

OptiPlex 7780 All-In-One

Setup and Specifications



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.



Chapter 1: Set up your computer.....	4
Chapter 2: Views of OptiPlex 7780 All-in-One.....	10
Front.....	10
Retractable camera.....	11
Left.....	12
Right.....	13
Back.....	14
Bottom.....	15
System board layout.....	16
Chapter 3: Specifications of OptiPlex 7780 All-in-One.....	17
Dimensions and weight.....	17
Processors.....	17
Chipset.....	18
Operating system.....	18
Memory.....	19
Ports and connectors.....	19
Communications.....	20
Audio.....	21
Storage.....	21
Intel Optane memory.....	22
Media-card reader.....	22
Camera.....	23
Power supply unit.....	23
Display.....	24
Video.....	25
Computer environment.....	25
Security.....	26
Data security.....	26
Environmental.....	27
Regulatory.....	27
Accessories.....	27
Service and support.....	28
Chapter 4: Getting help and contacting Dell.....	29



Set up your computer

1. Set up the stand.



Figure 1. Articulating stand





Figure 2. Height Adjustable Stand

2. Set up the keyboard and mouse.

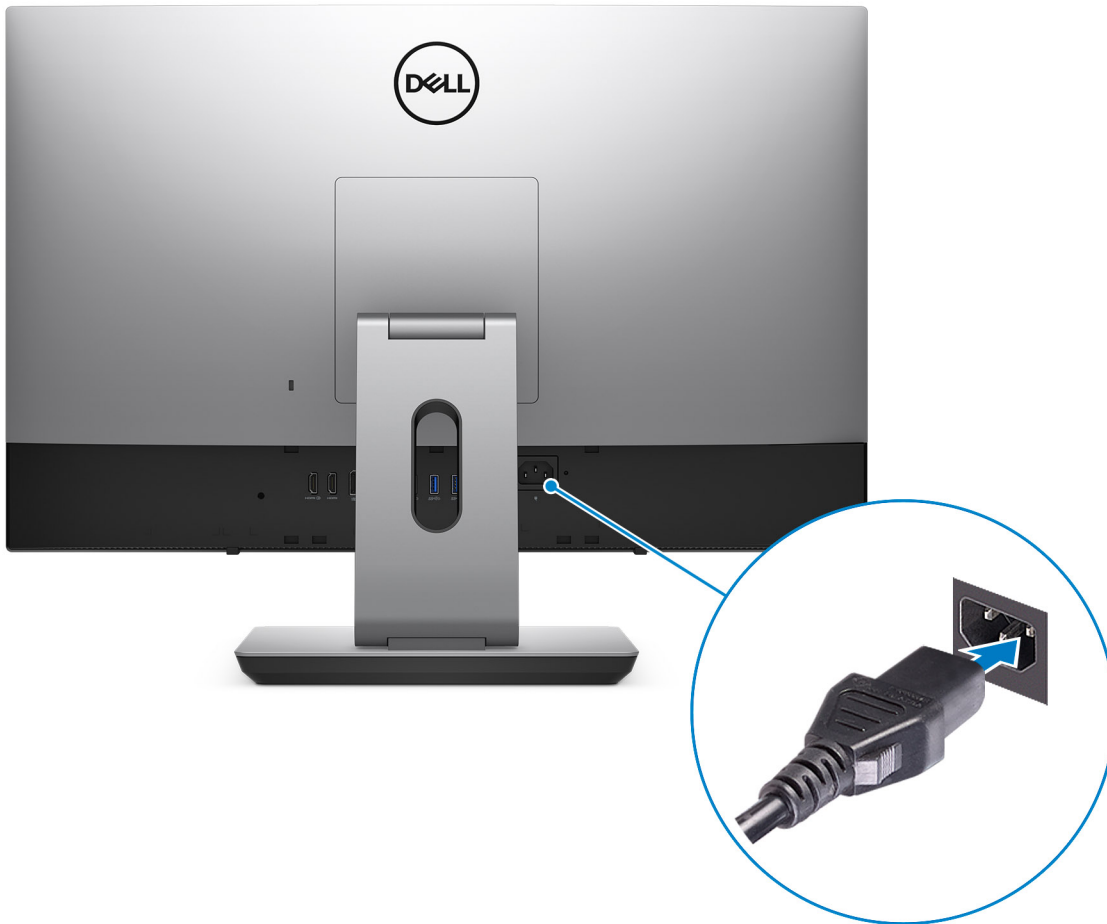
i **NOTE:** For setup instructions, see the documentation shipped with the keyboard and mouse.





3. Route the power cable through the stand, then connect the power cable.





4. Press the power button.





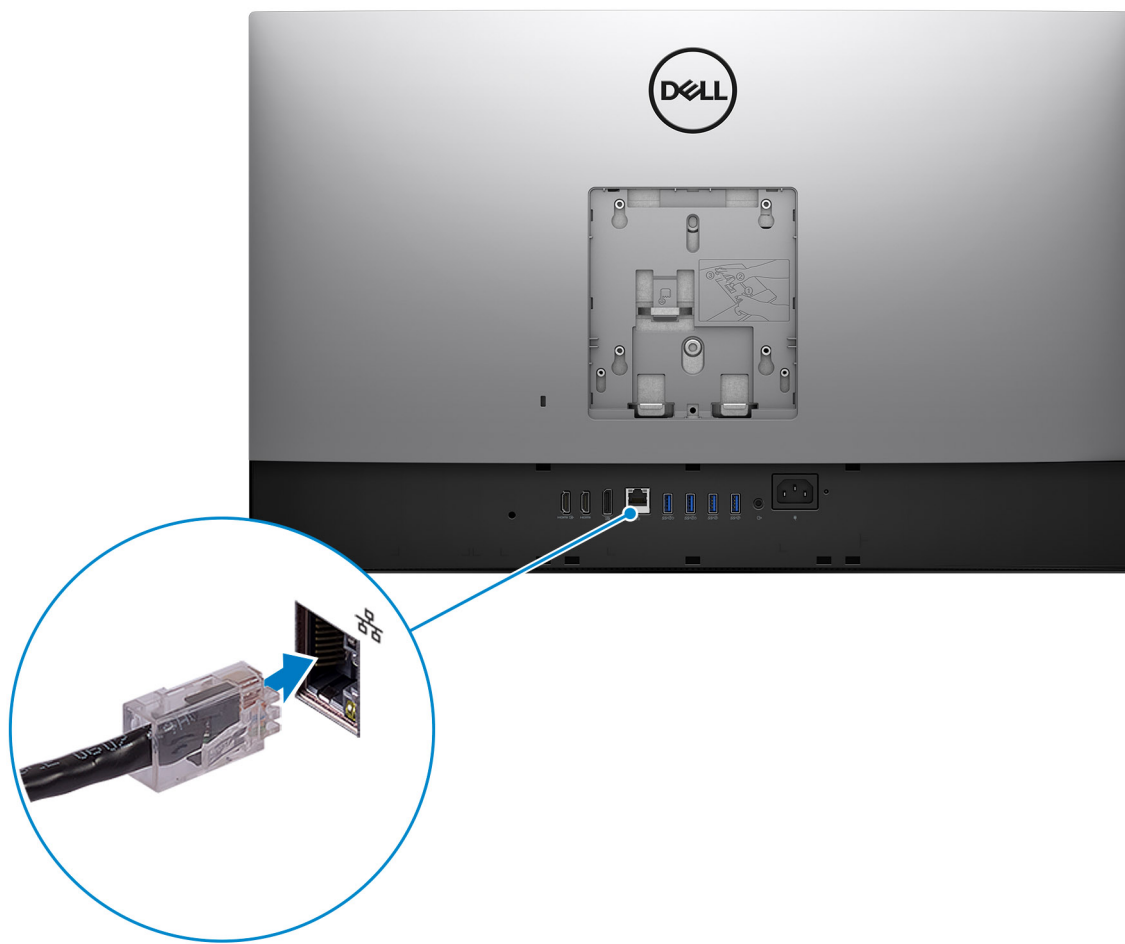
5. Finish Windows setup.

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

- Connect to a network for Windows updates.

i **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.

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

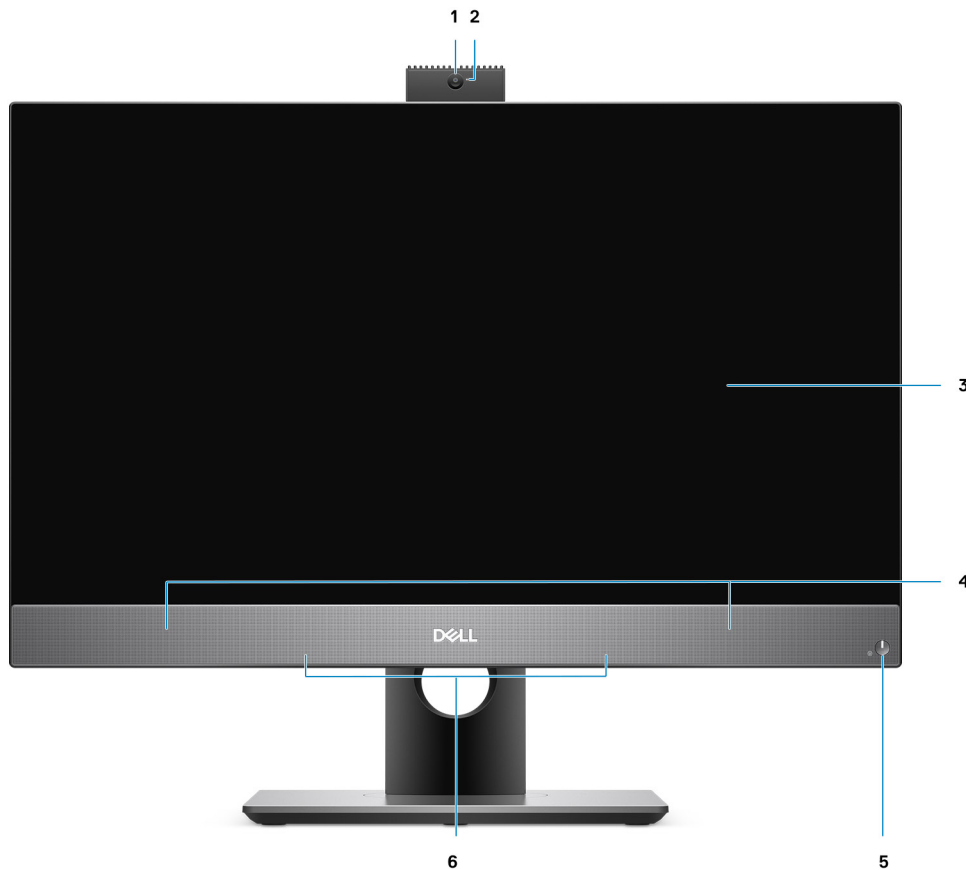
Table 1. Locate Dell apps

Resources	Description
	SupportAssist Pro-actively checks the health of your computer's hardware and software. The SupportAssist OS Recovery tool troubleshoots issues with the operating system. For more information, see the SupportAssist documentation at www.dell.com/support.  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 about using Dell Update, see the knowledge base article SLN305843 at www.dell.com/support.
	Dell Digital Delivery Download software applications, which are purchased but not pre-installed on your computer. For more information about using Dell Digital Delivery, see the knowledge base article 153764 at www.dell.com/support.



Views of OptiPlex 7780 All-in-One

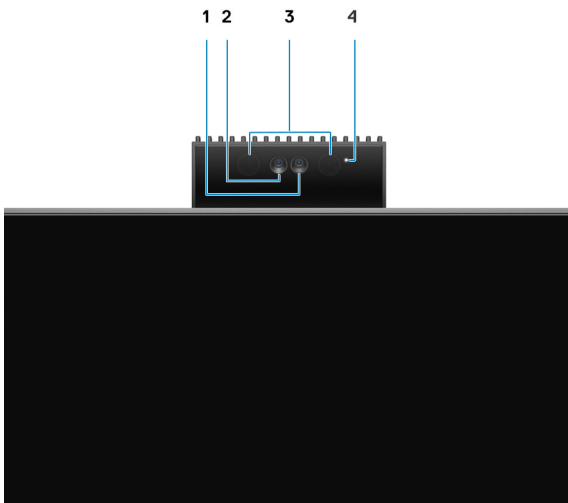
Front



- | | |
|--|------------------------|
| 1. Full HD webcam | 2. Camera-status light |
| 3. Display | 4. Speakers |
| 5. Power button/power-status indicator | 6. Array microphones |



Retractable camera

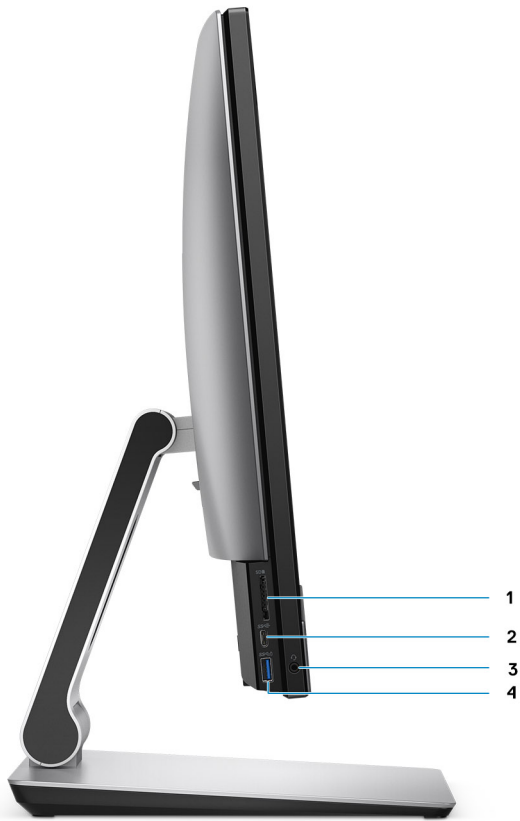


NOTE: Depending on the configuration ordered, your computer will have no camera, only Full HD camera, or both Full HD camera and infrared camera.

1. Full HD camera
2. Infrared camera
3. Infrared emitter
4. Camera-status light



Left

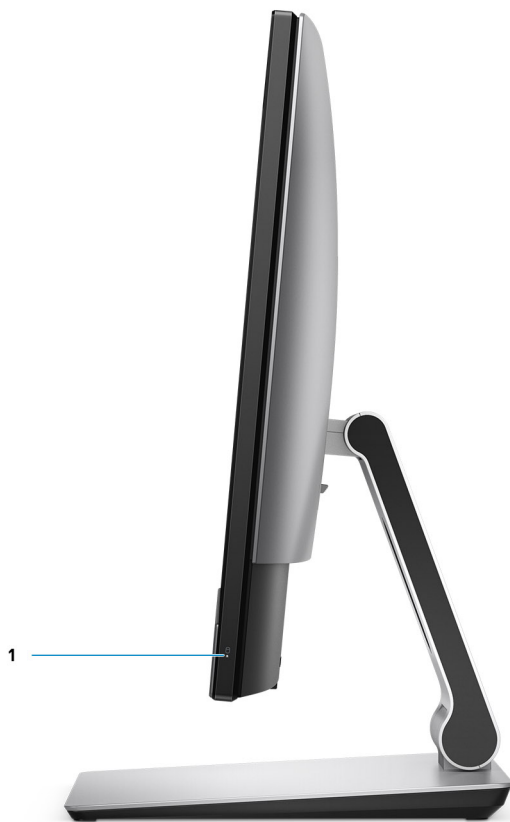


1. SD 4.0 card slot
3. Universal audio jack

2. USB 3.2 Gen 2 Type-C port
4. USB 3.2 Gen 1 Type-A port with PowerShare



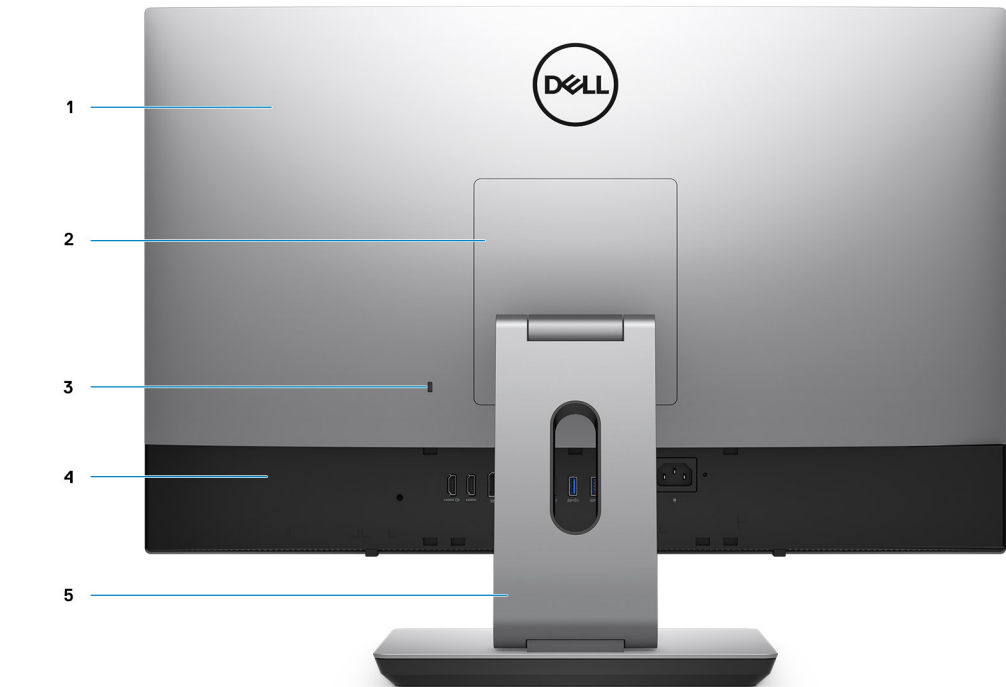
Right



1. Hard-drive status indicator



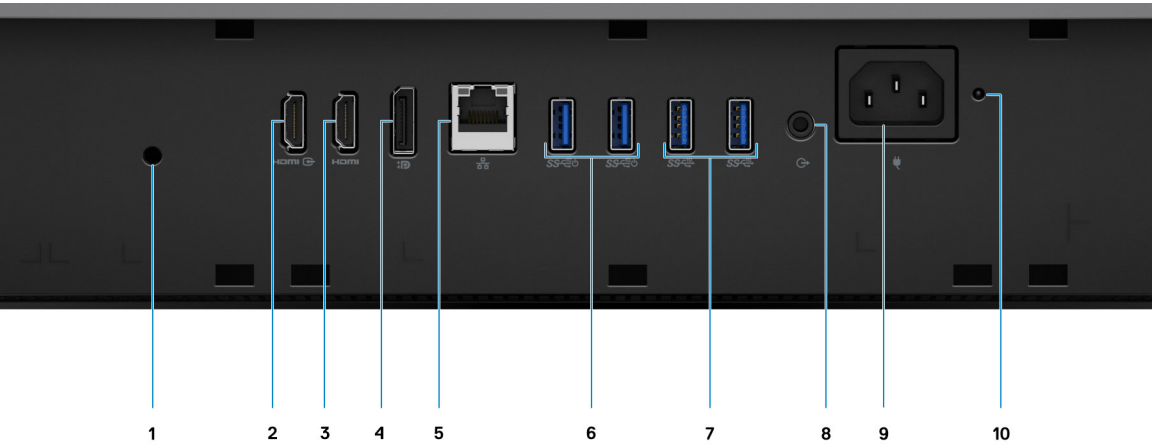
Back



1. Back cover

2. Stand cover
3. Kensington security-cable slot

4. Bottom cover
5. Stand



1. Cable cover screw hole

2. HDMI-in port
3. HDMI-out port

4. DP++ 1.4/HDCP 2.3 port
- HDMI 1.4b for UMA Graphics



- HDMI 2.0 for Discrete Graphics
5. RJ-45 port 10/100/1000 Mbps
 7. USB 3.2 Gen 2 Type-A ports
 9. Power connector

6. USB 3.2 Gen 2 Type-A ports with Smart Power On
8. Line-out audio port
10. PSU status indicator LED

Bottom



1. Display Built-in Self Test button/Input-source selection button

This button has two functions:

- When the computer is on, use this button to select the video input-source.
Press the button to switch the display between the internal system display and HDMI input.
- When the computer is off (there is no power; neither is it in sleep state nor hibernate state), use this button to run the built-in self-test for the display.

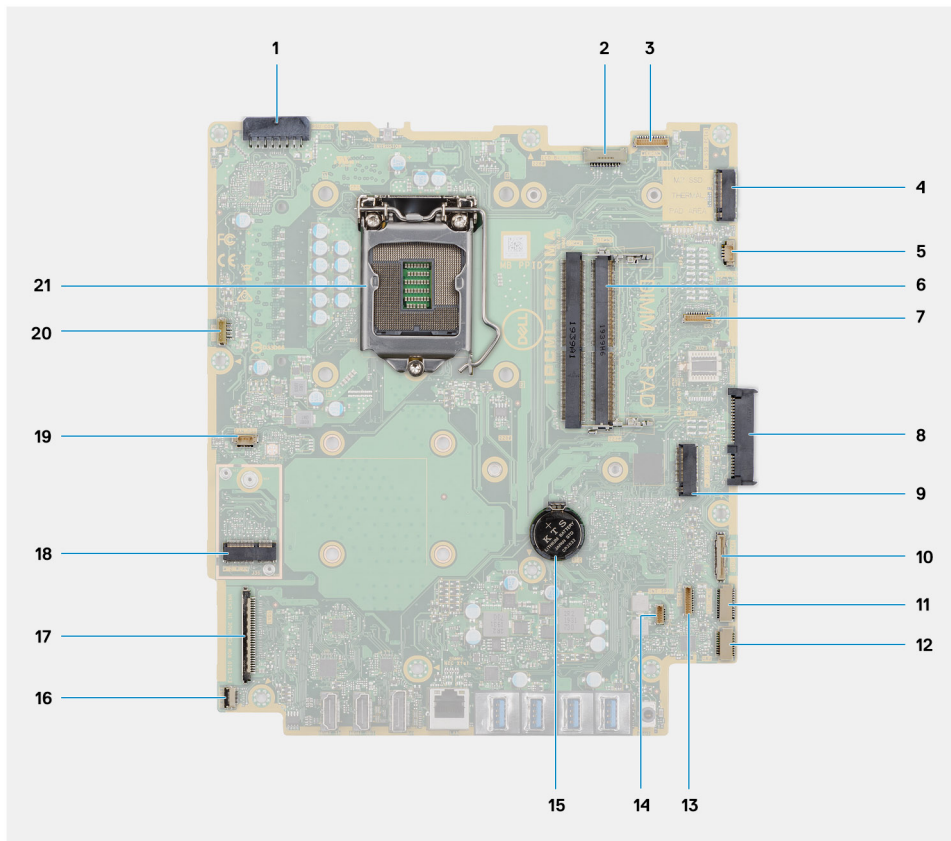
Press and hold down this button, and then press the power button to turn on the computer. The built-in color pattern for the LCD monitor will appear on the screen.

For more information, see the *Troubleshooting* section in the *Service Manual* at www.dell.com/support/manuals.

2. Service tag label



System board layout



1. Power-supply unit (PSU) cable connector
2. Display back-light cable connector
3. Camera cable connector
4. M.2 2230/2280 solid-state drive/Intel Optane PCIe connector
5. System-fan cable connector
6. Memory modules
7. LPC debug card connector
8. Hard-drive connector
9. M.2 2230/2280 solid-state drive PCIe connector
10. SIO-signal cable connector
11. SIO-power cable connector
12. Audio-board cable connector
13. Microphone-module cable connector
14. Speaker cable connector
15. Coin-cell battery
16. Power-button cable connector
17. Display cable connector
18. M.2 WLAN connector
19. PSU-fan cable connector
20. Touchscreen cable connector
21. Processor



Specifications of OptiPlex 7780 All-in-One

Dimensions and weight

Table 2. Dimensions and weight

Description	Values for touch display	Values for non-touch display
Height	389.00 mm (15.31 in.)	389.00 mm (15.31 in.)
Width	614.00 mm (24.17 in.)	614.00 mm (24.17 in.)
Depth	58.00 mm (2.28 in.)	58.00 mm (2.28 in.)
Weight (maximum)	9.10 kg (20.06 lb)	8.66 kg (19.09 lb)
Weight (minimum)	8.73 kg (19.24 lb)	8.30 kg (18.29 lb)

NOTE: The weight of your computer depends on the configuration ordered and the manufacturing variability.

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 only available on Windows 10 Enterprise today. Device Guard is a combination of enterprise-related hardware and software security features. When you configure together, it locks a device and it can only run trusted applications. Credential Guard uses virtualization-based security to isolate secrets (credentials) and only privileged system software can access the system. 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 subject to change and may vary by region/country.

Table 3. Processors

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics
10 th Generation Intel Core i3-10105	65 W	4	8	3.7 GHz to 4.4 GHz	8 MB	Intel UHD Graphics 630
10 th Generation Intel Core i3-10305	65 W	4	8	3.8 GHz to 4.5 GHz	8 MB	Intel UHD Graphics 630
10 th Generation Intel Core i5-10400	65 W	6	12	2.9 GHz to 4.3 GHz	12 MB	Intel UHD Graphics 630
10 th Generation Intel Core i5-10500	65 W	6	12	3.1 GHz to 4.5 GHz	12 MB	Intel UHD Graphics 630

Table 3. Processors (continued)

Processors	Wattage	Core count	Thread count	Speed	Cache	Integrated graphics
10 th Generation Intel Core i5-10600	65 W	6	12	3.3 GHz to 4.8 GHz	12 MB	Intel UHD Graphics 630
10 th Generation Intel Core i5-10505	65 W	6	12	3.2 GHz to 4.6 GHz	12 MB	Intel UHD Graphics 630
10 th Generation Intel Core i7-10700	65 W	8	16	2.9 GHz to 4.8 GHz	16 MB	Intel UHD Graphics 630
10 th Generation Intel Core i9-10900	65 W	10	20	2.8 GHz to 5.2 GHz	20 MB	Intel UHD Graphics 630

Chipset

Table 4. Chipset

Description	Values
Chipset	Intel Q470
Processor	10 th Generation Intel Core i3/i5/i7/i9
DRAM bus width	64-bit (for single channel) 128-bit (for dual channel)
Flash EPROM	32 MB
PCIe bus	Up to Gen 3
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 OptiPlex 7780 All-in-One supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit
- Windows 11 Pro National Academic, 64-bit
- Windows 10 Home, 64-bit
- Windows 10 Pro, 64-bit
- Windows 10 Pro Education, 64-bit
- Windows 10 IoT Enterprise 2019 LTSC (OEM only)
- Ubuntu 18.04 LTS, 64-bit



Memory

The following table lists the memory specifications of your OptiPlex 7780 All-in-One:

Table 5. Memory specifications

Description	Values
Slots	Two SO-DIMM slots
Type	DDR4, Non-ECC
Speed	2666 MHz/2933 MHz
Maximum memory	64 GB
Minimum memory	4 GB
Memory size per slot	4 GB, 8 GB, 16 GB, 32 GB
Configurations supported	• 4 GB, 1 x 4 GB, 2666 MHz for Intel Core i3/i5 processors, 2933 MHz for Intel Core i7/i9 processors • 8 GB, 1 x 8 GB, 2666 MHz for Intel Core i3/i5 processors, 2933 MHz for Intel Core i7/i9 processors • 8 GB, 2 x 4 GB, 2666 MHz for Intel Core i3/i5 processors, 2933 MHz for Intel Core i7/i9 processors • 16 GB, 1 x 16 GB, 2666 MHz for Intel Core i3/i5 processors, 2933 MHz for Intel Core i7/i9 processors • 16 GB, 2 x 8 GB, 2666 MHz for Intel Core i3/i5 processors, 2933 MHz for Intel Core i7/i9 processors • 32 GB, 1 x 32 GB, 2666 MHz for Intel Core i3/i5 processors, 2933 MHz for Intel Core i7/i9 processors • 32 GB, 2 x 16 GB, 2666 MHz for Intel Core i3/i5 processors, 2933 MHz for Intel Core i7/i9 processors • 64 GB, 2 x 32 GB, 2666 MHz for Intel Core i3/i5 processors, 2933 MHz for Intel Core i7/i9 processors

Ports and connectors

Table 6. External ports and connectors

Description	Values
External:	
Network	One RJ-45 port 10/100/1000 Mbps (rear)
USB	• One USB 3.2 Gen 2 Type-C port (side) • One USB 3.2 Gen 1 Type-A port with PowerShare (side) • Two USB 3.2 Gen 2 Type-A ports with Smart Power On (rear) • Two USB 3.2 Gen 2 Type-A ports (rear)
Audio	• One Universal audio jack (side) • One Line-out audio port (rear)
Video	• One DP++ 1.4/HDCP 2.3 port (rear) • One HDMI-IN port (rear)



Table 6. External ports and connectors (continued)

Description	Values
	One HDMI-OUT port (rear)—HDMI 1.4b for UMA Graphics and HDMI 2.0 for Discrete Graphics
Media card reader	One SD 4.0 card slot (side)
Docking port	Not supported
Power adapter port	Not supported
Security	One Kensington security-cable slot

Table 7. Internal ports and connectors

Description	Values
Internal:	
M.2	- One M.2 2230 slot for Wi-Fi and Bluetooth card - Two M.2 2230/2280 slots for solid-state drive/Intel Optane  NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626.

Communications

Ethernet

Table 8. Ethernet specifications

Description	Values
Model number	Intel i219LM
Transfer rate	10/100/1000 Mbps

Wireless module

Table 9. Wireless module specifications

Description	Values	
Model number	Intel Wi-Fi 6 AX201	Qualcomm QCA61x4a
Transfer rate	Up to 2400 Mbps	Up to 867 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	- Wi-Fi 802.11 a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac) - Wi-Fi 6 (WiFi 802.11ax)	- Wi-Fi 802.11 a/b/g - Wi-Fi 4 (WiFi 802.11n) - Wi-Fi 5 (WiFi 802.11ac)



Table 9. Wireless module specifications (continued)

Description	Values	
Encryption	64-bit/128-bit WEP - AES-CCMP - TKIP	64-bit/128-bit WEP - AES-CCMP - TKIP
Bluetooth	Bluetooth 5.1	Bluetooth 5.0

Audio

Table 10. Audio specifications

Description		Values
Controller		Realtek Codec ALC3289
Stereo conversion		Supported
Internal interface		High definition audio interface
External interface		Universal audio jack
Speakers		2
Internal speaker amplifier		Realtek Amplifier ALC1302
External volume controls		Not supported
Speaker output:		
	Average	5 W
	Peak	6 W
Subwoofer output		Not supported
Microphone		4

Storage

Your computer supports one of the following configurations:

- One 2.5-inch hard-disk drive
- One M.2 2230/2280 solid-state drive (class 35, 40)
- One M.2 2230/2280 solid-state drive (class 35, 40) and one 2.5-inch hard-disk drive
- Dual M.2 2230/2280 solid-state drives (class 35, 40)
- Dual M.2 2230/2280 solid-state drives (class 35, 40) and one 2.5-inch hard-disk drive
- One 2.5-inch hard-disk drive and one M.2 16 GB Intel Optane memory

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

- with a M.2 drive, the M.2 drive is the primary drive
- without a M.2 drive, the 2.5-inch hard-disk drive is the primary drive
- With a M.2 16 GB Intel Optane memory, the 2.5-inch hard-disk drive is the primary drive



Table 11. Storage specifications

Storage type	Interface type	Capacity
2.5-inch, 7200 RPM, hard-disk drive	SATA	Up to 1 TB
2.5-inch, 7200 RPM, Opal Self-Encrypting hard-disk drive	FIPS SATA	Up to 500 GB
2.5-inch, 5400 RPM, hard-disk drive	SATA	Up to 2 TB
M.2 2230, Class 35 solid-state drive	Gen 3 PCIe x4 NVMe	Up to 512 GB
M.2 2230, Opal Self-Encrypting Class 35 solid-state drive	Gen 3 PCIe x4 NVMe	Up to 256 GB
M.2 2280, Class 40 solid-state drive	Gen 3 PCIe x4 NVMe	Up to 2 TB
M.2 2280, Opal Self-Encrypting Class 40 solid-state drive	Gen 3 PCIe x4 NVMe	Up to 1 TB

Intel Optane memory

Intel Optane memory functions only as a storage accelerator. It neither replaces nor adds to the memory (RAM) installed on your computer.

NOTE: Intel Optane memory is supported on computers that meet the following requirements:

- 7th Generation or higher Intel Core i3/i5/i7 processor
- Windows 64-bit version or higher
- Latest version of Intel Rapid Storage Technology driver

Table 12. Intel Optane memory

Description	Values
Type	Memory
Interface	Gen 3 PCIe x4 NVMe
Connector	M.2 2280
Configurations supported	16 GB
Capacity	Up to 16 GB

Media-card reader

Table 13. Media-card reader specifications

Description	Values
Type	One Secure Digital (SD) 4.0 card
Cards supported	• Secure Digital High Capacity (SDHC) • Secure Digital Extended Capacity (SDXC) • Secure Digital (SD) 4.0 • SD UHS-I (UHS104) • SD UHS-II



Camera

Table 14. Full HD Infrared Webcam (with Windows Hello support)

Description		Values
Number of cameras		Two
Type		FHD RGB camera/VGA Infrared camera
Location		Front camera
Sensor type		CMOS sensor technology
Resolution		
	Camera	
	Still image	2.07 megapixel
	Video	1920 x 1080 (FHD) at 30 fps
	Infrared camera	
	Still image	0.30 megapixel
	Video	640 x 480 (VGA) at 30 fps
Diagonal viewing angle		
	Camera	77.5 degrees
	Infrared camera	82.8 degrees

Table 15. Full HD Webcam

Description		Values
Number of cameras		One
Type		FHD RGB camera
Location		Front camera
Sensor type		CMOS sensor technology
Resolution		
	Camera	
	Still image	2.07 megapixels
	Video	1920 x 1080 (FHD) at 30 fps
Diagonal viewing angle		77.4 degrees

Power supply unit

Table 16. Power supply unit specifications fro OptiPlex 7780 All-in-One

Description	Values
Type	220 W Platinum
Diameter (connector)	Not supported



Table 16. Power supply unit specifications fro OptiPlex 7780 All-in-One (continued)

Description	Values
Input voltage	90 VAC to 264 VAC
Input frequency	47 Hz to 63 Hz
Input current (maximum)	3.6 A
Output current (continuous)	• +19.5 VA/8.5 A • +19.5 VB/9.2 A Standby mode: • +19.5 VA/0.5 A • +19.5 VB/1.75 A
Rated output voltage	• +19.5 VA • +19.5 VB
Temperature range:	
Operating	5°C to 45°C (41°F to 113°F)
Storage	-40°C to 70°C (-40°F to 158°F)

Display

Table 17. Display specifications

Description	Values for touch display	Values for non-touch display
Type	Full High Definition (FHD)	Full High Definition (FHD)
Panel technology	Wide Viewing Angle (WVA)	Wide Viewing Angle (WVA)
Luminance	• 250 Nits (typical) • 200 Nits (minimum)	• 250 Nits (typical) • 200 Nits (minimum)
Dimensions (Active area):		
	Height	336.31 mm (13.24 in.)
	Width	597.89 mm (23.54 in.)
	Diagonal	686 mm (27.01 in.)
Native resolution	1920 x 1080	1920 x 1080
Megapixels	16.7 million colors	16.7 million colors
Color gamut	72% NTSC typical	72% NTSC typical
Pixels per inch (PPI)	81	81
Contrast ratio (min)	600:01:00	600:01:00
Response time (max)	25 ms	25 ms
Refresh rate	60 Hz	60 Hz
Horizontal view angle	• 85 +/-degrees (minimum) • 89 +/-degrees (typical)	• 85 +/-degrees (minimum) • 89 +/-degrees (typical)



Table 17. Display specifications (continued)

Description	Values for touch display	Values for non-touch display
Vertical view angle	85 +/-degrees (minimum) 89 +/-degrees (typical)	85 +/-degrees (minimum) 89 +/-degrees (typical)
Pixel pitch	0.3114 x 0.3114 mm	0.3114 x 0.3114 mm
Power consumption (maximum)	16.60 W	16.60 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare

Video

Table 18. Discrete graphics specifications

Discrete graphics			
Controller	External display support	Memory size	Memory type
NVIDIA GeForce GTX 1650	- DP++ 1.4/HDCP 2.3 port - HDMI-out—HDMI 2.0 port	4 GB	GDDR5

Table 19. Integrated graphics specifications

Integrated graphics			
Controller	External display support	Memory size	Processor
Intel UHD 630 Graphics	- DP++ 1.4/HDCP 2.3 port - HDMI-out—HDMI 1.4b port	Shared system memory	10 th Generation Intel® Core i3/i5/i7/i9

Computer environment

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

Table 20. Computer environment

Description	Operating	Storage
Temperature range	10°C to 35°C (50°F to 95°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	20% to 80% (non-condensing)	5% to 95% (non-condensing)
Vibration (maximum)*	0.26 GRMS	1.37 GRMS
Shock (maximum)	40 G†	105 G†
Altitude (maximum)	0 m to 3048 m (0 ft to 10000 ft)	0 m to 10668 m (0 ft to 35000 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.



Security

Table 21. Security

Security options
Kensington lock
Dell Lockable port cover (optional)
Chassis lock slot support
Noble Custom AIO Plate Lock (optional)
Supply chain tamper alerts
Chassis intrusion switch
Trusted Platform Module (Discrete TPM Enabled)
SafeBIOS including Dell Off-host BIOS Verification
BIOS Resilience
BIOS Recovery, and additional BIOS Controls
SafelD including Trusted Platform Module (TPM) 2.0
Self-Encrypting Drives (SED)
Smart card keyboard (FIPS)
D-Pedigree (Secure Supply Chain Functionality)
Dell wired mouse with fingerprinter reader

Data security

Table 22. Data security

Data security options
McAfee® Small Business Security 30 Day Free Trial
McAfee® Small Business Security 12-month subscription
McAfee® Small Business Security 36-month Subscription
SafeGuard and Response, which is powered by VMware Carbon Black and Secureworks
Next Generation Anti-virus (NGAV)
Endpoint Detection and Response (EDR)
Threat Detection and Response (TDR)
Managed Endpoint Detection and Response
Incident Management Retainer
Emergency Incident Response
SafeData



Environmental

Table 23. Environmental specifications

Feature	Values
Recyclable packaging	Yes
BFR/PVC—free chassis	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

Table 24. Regulatory

Regulatory compliance
EPEAT registered configurations available
ENERGY STAR compliant configurations available
TCO 8.0 certified configurations available
CEL
WEEE
Japan Energy Law
South Korea E-standby
South Korea Eco-label
EU RoHS
China RoHS

Accessories

Table 25. Accessories

Accessories
Audio Optional external speakers, Dell Pro Stereo Headset UC350
Keyboard Dell wired keyboard, Dell wireless keyboard, Dell Smart Card keyboard
Mouse Dell wired mouse, Dell wireless mouse, Dell USB Laser mouse, Dell Fingerprint Reader mouse
Stylus



Table 25. Accessories (continued)

Accessories
Targus Stylus for Capacitive Touch Devices
Additional Monitor
Qualified with select Dell UltraSharp, Professional, and E-series monitors
Locks
Noble custom AIO Plate Lock, Dell Combination Lock LC300, Dell Premium Lock LP500, KensingtonTwin Head Lock, Dell Lockable Port Cover
Stands
• Articulating Stand • Height Adjustable Stand

Service and support

Table 26. Service and support

Warranty	Accidental Damage Service
3 Years Hardware Service with Onsite/In-Home Service after Remote Diagnosis, warranty extensions up to 5 years	Accidental Damage Service is available to complement certain warranty options Optional.
ProSupport with Next Business Day Onsite Service is available to complement certain warranty options.	
ProSupport Plus for Client is available to complement certain warranty options.	



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 27. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
Tips	
Contact Support	In Windows search, type <code>Contact Support</code> , and press Enter.
Online help for operating system	www.dell.com/support/windows www.dell.com/support/linux
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.	www.dell.com/support
Dell knowledge base articles for a variety of computer concerns.	1. Go to https://www.dell.com/support/home/?app=knowledgebase. 2. Type the subject or keyword in the Search box. 3. Click Search to retrieve 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 and product, and some services may not be available in your country.

 **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.

