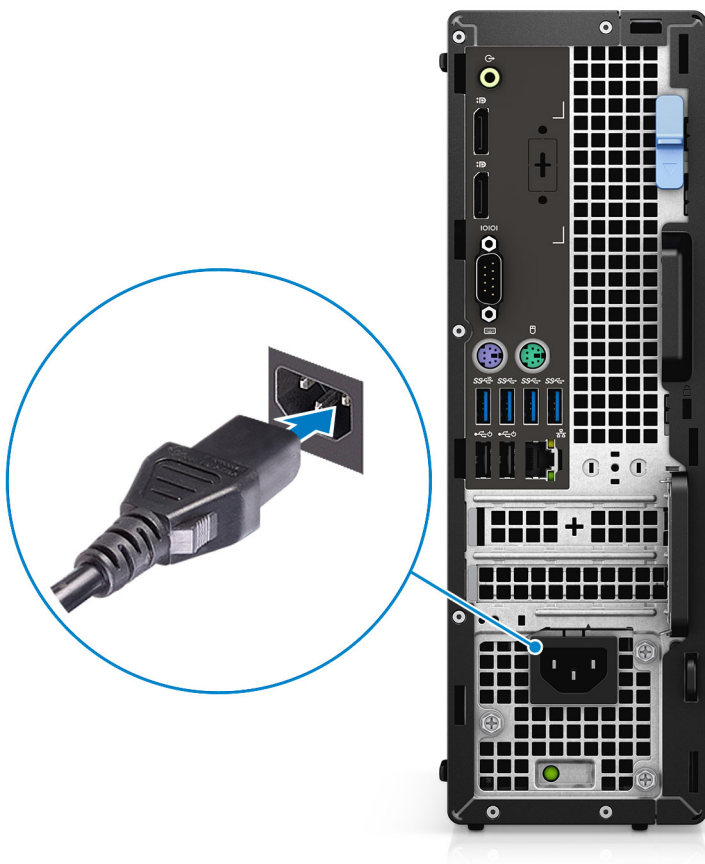
2. Connect to your network using a cable, or connect to a wireless network.



3. Connect the display.



4. Connect the power cable.



5. Press the power button.



6. Finish operating system setup.

For Ubuntu:

Follow the on-screen instructions to complete the setup. For more information about installing and configuring Ubuntu, see the knowledge base articles [SLN151664](#) and [SLN151748](#) at www.dell.com/support.

For Windows: Follow the on-screen instructions to complete the setup. When setting up, Dell recommends that you:

- Connect to a network for Windows updates.
 - **NOTE:** If connecting to a secured wireless network, enter the password for the wireless network access when prompted.
- If connected to the internet, sign in with or create a Microsoft account. If not connected to the internet, create an offline account.
- On the **Support and Protection** screen, enter your contact details.

7. Locate and use Dell apps from the Windows Start menu—Recommended

Table 1. Locate Dell apps







Dell apps	Details
	<p>Dell Product Registration Register your computer with Dell.</p>
	<p>Dell Help & Support Access help and support for your computer.</p>

Table 1. Locate Dell apps (continued)

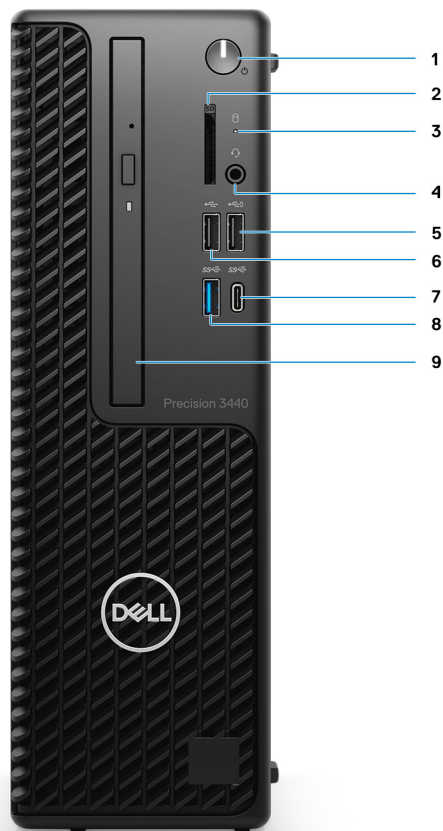
Dell apps	Details
	<p>SupportAssist</p> <p>Proactively checks the health of your computer's hardware and software.</p> <p> NOTE: Renew or upgrade your warranty by clicking the warranty expiry date in SupportAssist.</p>
	<p>Dell Update</p> <p>Updates your computer with critical fixes and important device drivers as they become available.</p>
	<p>Dell Digital Delivery</p> <p>Download software applications including software that is purchased but not preinstalled on your computer.</p>

Chassis overview

Topics:

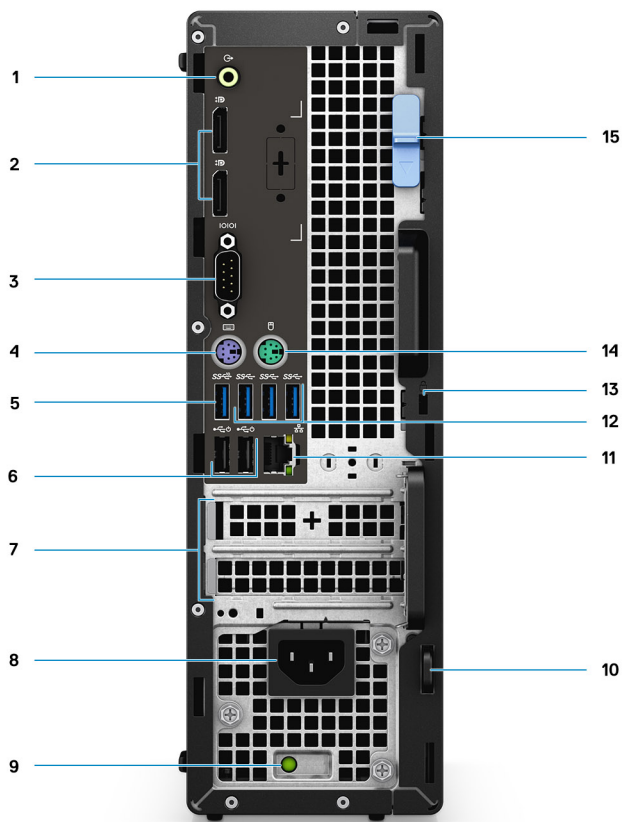
- [Front view](#)
- [Back view](#)
- [System board layout](#)

Front view



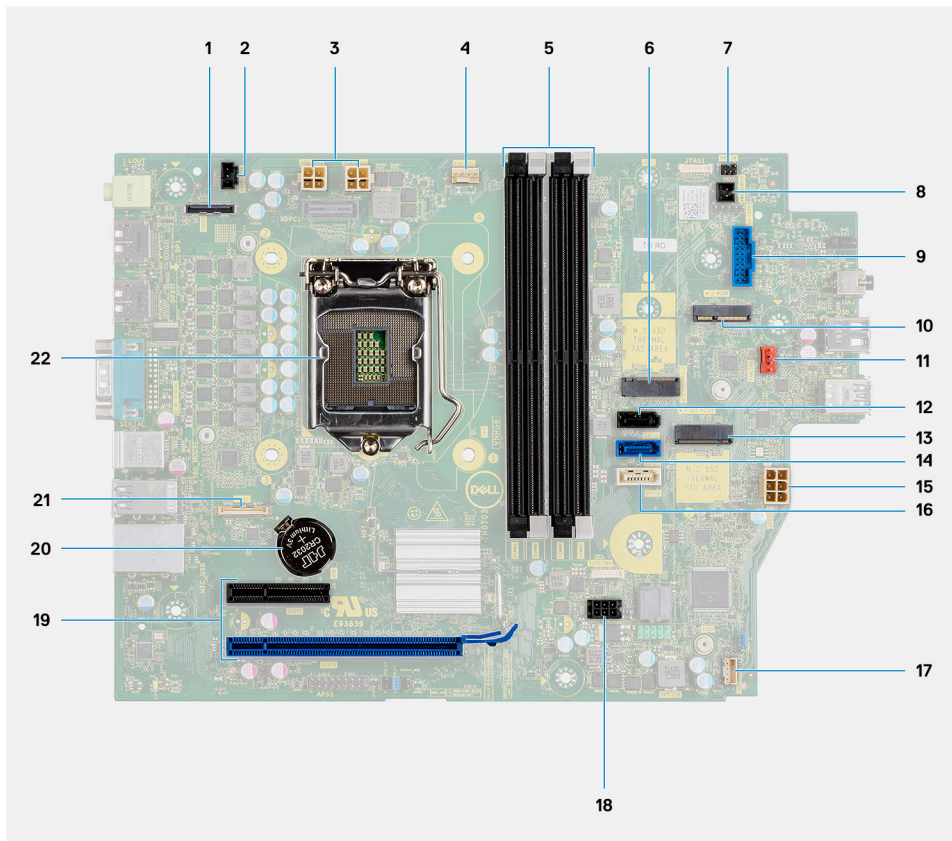
1. Power button and power light
2. SD card reader (Optional)
3. Hard drive activity light
4. Universal audio jack port
5. USB 2.0 Type-A port with PowerShare
6. USB 2.0 Type-A port
7. USB 3.2 Gen 2 Type-C port with PowerDelivery
8. USB 3.2 Gen2 Type-A port
9. Optical disk drive

Back view



1. Line -in/out retasking
2. Two DisplayPort 1.4 ports
3. Serial Port
4. PS/2 Keyboard port
5. USB 3.2 Gen 2 Type-A port
6. Two USB 2.0 ports with Power On
7. Expansion card slots
8. Power connector port
9. Power supply diagnostic light
10. Padlock loop
11. Network port
12. Three USB 3.2 Gen 1 Type-A ports
13. Kensington security-cable slot
14. PS/2 Mouse port
15. Release latch

System board layout



- | | |
|--|--|
| 1. Video connector | 2. Intrusion switch connector (Intruder) |
| 3. CPU power connector (ATX_CPU) | 4. CPU fan connector |
| 5. Memory slots (DIMM1, DIMM2, DIMM3, DIMM4) | 6. M.2 Solid-state drive connector |
| 7. Power switch connector (PWR_SW) | 8. Remote PWR switch connector |
| 9. Media card reader connector (Card_reader) | 10. M.2 WLAN connector |
| 11. System fan connector | 12. SATA 1 connector |
| 13. M.2 Solid-state drive connector | 14. SATA 2 connector |
| 15. PSU connector | 16. SATA 3 connector |
| 17. Internal speaker connector | 18. SATA power connector |
| 19. PCI-e connectors | 20. Coin cell battery |
| 21. USB Type-C connector | 22. Processor socket (CPU) |

Specifications of Precision 3440 Small Form Factor

Topics:

- System specifications
- Support policy
- Energy Star and Trusted Platform Module (TPM)
- Accessories
- Add-in cards

System specifications

NOTE: Offerings may vary by region. The following specifications are only those required by law to ship with your computer. For more information about the configuration of your computer, go to Help and Support in your Windows operating system and select the option to view information about your computer.

Dimensions and weight

Table 2. Dimensions and weight

Description	Values
Height:	
Front	290 mm (11.42 in.)
Rear	290 mm (11.42 in.)
Width	92.6 mm (3.65 in.)
Depth	292.8 mm (11.53 in.)
Weight (maximum)	5.59 kg (12.32 lb)
	NOTE: The weight of your computer depends on the configuration ordered and the manufacturing variability.

Chipset

Table 3. Chipset

Description	Values
Chipset	Intel W480
Processor	10th Generation Intel Core i3/i5/i7/i9/Xeon
DRAM bus width	Two channels, 128-bit
Flash EPROM	32 MB

Table 3. Chipset (continued)

Description	Values
PCIe bus	Upto Gen 3
Non-volatile memory	Yes
BIOS Configuration Serial Peripheral Interface (SPI)	256 Mbit (32 MB) located at SPI_FLASH on chipset
Trusted Platform Module (Discrete TPM Enabled)	24 KB located at TPM 2.0 on chipset
Firmware TPM (Discrete TPM Disabled)	By default the Platform Trust Technology feature is visible to the OS
NIC EEPROM	LOM configuration contained within SPI flash ROM instead of LOM e-fuse

Processors

NOTE: Global Standard Products (GSP) are a subset of Dell’s relationship products that are managed for availability and synchronized transitions on a worldwide basis. They ensure the same platform is available for purchase globally. This allows customers to reduce the number of configurations managed on a worldwide basis, thereby reducing their costs. They also enable companies to implement global IT standards by locking in specific product configurations worldwide.

Device Guard (DG) and Credential Guard (CG) are the new security features that are only available on Windows 10 Enterprise today.

Device Guard is a combination of enterprise-related hardware and software security features that, when configured together, will lock a device down so that it can only run trusted applications. If it is not a trusted application, it cannot run.

Credential Guard uses virtualization-based security to isolate secrets (credentials) so that only privileged system software can access them. Unauthorized access to these secrets can lead to credential theft attacks. Credential Guard prevents these attacks by protecting NTLM password hashes and Kerberos Ticket Granting Tickets.

NOTE: Processor numbers are not a measure of performance. Processor availability is subject to change and may vary by region/country.

Table 4. Processors

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics	GSP	DG/CG Ready
10th Generation Intel Core i3-10100	65 W	4	8	3.6 GHz to 4.3 GHz	6 MB	Intel UHD Graphics 630	No	Yes
10th Generation Intel Core i5-10500	65 W	6	12	3.1 GHz to 4.5 GHz	12 MB	Intel UHD Graphics 630	Yes	Yes
10th Generation Intel Core i5-10600	65 W	6	12	3.3 GHz to 4.8 GHz	12 MB	Intel UHD Graphics 630	Yes	Yes
10th Generation Intel Core i7-10700	65 W	8	16	2.9 GHz to 4.7 GHz	16 MB	Intel UHD Graphics 630	Yes	Yes

Table 4. Processors (continued)

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics	GSP	DG/CG Ready
10th Generation Intel Core i9-10900	65 W	10	20	2.8 GHz to 4.6 GHz	20 MB	Intel UHD Graphics 630	Yes	Yes
Intel Xeon W-1250	80 W	6	12	3.3 GHz to 4.4 GHz	12 MB	Intel UHD Graphics 630	Yes	Yes
Intel Xeon W-1270	80 W	8	16	3.2 GHz to 4.7 GHz	16 MB	Intel UHD Graphics 630	Yes	Yes
Intel Xeon W-1290	80 W	10	20	3.7 GHz to 4.9 GHz	20 MB	Intel UHD Graphics 630	Yes	Yes

Operating system

- Windows 10 Home (64-bit)
- Windows 10 Enterprise (64-bit)
- Windows 10 Professional (64-bit)
- Windows 10 Pro Education (64-bit)
- Windows 10 LTSC (64-bit)
- Ubuntu 18.04

Memory

Table 5. Memory specifications

Description	Values
Slots	4 DIMM slots
Type	DDR4
Speed	<ul style="list-style-type: none"> • 2666 MHz for Intel Core i3/i5/Xeon W-1250 processors, 2933 MHz for Intel Core i7/i9/Xeon W-1270/W-1290 processors
Maximum memory	128 GB
Minimum memory	4 GB
Memory size per slot	4 GB, 8 GB, 16 GB, 32 GB
Configurations supported	<ul style="list-style-type: none"> • 4 GB, 1 x 4 GB, DDR4, 2666 MHz for Intel Core i3/i5/Xeon W-1250 processors, 2933 MHz for Intel Core i7/i9/Xeon W-1270/W-1290 processors • 8 GB, 2 x 4 GB, DDR4, 2666 MHz for Intel Core i3/i5/Xeon W-1250 processors, 2933 MHz for Intel Core i7/i9/Xeon W-1270/W-1290 processors • 8 GB, 1 x 8 GB, DDR4, 2666 MHz for Intel Core i3/i5/Xeon W-1250 processors, 2933 MHz for Intel Core i7/i9/Xeon W-1270/W-1290 processors

Table 5. Memory specifications (continued)

Description	Values
	<ul style="list-style-type: none"> 16 GB, 2 x 8 GB, DDR4, 2666 MHz for Intel Core i3/i5/Xeon W-1250 processors, 2933 MHz for Intel Core i7/i9/Xeon W-1270/W-1290 processors 32 GB, 4 x 8 GB, DDR4, 2666 MHz for Intel Core i3/i5/Xeon W-1250 processors, 2933 MHz for Intel Core i7/i9/Xeon W-1270/W-1290 processors 32 GB, 2 x 16 GB, DDR4, 2666 MHz for Intel Core i3/i5/Xeon W-1250 processors, 2933 MHz for Intel Core i7/i9/Xeon W-1270/W-1290 processors 64 GB, 4 x 16 GB, DDR4, 2666 MHz for Intel Core i3/i5/Xeon W-1250 processors, 2933 MHz for Intel Core i7/i9/Xeon W-1270/W-1290 processors 128 GB, 4 x 32 GB, DDR4, 2666 MHz for Intel Core i3/i5/Xeon W-1250 processors, 2933 MHz for Intel Core i7/i9/Xeon W-1270/W-1290 processors

Storage

Your computer supports one of the following configurations:

- One 2.5-inch hard-disk drive
- Two 2.5-inch hard-disk drives
- One 3.5-inch hard-disk drive
- One 2.5-inch hard-disk drive and one 3.5-inch hard-disk drive
- One M.2 2230 or 2280 solid-state drive (class 40)
- One M.2 2230 or 2280 solid-state drive (class 40) and one 3.5-inch hard-disk drive
- One M.2 2230 or 2280 solid-state drive (class 40) and one 2.5-inch hard-disk drive
- One M.2 2230 or 2280 solid-state drive (class 40) and two 2.5-inch hard-disk drives

Table 6. Storage specifications

Storage type	Interface type	Capacity
2.5 in. hard-disk drive, 5400 RPM	SATA	Upto 2 TB
2.5 in. hard-disk drive, 7200 RPM	SATA	Upto 1 TB
2.5 in. hard-disk drive, 7200 RPM, FIPS Self Encrypting Opal 2.0	SATA	Upto 500 GB
3.5 in. hard-disk drive, 5400 RPM	SATA	Upto 4 TB
3.5 in. hard-disk drive, 7200 RPM	SATA	Upto 2 TB
M.2 2280 solid-state drive	Gen 3 PCIe x4 NVMe, Class 40	Upto 2 TB
M.2 2280 Opal Self-Encrypting solid-state drive	Gen 3 PCIe x4 NVMe, Class 40	Upto 1 TB

Audio and Speaker

Table 7. Audio specifications

Description	Values
Type	4 Channel High Definition Audio

Table 7. Audio specifications (continued)

Description	Values
Controller	Realtek ALC3246
Stereo conversion	Supported
Internal interface	High definition audio interface
External interface	Universal Audio Jack
Speakers	2
Internal speaker amplifier	Integrated in ALC3246 (Class-D 2 W)
External volume controls	Keyboard shortcut controls
Speaker output average	2 W
Speaker output peak	2.5 W
Subwoofer output	Not Supported
Microphone	Not Supported

Video

Table 8. Discrete graphics specifications

Discrete graphics			
Controller	External display support	Memory size	Memory Type
AMD Radeon R5 430	<ul style="list-style-type: none"> Two DisplayPort 1.2 	2 GB	DDR3
AMD Radeon Pro WX 2100	<ul style="list-style-type: none"> One DisplayPort 1.4 Two Mini DisplayPort 1.4 	2 GB	GDDR5
AMD Radeon Pro WX 3200	<ul style="list-style-type: none"> Four Mini DisplayPort 1.4 	4 GB	GDDR5
NVIDIA Quadro P400	<ul style="list-style-type: none"> Three Mini DisplayPort 1.4 	2 GB	GDDR5
NVIDIA Quadro P620	<ul style="list-style-type: none"> Four Mini DisplayPort 1.4 	2 GB	GDDR5

Table 9. Integrated graphics specifications

Integrated graphics			
Controller	External display support	Memory size	Processor
Intel UHD Graphics 630	Two DisplayPort 1.4	Shared system memory	10th Generation Intel Core i3/i5/i7/i9

Communications

Ethernet

Table 10. Ethernet specifications

Description	Values
Model number	Intel i219-LM
Transfer rate	10/100/1000 Mbps

Wireless module

Table 11. Wireless module specifications

Description	Values	
Model number	Qualcomm QCA61x4a (DW1820)	Intel AX201
Transfer rate	Up to 867 Mbps	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	<ul style="list-style-type: none"> WiFi 802.11a/b/g Wi-Fi 4 (WiFi 802.11n) Wi-Fi 5 (WiFi 802.11ac) 	<ul style="list-style-type: none"> Wi-Fi 802.11a/b/g Wi-Fi 4 (Wi-Fi 802.11n) Wi-Fi 5 (Wi-Fi 802.11ac) Wi-Fi 6 (Wi-Fi 802.11ax)
Encryption	<ul style="list-style-type: none"> 64-bit/128-bit WEP AES-CCMP TKIP 	<ul style="list-style-type: none"> 64-bit/128-bit WEP AES-CCMP TKIP
Bluetooth	Bluetooth 5.0	Bluetooth 5.1

Ports and connectors

Table 12. Ports and connectors

Description	Values
External:	
Network	1 RJ-45
USB	<ul style="list-style-type: none"> One USB 2.0 Type-A port (front) One USB 2.0 Type-A with PowerShare (front) One USB 3.2 Gen 2 Type-A (front) One USB 3.2 Gen 2 Type-C port with PowerDelivery (front) Two USB 2.0 ports with Power On (rear) One USB 2.0 header for Comon Access Card (CAC) Three USB 3.2 Gen 1 Type-A ports (rear) One USB 3.2 Gen 2 Type-A ports (rear)
Audio	<ul style="list-style-type: none"> One Universal Audio Jack (front) One Line -in/out retasking (rear)

Table 12. Ports and connectors (continued)

Description	Values
Video	<ul style="list-style-type: none"> Two DisplayPort 1.4 port (rear) One HDMI 2.0 port (rear, optional) One VGA port (rear, optional) One Type-C w/DP-Alt mode (rear optional)
Memory card reader	One SD-card 4.0 slot
Power port	AC-in
Security	<ul style="list-style-type: none"> One Wedge-shaped lock One Padlock Loop One Lockable Port Cover One Intrusion switch
Antenna	Two SMA connectors (optional)
Internal:	
SATA	One SATA slots for 2.5-inch Hard-disk drive
M.2	<ul style="list-style-type: none"> One half-height Gen3 PCIe x16 slot (discrete graphics) One half-height Gen3 PCIe x4 slot Three SATA 3.0 for Hard-disk drive/Solid-state drive One M.2 2230 slot for WiFi/Bluetooth card One M.2 2230/2280 slot for solid-state drive One M.2 2230 slot for PCIe solid-state drive <p>NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626.</p>

Power supply

Table 13. Power supply

Feature	Specifications
Input voltage	100–240 VAC, 50–60 Hz
Wattage	<ul style="list-style-type: none"> 200 W 100V-240V Full range 260 W 100V-240V Full range

Security

Table 14. Security

Feature	Description
Trusted Platform Module (TPM) 2.0	Integrated on the system board
Firmware TPM	Optional
Windows Hello Support	Optional via security input device

Table 14. Security (continued)

Feature	Description
Cable cover	Optional
Chassis intrusion switch	Standard
Dell Smartcard Keyboard	Optional
Chassis lock slot and loop support	Standard

Security Software

Table 15. Security Software

Features	Description
Dell Endpoint Security Suite Enterprise	Optional
Dell Data Guardian	Optional
Dell Encryption (Enterprise or Personal)	Optional
Dell Threat Defense	Optional
RSA SecurID Access	Optional
RSA NetWitness Endpoint	Optional
MozyPro or MozyEnterprise	Optional
VMware Airwatch/WorkspaceONE	Optional
Absolute Data & Device Security	Optional

CAC/PIV Module

Table 16. CAC/PIV Module

Features	Tower/Small Form Factor/Micro
Connector Type	ISO 7816 compliant contact smart card NFC forum 2.0
PCB	
Dimensions (W x L x T)	74.5 mm x 45.7 mm
Layer	6
Controller Details	
Controller bus architecture (example PCIe 1.0a x1)	USB 2.0
Data transfer mode (example Bus-Master DMA)	USB 2.0
Power consumption (full operation per data rate connection speed)	288.08 mA x 3.3 V

Table 16. CAC/PIV Module (continued)

Features	Tower/Small Form Factor/Micro
Power consumption (standby operation)	8.9 mA x 3.3 V
Standard compliance (example 802.1P)	NFC Forum 2.0, ISO7816
Hardware Certifications (example FCC, B, GS mark...)	FIPS201, FIPS140-2
Boot ROM Support	Integrated inside Lynx SoC
Processor/Chipset	
NFC	Broadcom Cortex-M3 BC58102
Card reader driver	NXP TDA8034HN/C2
USB 2.0 Hub	GENESYS GL850G-OHY50
PROM	WINBOND W25Q32JVSSIQ 32M/bit
Power IC	RICHTEK RT5796AHGJ5
Power LDO (NFC VBAT)	GMT G9141T11U
Environmental	
Operating System Driver Support	Dell ControlVault2 Driver
Manageability (examples WOL, PXE)	No, this is not a LAN controller chipset.
Management Capabilities Alerting (example ASF 2.0)	No, this is not a LAN controller chipset.
Add-in Slots	
Card reader connector	1 (10 PIN)
USB 2.0 header	1 (5 PIN)
NFC header	1 (6 PIN)

Out of Band Systems Management Intel Standard Manageability

Intel Standard Manageability (ISM) must be configured in our factory at the time of purchase, as it is NOT field upgradable. ISM offers out-of-band management and DASH compliance https://registry.dmtf.org/registry/results/field_initiative_name%3A%22DASH%201.0%22. ISM offers a limited set of out-of-band features like remote power on/off, Serial-over-LAN redirect, Wake-on-LAN, etc. ISM leverages the same capabilities that were available with Intel's Active Management Technology (AMT) version 5.0.

To learn more about Intel ISM, visit Intel's website at: <https://software.intel.com/en-us/blogs/2009/03/27/what-is-standard-manageability>

Computer environment

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

Table 17. Computer environment

Description	Operating	Storage
Temperature range	10°C–35°C (50°F–95°F)	-40°C-65°C (-40°F-149°F)
Relative humidity (maximum)	20% to 85% (non-condensing)	5% to 95% (non-condensing)
Vibration (maximum)*	0.52 GRMS random at 5 Hz to 350 Hz	2.0 GRMS random at 5 Hz to 350 Hz
Shock (maximum)	Bottom half-sine pulse with a change in velocity of 50.8 cm/sec (20 in./sec)	105G half-sine pulse with a change in velocity of 133 cm/sec (52.5 in./sec)
Altitude (maximum)	3048 m (10,000 ft)	10,668 m (35,000 ft)

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

† Measured using a 2 ms half-sine pulse when the hard drive is in use.

Service and support

i **NOTE:** For more details on Dell Service Plans, see <https://www.dell.com/learn/us/en/19/services/warranty-support-services>.

Table 18. Warranty

Warranty
1 Year Basic Warranty with Hardware Service on site service after remote diagnosis
2 Years Basic Warranty Extension
3 Years Basic Warranty Extension
4 Years Basic Warranty Extension
5 Years Basic Warranty Extension
1 Year ProSupport and Next Business Day on-site service
2 Years ProSupport and Next Business Day on-site service
3 Years ProSupport and Next Business Day on-site service
4 Years ProSupport and Next Business Day on-site service
5 Years ProSupport and Next Business Day on-site service
1 Year ProSupport Plus for Client with Next Business Day on-site service
2 Years ProSupport Plus for Client with Next Business Day on-site service
3 Years ProSupport Plus for Client with Next Business Day on-site service
4 Years ProSupport Plus for Client with Next Business Day on-site service
5 Years ProSupport Plus for Client with Next Business Day on-site service

Table 19. Accidental damage services

Accidental Damage Services
1 Year Accidental Damage Service
2 Years Accidental Damage Service
3 Years Accidental Damage Service
4 Years Accidental Damage Service

Table 19. Accidental damage services (continued)

Accidental Damage Services
5 Years Accidental Damage Service

Support policy

For more information on support policy, see the knowledge base articles [PNP13290](#), [PNP18925](#), and [PNP18955](#).

Energy Star and Trusted Platform Module (TPM)

Table 20. Energy Star and TPM

Features	Specifications
TPM (Optional)	HW/FW Trusted Platform Module support

Accessories

Table 21. Accessories

Accessories	
Audio	<ul style="list-style-type: none">· Dell Pro Stereo Headset - UC350
Keyboard and Mice	<ul style="list-style-type: none">· Dell Wireless Keyboard and Mouse, KM636, Black
Monitors	<ul style="list-style-type: none">· Dell 24 Monitor - E2420HS
Stands and Mounts	<ul style="list-style-type: none">· Dell Dual Monitor Arm - MDA20· Dell Dual Monitor Stand - MDS19· Dell Single Monitor Arm - MSA20

Add-in cards

Table 22. Add-in cards

Add-in cards
Serial and parallel port PCIe card


Getting help

Topics:

- [Contacting Dell](#)

Contacting Dell

Prerequisites

 **NOTE:** If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

About this task

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

Steps

1. Go to **Dell.com/support**.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.