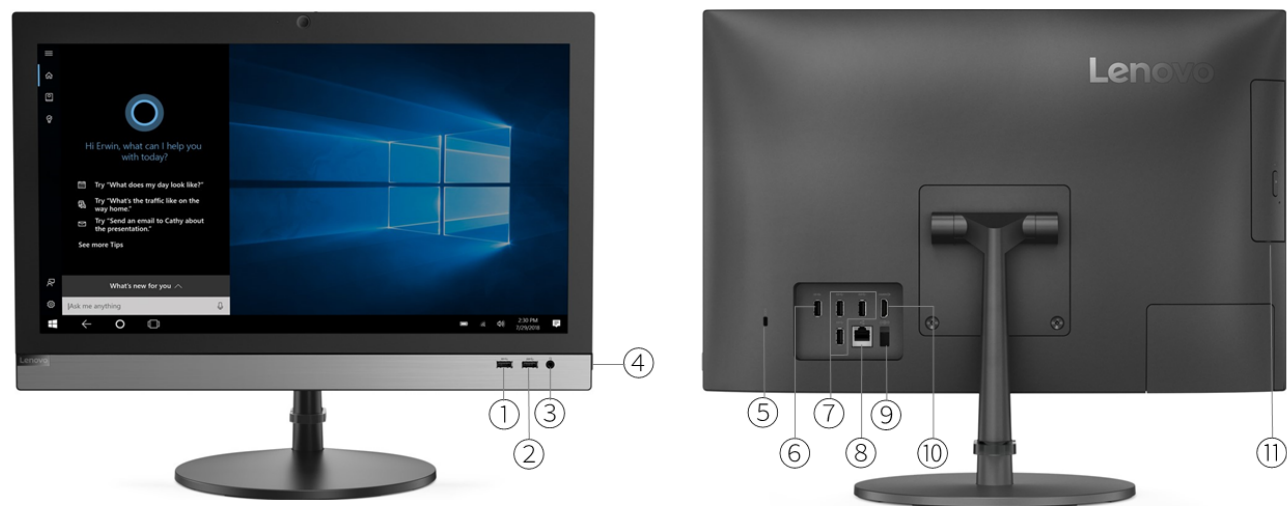


OVERVIEW



1. USB 3.1 Gen 2	7. 3x USB 3.1 Gen 1
2. USB 3.1 Gen 1	8. Ethernet (RJ-45)
3. Headphone / microphone combo jack (3.5mm)	9. Power connector
4. Power button	10. HDMI 1.4
5. USB 3.1 Gen 2	11. Optical drive
6. Kensington Security Slot	

PERFORMANCE

Processor

Processor Family

Intel® Celeron®, Intel Pentium®, or 8th / 9th Generation Intel Core™ i3 / i5 / i7 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Celeron G4900	2	2	3.1GHz	-	2MB	DDR4-2400	Intel UHD Graphics 610
Celeron G4930	2	2	3.2GHz	-	2MB	DDR4-2400	Intel UHD Graphics 610
Pentium Gold G5400	2	4	3.7GHz	-	4MB	DDR4-2400	Intel UHD Graphics 610
Pentium Gold G5420	2	4	3.8GHz	-	4MB	DDR4-2400	Intel UHD Graphics 610
Core i3-8100	4	4	3.6GHz	-	6MB	DDR4-2400	Intel UHD Graphics 630
Core i3-9100	4	4	3.6GHz	4.2GHz	6MB	DDR4-2400	Intel UHD Graphics 630
Core i5-8400	6	6	2.8GHz	4.0GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-8500	6	6	3.0GHz	4.1GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9400	6	6	2.9GHz	4.1GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9500	6	6	3.0GHz	4.4GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i7-8700	6	12	3.2GHz	4.6GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i7-9700	8	8	3.0GHz	4.7GHz	12MB	DDR4-2666	Intel UHD Graphics 630

Operating System

Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- Ubuntu Linux
- No operating system

Graphics

Graphics^[1]

Graphics	Type	Memory	Connector	Max Resolution	Key Features
Intel UHD Graphics 610	Integrated	Shared	1x HDMI® 1.4	1920x1080@60Hz(HDMI)	DirectX® 12
Intel UHD Graphics 630	Integrated	Shared	1x HDMI 1.4	1920x1080@60Hz(HDMI)	DirectX 12

Notes:

1. The information of integrated graphics are not applicable for the models without integrated graphics (for the details, please refer to processor section)

Monitor Support

Monitor Support

Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI

Chipset

Chipset

Intel B360 chipset

Memory

Max Memory^[1]

Up to 32GB DDR4-2666

Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type^[2]

DDR4-2666

Memory Protection

Non-ECC

Notes:

1. The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.
2. Installed memory is actually 2666MHz, but may run at 2400MHz or 2666MHz depending on the memory support capability of processor

Storage

Storage Support

Up to two drives, 1x 3.5" HDD + 1x M.2 SSD

- 3.5" HDD up to 2TB
- M.2 SSD up to 512GB

Storage Type

Disk Type	Interface	RPM	Security
3.5" SATA HDD	SATA 6Gb/s	7.2K	-
M.2 2242 SSD	PCIe NVMe	-	-
M.2 2280 SSD	PCIe NVMe	-	-

RAID

No support

Removable Storage

Optical

- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

Card Reader

- 6-in-1 card reader (SD, SDHC, SDXC, MMC, MS, MS-Pro)
- No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC233 codec

Speakers

Stereo speakers, 2W x2

Microphone

- Single microphone
- No microphone

Camera

- 720p webcam, LED indicator, with privacy camera cover
- No camera

Power Supply

Power Supply

Power	Type	Efficiency	Key Features
120W	Adapter	89%	Autosensing

DESIGN

Display

Display^[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect	Contrast	Color	Viewing	Key
------	------------	-------	------	------------	---------	--------	----------	-------	---------	-----

						Ratio	Ratio	Gamut	Angle	Features
19.5"	HD+ (1600x900)	None	WVA	250 nits	Anti-glare	16:9	1000:1	-	-	Anti-glare

Touchscreen

Non-touch

Notes:

1. California Electronic Waste Recycling Fee
- In California, per state law, Lenovo charges an electronic waste recycling fee on this covered device at the time of sale of the product.
- For more information, go to <https://www.calrecycle.ca.gov/Electronics/Consumer>

Input Device

Keyboard

- Lenovo Calliope Keyboard (USB connector), black
- Lenovo Calliope Wireless Keyboard, black
- No keyboard

Mouse

- Lenovo Calliope Mouse (USB connector), black
- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black
- No mouse

Mechanical

Buttons

- Power button
- Optical drive eject button (ODD models only)
- Camera cover slider

Form Factor

AIO (19 inches)

Dimensions (WxDxH)

Models	Dimensions
Models with monitor stand	477 x 86.6 x 398 mm (18.8 x 3.4 x 15.7 inches)
Models without stand	477 x 59.5 x 380 mm (18.8 x 2.3 x 15 inches)

Weight

Models	Weight
Models with monitor stand	6.36 kg (14.0 lbs)
Models without stand	5.02 kg (11.1 lbs)

Case Color

Black

Bays

1x slim ODD bay

Expansion Slots

Two M.2 slots (one for WLAN, one for SSD)

Stand

- Monitor stand, supports -5° to +65° tilt, left & right 45° swivel
- No stand

Mounting

Supports VESA mount 100mm

CONNECTIVITY

Network

Onboard Ethernet

Gigabit Ethernet, 1x RJ45

WLAN + Bluetooth®

- Realtek RTL8821CE, 802.11ac Dual Band 1x1 Wi-Fi® + Bluetooth 4.0, M.2 card
- Realtek RTL8822BE, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 4.0, M.2 card
- Intel Dual Band Wireless-AC 3165, 802.11ac Dual Band 1x1 Wi-Fi + Bluetooth 4.0, M.2 Card
- Intel Dual Band Wireless-AC 8265, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 4.0, M.2 Card
- No WLAN and Bluetooth

Ports^[1]**Front Ports**

- 1x USB 3.1 Gen 1
- 1x USB 3.1 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

Rear Ports^[2]

- 3x USB 3.1 Gen 1
- 1x USB 3.1 Gen 2
- 1x HDMI 1.4
- 1x Ethernet (RJ-45)
- 1x power connector

Optional Rear Ports

- 1x parallel
- None

Optional Bottom Ports

- 1x card reader
- 1x parallel
- 1x serial

Left Ports

None

Optional Left Ports

None

Right Ports

None

Optional Right Ports

None

Notes:

1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
Thunderbolt™ 3: 40 Gbit/s;
FireWire 400: 400 Mbit/s;
FireWire 800: 800 Mbit/s
2. For video ports on discrete graphics, please see graphics section

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified

Physical Locks

Kensington® Security Slot

Fingerprint Reader

- Touch style fingerprint reader on mouse
- No fingerprint reader

Other Security

(Optional) Camera privacy shutter

BIOS Security

- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- Individual USB port disablement

SERVICE

Warranty

Base Warranty

- 1-year depot service
- 1-year limited onsite service
- 3-year depot service
- 3-year limited onsite service

ENVIRONMENTAL

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Humidity

- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude

- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

Green Certifications

- EPEAT™ Silver
- ErP Lot 3
- GREENGUARD®
- RoHS compliant

Other Certifications

Other Certifications

- (Optional) TÜV Rheinland® Low Blue Light
- (Optional) TÜV Rheinland Low Noise

