Precision 7960 Tower

Setup and Specifications

Regulatory Model: D05X
Regulatory Type: D05X001
April 2023
Rev. A00

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.

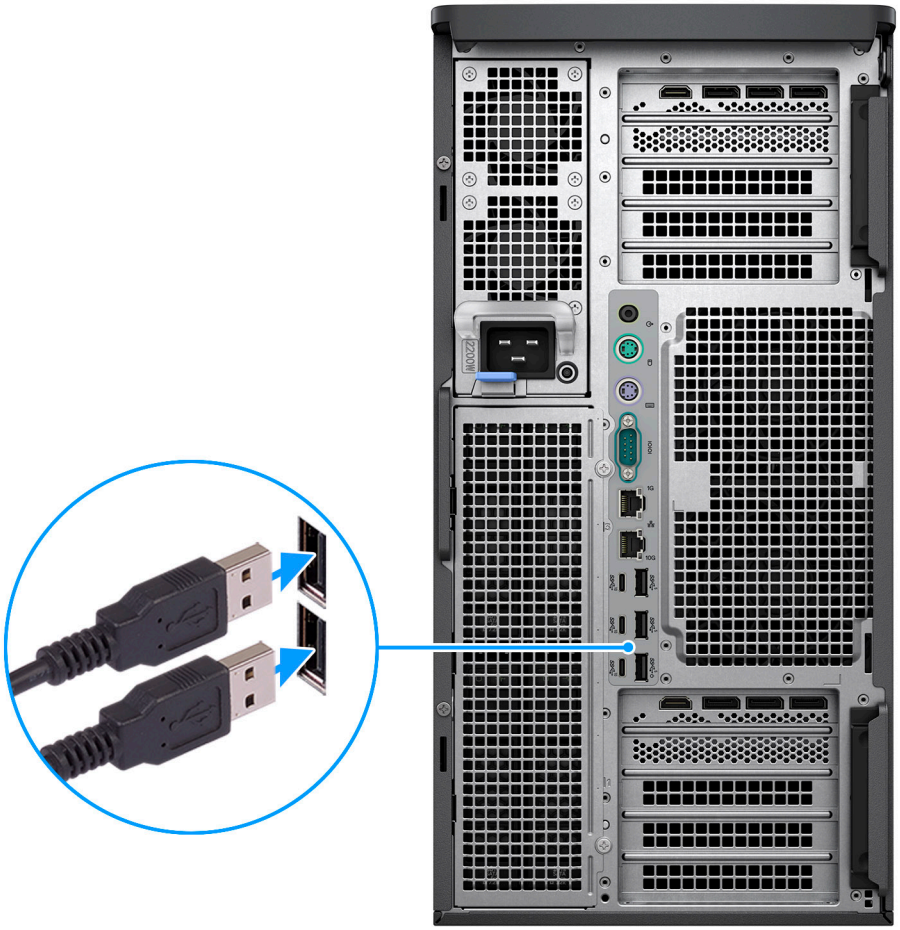
WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

Contents

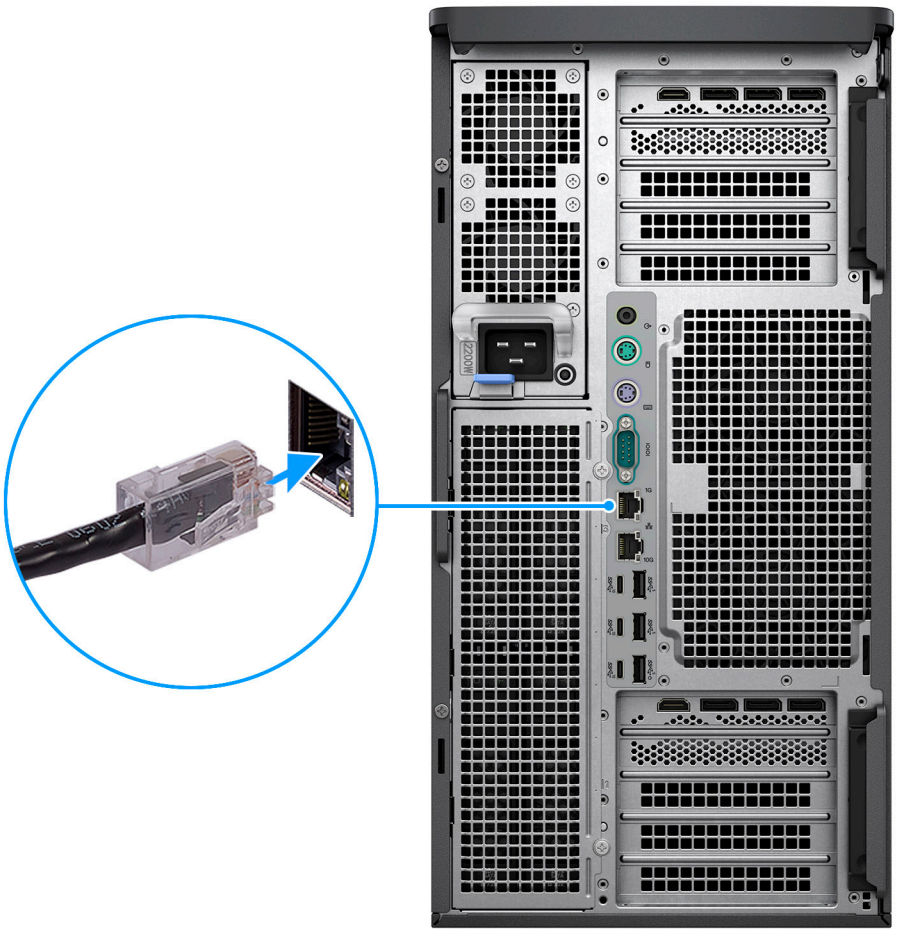
1

Set up your Precision 7960 Tower

1. Connect the keyboard and mouse.



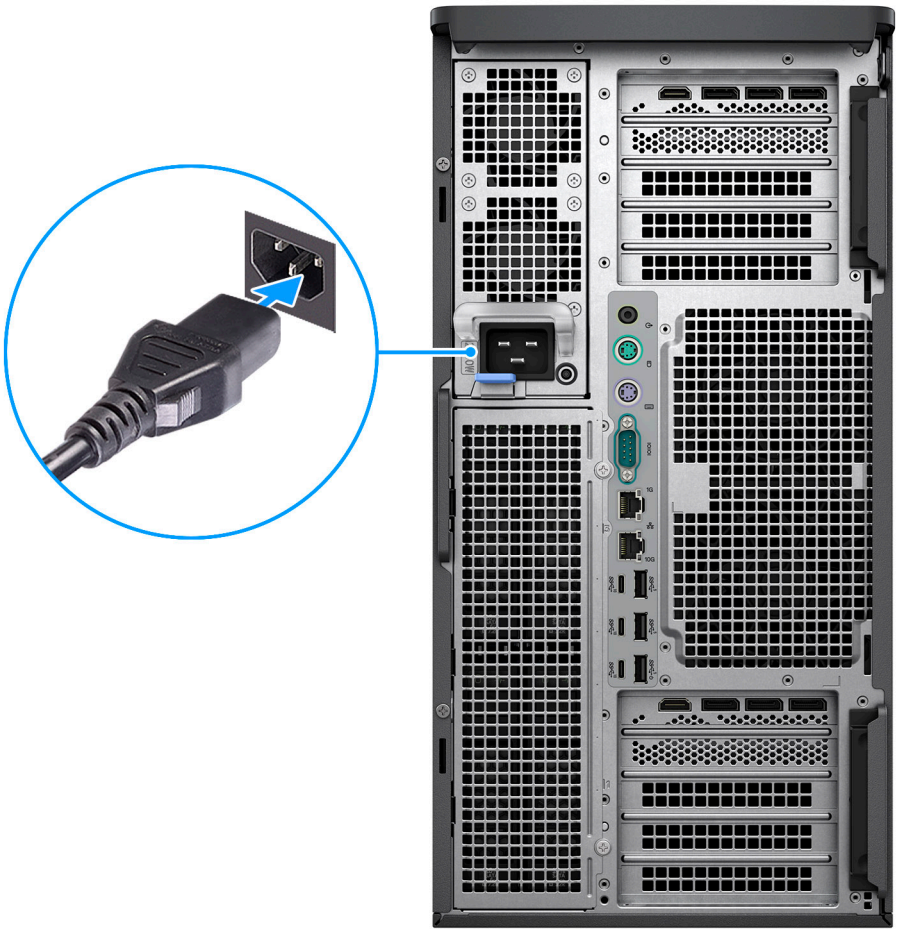
2. Connect to your network using a cable, or connect to a wireless network.



3. Connect the display.

4. Connect the power cable.

CAUTION: Connect the power cable to a Power Distribution Unit (PDU) 16 A and then connect the PDU to the wall outlet.



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, search in the Knowledge Base Resource 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

Resources	Description
	My Dell Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.

Table 1. Locate Dell apps (continued)

Resources	Description
	**SupportAssist** SupportAssist proactively and predictively identifies hardware and software issues on your computer and automates the engagement process with Dell Technical support. It addresses performance and stabilization issues, prevents security threats, monitors, and detects hardware failures. For more information, see *SupportAssist for Home PCs User's Guide* at www.dell.com/serviceabilitytools. Click **SupportAssist** and then, click **SupportAssist for Home PCs**. **NOTE:** In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.
	**Dell Update** Updates your computer with critical fixes and latest device drivers as they become available. For more information on using Dell Update, search in the Knowledge Base Resource at www.dell.com/support.
	**Dell Digital Delivery** Download software applications, which are purchased but not preinstalled on your computer. For more information on using Dell Digital Delivery, search in the Knowledge Base Resource at www.dell.com/support.

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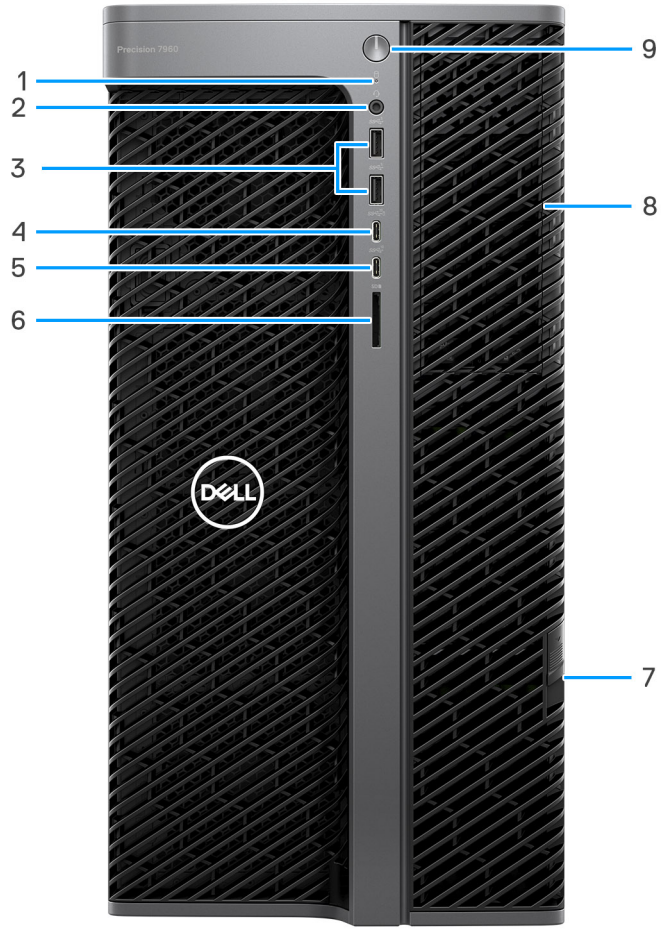
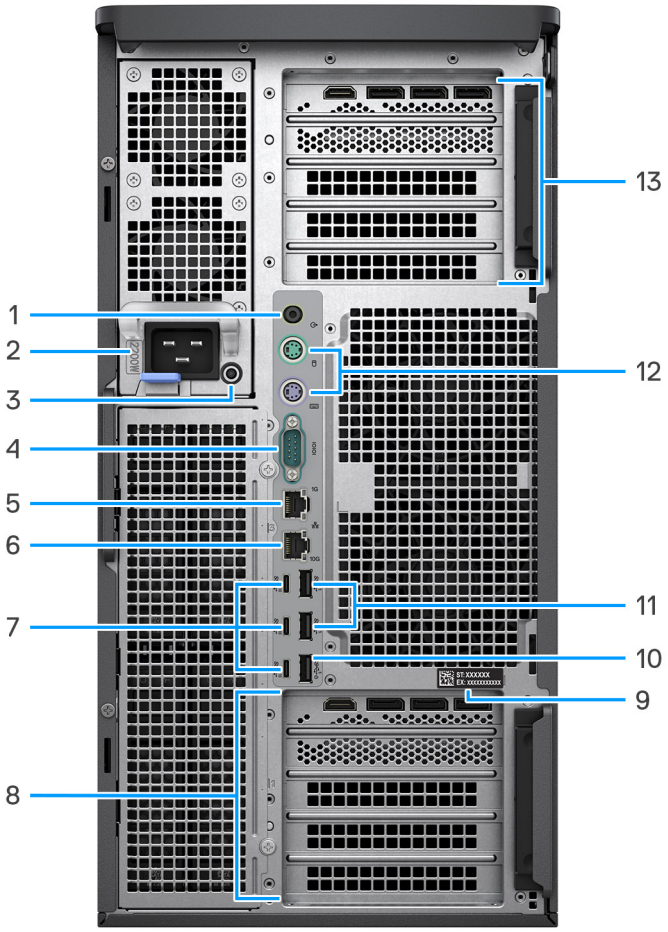
Views of Precision 7960 Tower

Display



1. Hard-drive activity indicator
2. Universal audio port
3. USB 3.2 Gen 1 ports
4. USB 3.2 Gen 2x2 Type-C port with PowerShare
5. USB 3.2 Gen 2 Type-C port
6. SD-card slot
7. SATA/SAS/NVMe drive flexbays
8. Optical drive slots
9. Power button

Back



1. Line-out port
2. Power adapter port
3. PSU BIST button
4. Serial port
5. RJ45 Ethernet port, 1 GbE
6. RJ45 Ethernet port, 10 GbE
7. USB 3.2 Gen 2 Type-C ports
8. Expansion card slots
9. Service tag
10. USB 3.2 Gen 1 port with Smart Power On
11. USB 3.2 Gen 1 ports
12. PS2 ports (for keyboard and mouse)
13. Expansion card slots

System-board call outs

This topics provides detailed call outs for the connectors on the system board:

System-board call outs (front side)

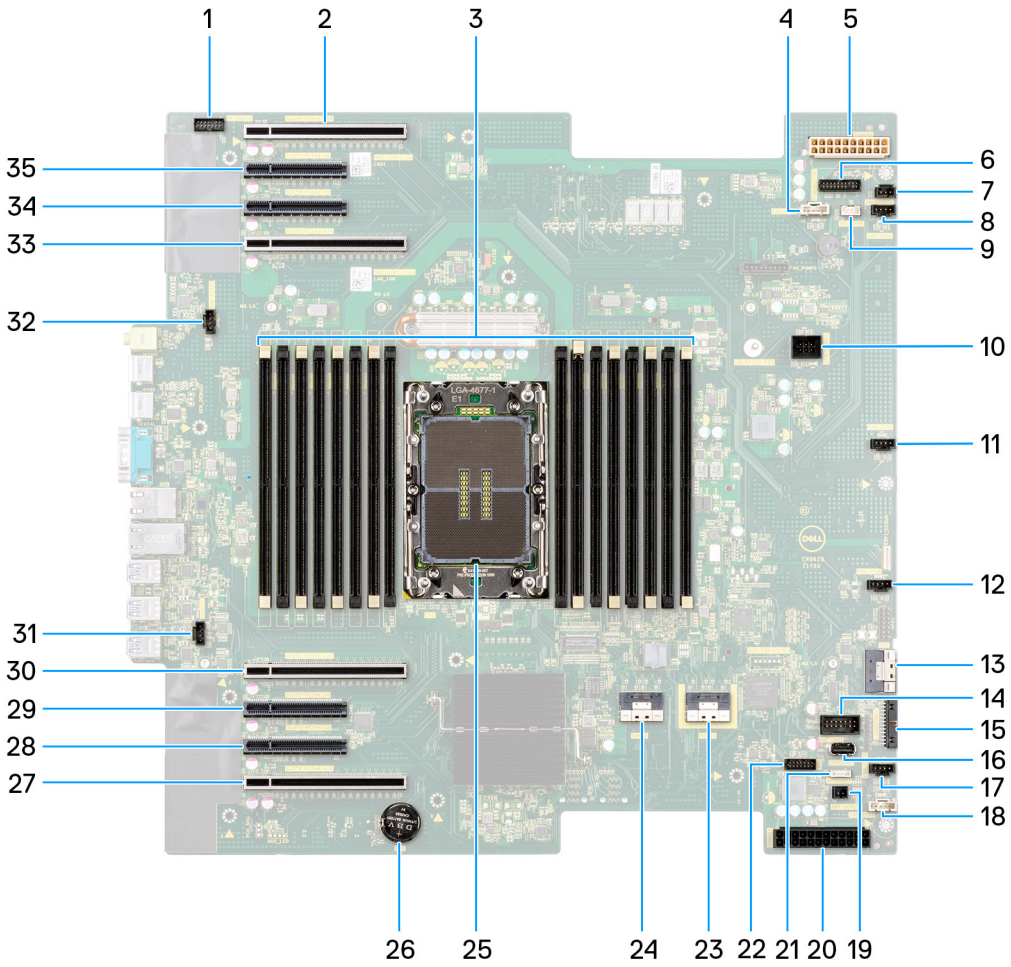


Table 2. Precision 7960 tower system board callouts (front side)

No	Connector	Description
1	FP AUDIO	Front panel audio-cable connector
2	SLOT8	PCI Express Gen 4 x16 slot
3	DIMMx16 (DIMM1—DIMM16)	Memory module connectors
4	FAN SYS4	System fan connector
5	POWER2	Power cable connector
6	POWER CRTL	Power controller switch connector
7	INTRUSION	Intrusion switch connector
8	FAN SYS3	System fan connector
9	INT SPKR	Internal-speaker connector
10	DDR FAN 0/1	Memory-module fan connector

Table 2. Precision 7960 tower system board callouts (front side) (continued)

No	Connector	Description
11	FAN SYS2	System fan connector
12	FAN SYS1	System fan connector
13	FIO	Front I/O-daughter board connector
14	INT USB1	Internal USB 2.0
15	FRONTPANEL	Front I/O-power connector
16	INT USB2	Internal USB 2.0
17	FAN SYS0	System fan connector
18	FAN SYS5	System fan connector
19	PWR REMOTE	System fan connector
20	POWER1	Intel Virtual RAID on CPU
21	PWR REMOTE	System fan connector
22	TBT	Thunderbolt add-in card connector
23	REAR NVME2-3	Rear NVMe connector for externally facing M.2 flexbay drive
24	REAR NVME0-1	Rear NVMe connector for externally facing M.2 flexbay drive
25	CPU	Processor socket
26	RTC	Coin-cell battery
27	SLOT4	PCI Express Gen 4 x16 slot
28	SLOT3	PCI Express Gen 4 x8 slot wired as x4 electrically
29	SLOT2	PCI Express Gen 4 x8 slot wired as x4 electrically
30	SLOT1	PCI Express Gen 5 x16 slot
31	FAN REAR0	Rear Fan 0
32	FAN REAR1	Rear Fan 1
33	SLOT5	PCI Express Gen 5 x16 slot
34	SLOT6	PCI Express Gen 4 x8 slot
35	SLOT7	PCI Express Gen 4 x8 slot

System-board call outs (rear side)

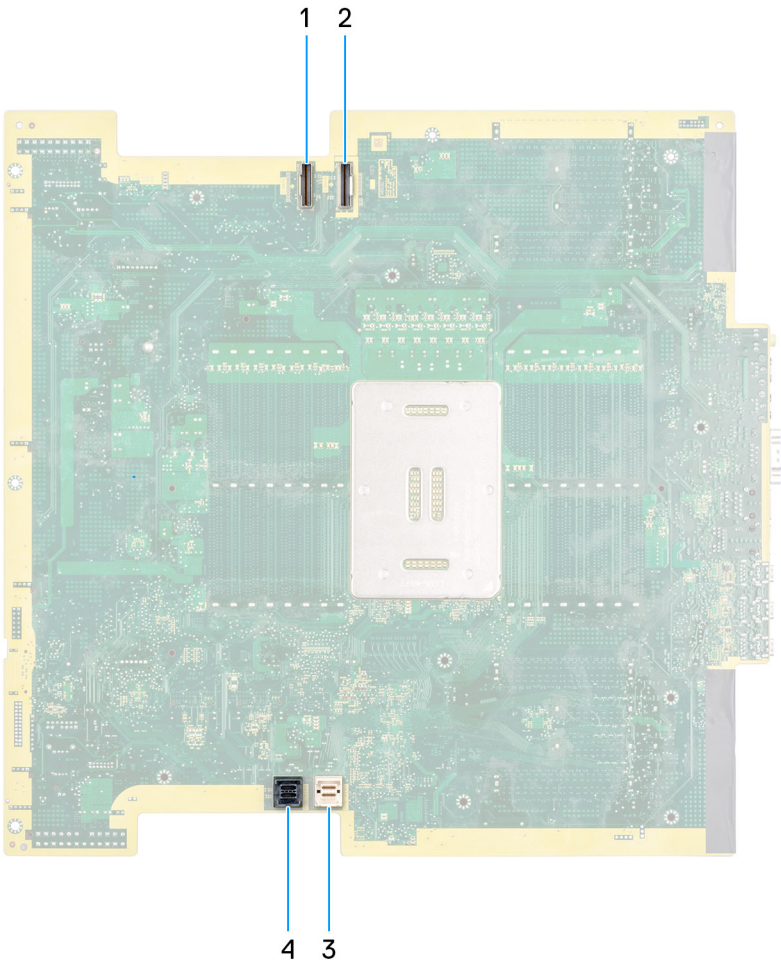


Table 3. Precision 7960 tower system board callouts (rear side)

No	Connector	Description
1	Front NVME0-1 (rear access)	Front NVMe connector for externally facing M.2 flexbay drive
2	Front NVME2-3 (rear access)	Front NVMe connector for externally facing M.2 flexbay drive
3	SATA 4-7 (rear access)	SATA hard drive data-cable connector
4	SATA 0-3 (rear access)	SATA hard drive data-cable connector

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Specifications of Precision 7960 Tower

Dimensions and weight

The following table lists the height, width, depth, and weight of your Precision 7960 Tower.

Table 4. Dimensions and weight

Description	Values
Height	430.70 mm (16.96 in.) / 434.20 mm (17.09 in.) with rubber feet
Width	218.00 mm (8.58 in.)
Depth	538.30 mm (21.19 in.) / 569.15 mm (22.41 in.) with lock structure
Weight **NOTE:** The weight of your computer depends on the configuration ordered and manufacturing variability.	• 37.56 kg (82.82 lbs.) —maximum • 23.81 kg (52.50 lbs.)—typical • 21.04 kg (46.39 lbs.)—minimum

Processor

The following table lists the details of the processors that are supported by your Precision 7960 Tower .

Table 5. Processor

Description	Option one	Option two	Option three	Option four	Option five	Option six	Option seven	Option eight	Option nine
Processor type	Intel Xeon W5-3423	Intel Xeon W5-3425	Intel Xeon W5-3433	Intel Xeon W5-3435 X	Intel Xeon W7-3445	Intel Xeon W7-3455	Intel Xeon W7-3465X	Intel Xeon W9-3475X	Intel Xeon W9-3495X
Processor wattage	220 W	270 W	220 W	270 W	270 W	270 W	300 W	300 W	350 W
Processor core count	12	12	16	16	20	24	28	36	56
Processor thread count	24	24	32	32	40	48	56	72	112
Processor speed	2.10 GHz to 4.20 GHz	3.20 GHz to 4.60 GHz	2.0 GHz to 4.20 GHz	3.10 GHz to 4.70 GHz	2.60 GHz to 4.80 GHz	2.50 GHz to 4.80 GHz	2.50 GHz to 4.80 GHz	2.20 GHz to 4.80 GHz	1.90 GHz to 4.80 GHz
Processor cache	30 MB	30 MB	45 MB	45 MB	52.5 MB	67.5 MB	75 MB	82.5 MB	105 MB
Integrated graphics	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported

Chipset

The following table lists the details of the chipset supported by your Precision 7960 Tower.

Table 6. Chipset

Description	Values
Chipset	Intel W790
Processor	Intel Xeon W5/W7/W9 processors
DRAM bus width	• 64-bit (for single-channel) • 128-bit (for dual-channel)
Flash EPROM	• 16 MB (nRPMC) • 32 MB (RPMC)
PCIe bus	Up to Gen5
Non-volatile memory	Yes
BIOS configuration Serial Peripheral Interface (SPI)	256 Mbit (32 MB) located at SPI_FLASH
Trusted Platform Module (TPM) 2.0 (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 operating system.
NIC EEPROM	LOM configuration contained within SPI flash ROM instead of LOM e-fuse

Operating system

Your Precision 7960 Tower supports the following operating systems:

- Windows 11 Pro for Workstations
- Windows 11 Pro for Workstations Downgrade (Windows 10 Pro for Workstations Image-factory installed)
- Windows 10 CMIT Government Edition, 64-bit (China only)
- Ubuntu 22.04 LTS, 64-bit
- Red Hat Enterprise Linux 8.6

Memory

The following table lists the memory specifications of your Precision 7960 Tower.

Table 7. Memory specifications

Description	Values
Memory slots	16 DIMMS
Memory type	DDR5
Memory speed	4800 MT/s
Maximum memory configuration	1 TB
Minimum memory configuration	16 GB

Table 7. Memory specifications (continued)

Description	Values
Memory size per slot	16 GB, 32 GB, 64 GB
Memory configurations supported	• 16 GB, 1 x 16 GB, DDR5 RDIMM, 4800 MT/s • 32 GB, 1 x 32 GB, DDR5 RDIMM, 4800 MT/s • 32 GB, 2 x 16 GB, DDR5 RDIMM, 4800 MT/s • 64 GB, 1 x 64 GB, DDR5 RDIMM, 4800 MT/s • 64 GB, 2 x 32 GB, DDR5 RDIMM, 4800 MT/s • 64 GB, 4 x 16 GB, DDR5 RDIMM, 4800 MT/s • 96 GB, 6 x 16 GB, DDR5 RDIMM, 4800 MT/s • 128 GB, 2 x 64 GB, DDR5 RDIMM, 4800 MT/s • 128 GB, 4 x 32 GB, DDR5 RDIMM, 4800 MT/s • 128 GB, 8 x 16 GB, DDR5 RDIMM, 4800 MT/s • 192 GB, 6 x 32 GB, DDR5 RDIMM, 4800 MT/s • 192 GB, 12 x 16 GB, DDR5 RDIMM, 4800 MT/s • 256 GB, 4 x 64 GB, DDR5 RDIMM, 4800 MT/s • 256 GB, 16 x 16 GB, DDR5 RDIMM, 4800 MT/s • 384 GB, 6 x 64 GB, DDR5 RDIMM, 4800 MT/s • 384 GB, 12 x 32 GB, DDR5 RDIMM, 4800 MT/s • 512 GB, 8 x 64 GB, DDR5 RDIMM, 4800 MT/s • 512 GB, 16 x 32 GB, DDR5 RDIMM, 4800 MT/s • 768 GB, 12 x 64 GB, DDR5 RDIMM, 4800 MT/s • 1 TB, 16 x 64 GB, DDR5 RDIMM, 4800 MT/s

NOTE: When 12th or 16th memory DIMM slots are populated in your computer, the 4800 MT/s memory speed will clock down to 4400 MT/s.

Memory matrix

The following table lists the memory configurations supported on your Precision 7960 Tower.

NOTE: Ensure that you install the memory module starting from DIMM 1 slot.

Table 8. Memory matrix

Configurations	DIMM 8	DIMM 16	DIMM 2	DIMM 10	DIMM 6	DIMM 14	DIMM 4	DIMM 12	DIMM 9	DIMM 1	DIMM 15	DIMM 7	DIMM 11	DIMM 3	DIMM 13	DIMM 5
16 GB DDR5	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-
32 GB DDR5	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	
32 GB DDR5	-	-	16	-	-	-	-	-	-	16	-	-	-	-	-	-
64 GB DDR5	-	-	-	-	-	-	-	-	-	64	-	-	-	-	-	-
64 GB DDR5	-	-	32	-	-	-	-	-	-	32	-	-	-	-	-	-
64 GB DDR5	-	-	16	-	-	-	16	-	-	16	-	-	-	16	-	-
96 GB DDR5	-	-	16	-	16	-	16	-	-	16	-	-	-	16	-	16
128 GB DDR5	16	-	16	-	16	-	16	-	-	16	-	16	-	16	-	16
128 GB DDR5	-	-	32	-	-	-	32	-	-	32	-	-	-	32	-	-
128 GB DDR5	-	-	64	-	-	-	-	-	-	64	-	-	-	-	-	-
192 GB DDR5	16	-	16	16	16	-	16	16	16	16	-	16	16	16	-	16
192 GB DDR5	-	-	32	-	32	-	32	-	-	32	-	-	-	32	-	32

Table 8. Memory matrix (continued)

256 GB DDR5	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
256 GB DDR5	-	-	64	-	-	-	64	-	-	64	-	-	-	64	-	-
384 GB DDR5	32	-	32	32	32	-	32	32	32	32	-	32	32	32	-	32
384 GB DDR5	-	-	64	-	64	-	64	-	-	64	-	-	-	64	-	64
512 GB DDR5	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
512 GB DDR5	64	-	64	-	64	-	64	-	-	64	-	64	-	64	-	64
768 GB DDR5	64	-	64	64	64	-	64	64	64	64	-	64	64	64	-	64
1 TB DDR5	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64

External ports

The following table lists the external ports of your Precision 7960 Tower.

Table 9. External ports

Description	Values
Network port	• One RJ45 Ethernet port, 1 GbE • One RJ45 Ethernet port, 10 GbE
USB ports	**Front**: • Two USB 3.2 Gen 1 ports • One USB 3.2 Gen 2x2 Type-C port with PowerShare • One USB 3.2 Gen 2 Type-C port **Rear**: • Three USB 3.2 Gen 2 Type-C ports • Two USB 3.2 Gen 1 ports • One USB 3.2 Gen 1 port with Smart Power On
Audio port	• One universal audio jack • One Line-out port
Video port	Not supported
Media-card reader	Not supported
Power-adapter port	Not supported
Security-cable slot	• One kensington security-cable slot • One padlock ring

Internal slots

The following table lists the internal slots of your Precision 7960 Tower.

Table 10. Internal slots

Description	Values
Expansion	• Two full-height Gen5 PCIe x16 slots • Two full-height Gen4 PCIe x16 slots • Two full-height Gen4 PCIe x8 slots

Table 10. Internal slots (continued)

Description	Values
	• Two full-height, half-length Gen4 PCIe x8 slots wired as x4 electrically
mSATA	NA
SATA/SAS/NVMe	• Eight externally facing (four front and four rear) storage flexbays with optical drive configuration • Ten externally facing (six front and four rear) storage flexbays without optical drive configuration • Up to 8 M.2 NVMe drives (four front and four rear)
M.2	NA

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Precision 7960 Tower.

Table 11. Ethernet specifications

Description	Option 1	Option 2
Model number	Intel i219-LM	Marvell AQC113
Transfer rate	10/100/1000 Mbps	10/100/1000/10000 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module that is supported on your Precision 7960 Tower.

Table 12. Wireless module specifications

Description	Values
Model number	Qualcomm WCN6856-DBS
Transfer rate	Up to 3571 Mbps
Frequency bands supported	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 6E (WiFi 802.11ax)
Encryption	• 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth wireless card	Bluetooth 5.3
	NOTE: The version of the Bluetooth wireless card may vary depending on the operating system that is installed on your computer.

Audio

The following table lists the audio specifications of your Precision 7960 Tower.

Table 13. Audio specifications

Description		Values
Audio controller		Realtek ALC3246-CGT
Stereo conversion		Supported (Front panel single universal audio jack)
Internal audio interface		High definition audio interface
External audio interface		Line-out (re-taskable)
Number of speakers		One
Internal-speaker amplifier		Supported
External volume controls		No hardware volume buttons
Speaker output:		
	Average speaker output	2 W
	Peak speaker output	2.5 W
Subwoofer output		Not applicable
Microphone		Not applicable

Storage

This section lists the storage options on your Precision 7960 Tower.

Table 14. Storage specifications

Storage type	Interface type	Capacity
2.5-inch, 7200 RPM, HDD	SATA 3.0	500 GB
3.5-inch, 7200 RPM, HDD	SATA 3.0	1 TB
M.2 2280, Class 40 SSD	PCIe NVMe Gen4 x4	Up to 4 TB
2.5-inch, 10000 RPM, SAS, Enterprise HDD	SATA 3.0	Up to 2.4 TB
2.5-inch, 15000 RPM, SAS, Enterprise HDD	SATA 3.0	600 GB
3.5-inch, 7200 RPM, SAS, Enterprise HDD	SATA 3.0	Up to 12 TB
2.5-inch, MU, SATA, SSD	SATA	1.92 TB

Storage matrix

The following table lists the storage configurations supported on your Precision 7960 Tower.

Table 15. Storage matrix

Storage description	Flex 0		Flex 1		Flex 2		Flex 3		Flex 4		Zoom
	HDD0	HDD1	HDD2	HDD3	HDD4	HDD5	Rear HDD0	Rear HDD1	Rear HDD2	Rear HDD3	
Flex PCIe Non-RAID Boot (Intel)	PCIe	PCIe	PCIe	PCIe	ODD/NA		PCIe	PCIe	PCIe	PCIe	N
Flex PCIe Non-RAID Boot (Intel) + SATA (Intel) - 4 pcs PCIe	PCIe	PCIe	PCIe	PCIe	ODD/NA	SATA	SATA/ SAS	SATA/ SAS	SATA/ SAS	SATA/ SAS	N
Flex PCIe Non-RAID Boot (Intel) + SATA (Intel) - 2 pcs PCIe	SATA	SATA	PCIe	PCIe	NA		SATA/ SAS	SATA/ SAS	SATA/ SAS	SATA/ SAS	N
Flex PCIe Non-RAID Boot (Intel)	PCIe	PCIe	PCIe	PCIe	ODD/NA		NA				N
Flex PCIe RAID Boot (Intel)	PCIe	PCIe	PCIe	PCIe	ODD/NA		NA				N
Zoom Boot JBOD + SATA (Intel)	SATA	SATA	SATA	SATA	ODD/NA		SATA	SATA	SATA	SATA	Y
Zoom Boot JBOD + SATA/SAS (MegaRAID)	SATA/ SAS	SATA/ SAS	SATA/ SAS	SATA/ SAS	ODD/NA	SATA/SAS	SATA/ SAS	SATA/ SAS	SATA/ SAS	SATA/ SAS	Y

Zoom	SSD location			
Description	SSD0	SSD1	SSD2	SSD3
Zoom2 Non-RAID	Yes	No	No	No
Zoom2 Non-RAID	Yes	Yes	No	No
Zoom4 Non-RAID	Yes	No	No	No
Zoom4 Non-RAID	Yes	Yes	No	No
Zoom4 Non-RAID	Yes	Yes	Yes	No
Zoom4 Non-RAID	Yes	Yes	Yes	Yes

Zoom Boot	SSD location			
Description	SSD0	SSD1	SSD2	SSD3
Zoom2 Non-RAID Boot	Yes (Boot)	No	No	No

Zoom Boot	SSD location			
Zoom2 Non-RAID Boot	Yes (Boot)	Yes	No	No
Zoom4 Non-RAID Boot	Yes (Boot)	No	No	No
Zoom4 Non-RAID Boot	Yes (Boot)	Yes	No	No
Zoom4 Non-RAID Boot	Yes (Boot)	Yes	Yes	No
Zoom4 Non-RAID Boot	Yes (Boot)	Yes	Yes	Yes

RAID (Redundant Array of Independent Disks)

For optimal performance when configuring drives as a RAID volume, Dell recommends drive models that are identical.

NOTE: RAID is not supported on Intel Optane configurations.

RAID 0 (Striped, Performance) volumes benefit from higher performance when drives are matched because the data is split across multiple drives: any IO operations with block sizes larger than the stripe size will split the IO and become constrained by the slowest of the drives. For RAID 0 IO operations where block sizes are smaller than the stripe size, whichever drive the IO operation targets will determine the performance, which increases variability and results in inconsistent latencies. This variability is particularly pronounced for write operations and it can be problematic for applications that are latency sensitive. One such example of this is any application that performs thousands of random writes per second in very small block sizes.

RAID 1 (Mirrored, Data Protection) volumes benefit from higher performance when drives are matched because the data is mirrored across multiple drives: all IO operations must be performed identically to both drives, thus variations in drive performance when the models are different, results in the IO operations completing only as fast as the slowest drive. While this does not suffer the variable latency issue in small random IO operations as with RAID 0 across heterogeneous drives, the impact is nonetheless large because the higher performing drive becomes limited in all IO types. One of the worst examples of constrained performance here is when using unbuffered IO. To ensure writes are fully committed to non-volatile regions of the RAID volume, unbuffered IO bypasses cache (for example by using the Force Unit Access bit in the NVMe protocol) and the IO operation will not complete until all the drives in the RAID volume have completed the request to commit the data. This kind of IO operation completely negates any advantage of a higher performing drive in the volume.

RAID 5 provides better performance by using data striping and protection through parity. The disadvantage of RAID 5 is that rebuilding a large RAID 5 volume requires a longer period of time. The following are the key features of RAID 5:

- Requires at least three drives.
- Data is available even if one of the drives present in the volume fails. The failed drive must be replaced, and the volume must be rebuilt for the data to be accessible.
- The total capacity is N-1, where N is the total capacity of the drives in the array. For example, if you use three 1 TB drives in a RAID 5 array, the total volume size is 2 TB.

RAID 10 is a stripe of mirrors that combines the features of RAID 0 and RAID 1. As the blocks are striped and mirrored, the performance and redundancy are higher. The disadvantage of RAID 10 is that it is more expensive than other RAID levels, with a higher number of drives required. The following are the key features of RAID 10:

- Requires a minimum of four drives. Only an even number of drives can be used, and an odd number of drives are not possible.
- The total volume capacity is half the sum of individual drives capacity. For example, when you use four drives of 1 TB, you get a RAID 10 volume of 2 TB.

Care must be taken to match not only the drive vendor, capacity, and class, but also the specific model. Drives from the same vendor, with the same capacity, and even within the same class, can have very different performance characteristics for certain types of IO operations. Thus, matching by model ensures that the RAID volumes is comprised of an homogeneous array of drives that will deliver all the benefits of a RAID volume without incurring the additional penalties when one or more drives in the volume are lower performing.

Precision 7960 Tower supports RAID with more than one hard drive configuration.

Media-card reader

The following table lists the media cards supported by your Precision 7960 Tower.

Table 16. Media-card reader specifications

Description	Values
Media-card type	One SD card slot
Media-cards supported	• Secure Digital (SD) • Secure Digital High Capacity (SDHC) • Secure Digital Extended Capacity (SDXC)
NOTE: The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.	

Power ratings

The following table lists the power rating specifications of Precision 7960 Tower.

Table 17. Power ratings

Description	Option one	Option two
Type	1100 W/1400 W Gold internal power supply unit	1500 W/2200 W Platinum internal power supply unit
PSU dimension		
Hieght	63 mm (2.48 in.)	63 mm (2.48 in.)
Width	160 mm (6.29 in.)	160 mm (6.29 in.)
Depth	225 mm (8.85 in.)	225 mm (8.85 in.)
Input voltage	90 Vac - 264 Vac	90 Vac - 264 Vac
Input frequency	47 Hz - 63 Hz	47 Hz - 63 Hz
Input current (maximum)	15 A	16 A
Output current (continuous)	90 Vac~180 Vac (1100 W) • 12 VDC/91.6 A • -12 VDC/0.5 A • 12 VSBDC/8 A 180.1 Vac~264 Vac (1400 W) • 12 V/116.7 A • -12 VDC/0.5 A • 12 VSBDC/8 A	90 Vac~114.9 Vac (1200 W) • 12 VDC/98.37 A • -12 VDC/0.5 A • 12 VSBDC/8 A 115 Vac~179.9 Vac (1500 W) • 12 V/122.96 A • -12 VDC/0.5 A • 12 VSBDC/8 A 180 Vac~264 Vac (2200 W) • 12 VDC/180.33 A • -12 VDC/0.5 A • 12 VSBDC/8 A
Rated output voltage	• 12 VDC • -12 VDC • 12 VSBDC	• 12 VDC • -12 VDC • 12 VSBDC
Temperature range		
Operating	5°C to 50°C (41°F to 122°F)	5°C to 50°C (41°F to 122°F)

Table 17. Power ratings (continued)

Description		Option one	Option two
		Standby—40°C (104°F)	Standby—40°C (104°F)
	Storage Minimum	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)

Power cord

This section lists the power-cord plug types for 1500 W/2200 W PSU on your Precision 7960 Tower based on the countries shipped.

NOTE: The 1500 W/2200 W PSUs have C20 cord and require 20 A circuit at 115 V or a 220 V circuit. The power supply units are externally accessible, removal, and lockable.

Table 18. Power-cord plug types

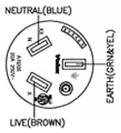
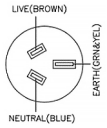
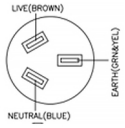
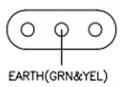
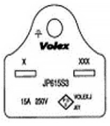
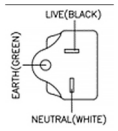
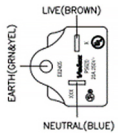
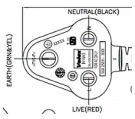
Power-cord style	Plug type	Affected countries
Argentina		Argentina
Australia		• Australia • Christmas Island • Cook Islands • Fiji • Kiribati • Nauru • New Zealand • Papua New Guinea • Pitcairn • Tonga • Tuvalu • Uruguay
Brazil		Brazil
China		China
Italy		• Chile • Holy See • Italy • Uruguay
Japan—250 V		Japan

Table 18. Power-cord plug types (continued)

Power-cord style	Plug type	Affected countries
North America—125 V		• Anguilla • American Samoa • Aruba • Bahamas • Barbados • Belize • Bermuda • British Virgin Islands • Canada • Cayman Islands • Colombia • Costa Rica • Dominican Republic • Ecuador • El Salvador • Guam • Guatemala • Haiti • Honduras • Jamaica • North Mariana • Marshall Island • Mexico • Nicaragua • Palau • Panama • Philippines • Puerto Rico • Samoa • St. Maarten • Trinidad and Tobago • Turks and Caicos • United States • US Virgin Islands • Venezuela • Vietnam
North America—250 V		
Switzerland		• Liechtenstein • Switzerland
India		India

Power supply connector

The following table lists the Power supply connector specifications of your Precision 7960 Tower.

Table 19. Power supply connector

1100 W/1400 W Gold internal power supply unit	Golden finger design without cable
1500 W/2200 W Platinum internal power supply unit	Golden finger design without cable

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Precision 7960 Tower.

Table 20. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA RTX A6000	48 GB	GDDR6
NVIDIA RTX A5500	24 GB	GDDR6
NVIDIA RTX A4500	20 GB	GDDR6
NVIDIA RTX A4000	16 GB	GDDR6
NVIDIA RTX A2000	12 GB	GDDR6
NVIDIA T1000	8 GB	GDDR6
NVIDIA T400	4 GB	GDDR6
AMD Radeon Pro W6800	16 GB	GDDR6
AMD Radeon Pro W6600	8 GB	GDDR6

Video port resolution

The following table lists the video port resolution for your Precision 7960 Tower.

Table 21. Video port resolution

Graphics card	Video ports	Maximum supported resolution
NVIDIA RTX A6000	Four DP 1.4 ports	7680 x 4320 @ 24 bpp at 120 Hz **NOTE:** Requires two DPs 1.4a and DSC
NVIDIA RTX A5500	Four DP 1.4 ports	7680 x 4320 @ 24 bpp at 120 Hz **NOTE:** Requires two DPs 1.4a and DSC
NVIDIA RTX A4500	Four DP 1.4 ports	7680 x 4320 @ 24 bpp at 120 Hz **NOTE:** Requires two DPs 1.4a and DSC
NVIDIA RTX A4000	Four DP 1.4 ports	7680 x 4320 @ 24 bpp at 120 Hz **NOTE:** Requires two DPs 1.4a and DSC
NVIDIA RTX A2000	Four mini-DP 1.4 ports	7680 x 4320 @ 24 bpp at 120 Hz **NOTE:** Requires two DPs 1.4a and DSC

Table 21. Video port resolution (continued)

Graphics card	Video ports	Maximum supported resolution
NVIDIA T1000	Four mini-DP 1.4 ports	7680 x 4320 @ 24 bpp at 120 Hz **NOTE:** Requires two DPs 1.4a and DSC
NVIDIA T400	Three mini-DP 1.4 ports	7680 x 4320 @ 24 bpp at 120 Hz **NOTE:** Requires two DPs 1.4a and DSC
AMD Radeon Pro W6800	Six mini-DP 1.4 ports	7680 x 4320 @60 Hz
AMD Radeon Pro W6600	Four DP 1.4 ports	7680 x 4320 @60 Hz

Hardware security

The following table lists the hardware security of your Precision 7960 Tower.

Table 22. Hardware security

Hardware security
Kensington security-cable slot
Padlock loop
Chassis lock support - Coin locker
Chassis intrusion switch
Optional lockable bezels for externally-facing front and rear storage flexbays
TPM 2.0 Discrete Hardware

Environmental

The following table lists the environmental specifications of your Precision 7960 Tower.

Table 23. Environmental

Feature	Values
Recyclable packaging	Yes
EPEAT 2018 Gold for selected configuration	Yes
BFR/PVC—free	No
Vertical orientation packaging support	Yes
Multi-Pack packaging	No
Energy-Efficient Power Supply	Standard
ENV0424 compliant	Yes

NOTE: Wood-based fiber packaging contains a minimum of 35% recycled content by total weight of wood-based fiber. Packaging that contains without wood-based fiber can be claimed as Not Applicable. The anticipated required criteria for EPEAT 2018.

Regulatory compliance

The following table lists the regulatory compliance of your Precision 7960 Tower.

Table 24. Regulatory compliance

Regulatory compliance
Product Safety, EMC and Environmental Datasheets
Dell Regulatory Compliance Home page
Dell and the Environment

Operating and storage environment

This table lists the operating and storage specifications of your Precision 7960 Tower.

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

Table 25. 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.		

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

† Measured using a 2 ms half-sine pulse.

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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 26. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
Tips	
Contact Support	In Windows search, type `Contact Support`, and press Enter.
Online help for operating system	www.dell.com/support/windows www.dell.com/support/linux
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.