

PERFORMANCE

Processor

Processor Family

Intel® Celeron®, Intel Pentium®, or 10th Generation Intel Core™ i3 / i5 / i7 / i9 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Celeron G5900	2	2	3.4GHz	-	2MB	DDR4-2666	Intel UHD Graphics 610
Celeron G5905	2	2	3.5GHz	-	4MB	DDR4-2666	Intel UHD Graphics 610
Celeron G5920	2	2	3.5GHz	-	2MB	DDR4-2666	Intel UHD Graphics 610
Celeron G5925	2	2	3.6GHz	-	4MB	DDR4-2666	Intel UHD Graphics 610
Pentium Gold G6400	2	4	4.0GHz	-	4MB	DDR4-2666	Intel UHD Graphics 610
Pentium Gold G6500	2	4	4.1GHz	-	4MB	DDR4-2666	Intel UHD Graphics 630
Pentium Gold G6600	2	4	4.2GHz	-	4MB	DDR4-2666	Intel UHD Graphics 630
Core i3-10100	4	8	3.6GHz	4.3GHz	6MB	DDR4-2666	Intel UHD Graphics 630
Core i3-10300	4	8	3.7GHz	4.4GHz	8MB	DDR4-2666	Intel UHD Graphics 630
Core i3-10320	4	8	3.8GHz	4.6GHz	8MB	DDR4-2666	Intel UHD Graphics 630
Core i5-10400	6	12	2.9GHz	4.3GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i5-10500	6	12	3.1GHz	4.5GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i5-10600	6	12	3.3GHz	4.8GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i7-10700	8	16	2.9GHz	4.8GHz	16MB	DDR4-2933	Intel UHD Graphics 630
Core i9-10900	10	20	2.8GHz	5.2GHz	20MB	DDR4-2933	Intel UHD Graphics 630

Operating System

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

Graphics

Graphics	Туре	Memory	Connector	Max Resolution	Key Features
Intel UHD graphics 610	Integrated	Shared	1x DP	4096x2304@60Hz(DP)	DirectX® 12
Intel UHD graphics 630	Integrated	Shared	1x DP	4096x2304@60Hz(DP)	DirectX 12
AMD Radeon™ 625	Discrete	2GB GDDR5	1x DP	4096x2304@60Hz(DP)	DirectX 12

Notes:

• Integrated graphics information and onboard video ports information are not applicable for all models without integrated graphics (for the details, please refer to processor section)

Monitor Support

Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via $DisplayPort^{TM}$

Chipset

Intel Q470 chipset

Memory

Memory Type

- DDR4-2666
- DDR4-2933



Memory Slots

Two DDR4 DIMM slots, dual-channel capable

Memory Protection

Non-ECC

Max Memory

Up to 64GB DDR4-2933

Notes:

• The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.

Storage

Storage Support

Up to three drives, 2x 2.5" HDD + 1x M.2 2242/2280 SSD

- 2.5" HDD up to 2TB each
- M.2 SSD up to 1TB
- Optional Intel Optane[™] Memory, M.2

RAID

Not support

Storage Type

Disk Type	Interface	RPM	Security
2.5" SATA HDD	SATA 6Gb/s	5.4K	-
2.5" SATA HDD	SATA 6Gb/s	7.2K	-
M.2 2242 SSD	PCIe NVMe, PCIe 3.0 x2	-	-
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	-
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	Opal
Intel Optane Memory M10	PCIe NVMe, PCIe 3.0 x2	-	-

Removable Storage

Optical

- DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- · Not configured

Card Reader

- 3-in-1 card reader
- · Not configured

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC233 codec

Speakers

Stereo speakers, 3W x2

Microphone

Dual array microphone

Camera

- 1080p, with ThinkShutter (physical switch on/off)
- IR &1080p, with ThinkShutter (physical switch on/off), Windows Hello support
- Not configured

Power Supply

Power	Type	Efficiency	Key Features	
150W	Adapter	89%	Autosensing	



170W Ada	oter 89%	Autosensing
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DESIGN

Display

Display

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
23.8"	FHD (1920x1080)	None	IPS	350 nits	Anti- glare	16:9	1000:1	-	horizontal: +/- 89°, vertical: +/- 89°	Borderless design, support Low Blue Light Mode, PrivacyGaurd
23.8"	FHD (1920x1080)	None	IPS	250 nits	Anti- glare	16:9	1000:1	-	horizontal: +/- 89°, vertical: +/- 89°	Borderless design, support Low Blue Light Mode
23.8"	FHD (1920x1080)	Multi- touch	IPS	250 nits	Anti- glare	16:9	1000:1	-	horizontal: +/- 89°, vertical: +/- 89°	Borderless design, support Low Blue Light Mode

Notes:

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

Touchscreen

- Advanced In-cell Touch (AIT), supports 10-point touch
- Non-touch

Input Device

Keyboard

- Lenovo Calliope Keyboard (USB connector), black
- Lenovo Traditional Keyboard (USB connector), black
- Not configured

Mouse

- Lenovo Calliope Mouse (USB connector), black
- Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black
- Not configured

Mechanical

Buttons

- Power button
- PrivacyGaurd on/off botton (only for the models with PrivacyGaurd)
- Microphone mute button

Form Factor

AIO (23.8 inches)

Dimensions (WxDxH)

Models	Dimensions
Models (with UltraFlex IV stand, without ODD, with PrivacyGuard, with camera)	Lowest in flat mode: 541 x 312.8 x 230.5 mm (21.3 x 12.3 x 9.1 inches) Highest in vertical mode: 541 x 232.7 x 467.7 mm (21.3 x 9.2 x 18.4 inches)
Models (with full function monitor stand, without ODD, with PrivacyGuard, with camera)	541 x 200 x 414.2 to 494.2 mm (21.3 x 7.9 x 16.3 to 19.5 inches)
Models (without stand, with ODD, without PrivacyGuard, with camera)	541 x 57.8 x 340.5 mm (21.3 x 2.3 x 13.4 inches)
Models (without stand, without ODD, without	541 x 46 x 340.5 mm (21.3 x 1.8 x 13.4 inches)



PrivacyGuard, with camera)	
Models (without stand, with ODD, with PrivacyGuard, with camera)	541 x 61.3 x 340.5 mm (21.3" x 2.4" x 13.4 inches)
Models (with full function monitor stand, without ODD, without PrivacyGuard, with camera)	541 x 200 x 414.2 to 494.2 mm (21.3 x 7.9 x 16.3 to 19.5 inches)
Models (with full function monitor stand, with ODD, without PrivacyGuard, with camera)	541 x 200 x 414.2 to 494.2 mm (21.3 x 7.9 x 16.3 to 19.5 inches)
Models (with full function monitor stand, with ODD, with PrivacyGuard, with camera)	541 x 200 x 414.2 to 494.2 mm (21.3 x 7.9 x 16.3 to 19.5 inches)
Models (without stand, without ODD, with PrivacyGuard, with camera)	541 x 49.5 x 340.5 mm (21.3 x 1.9 x 13.4 inches)
Models (with UltraFlex IV stand, with ODD, with PrivacyGuard, with camera)	Lowest in flat mode: 541 x 312.8 x 230.5 mm (21.3 x 12.3 x 9.1 inches) Highest in vertical mode: 541 x 232.7 x 467.7 mm (21.3 x 9.2 x 18.4 inches)
Models (with UltraFlex IV stand, with ODD, without PrivacyGuard, with camera)	Lowest in flat mode: 541 x 312.8 x 227.4 mm (21.3 x 12.3 x 9.0 inches) Highest in vertical mode: 541 x 232.7 x 467.7 mm (21.3 x 9.2 x 18.4 inches)
Models (with UltraFlex IV stand, without ODD, without PrivacyGuard, with camera)	Lowest in flat mode: 541 x 312.8 x 227.4 mm (21.3 x 12.3 x 9.0 inches) Highest in vertical mode: 541 x 232.7 x 467.7 mm (21.3 x 9.2 x 18.4 inches)

Weight

Models	Weight
Models (with full function monitor stand, without ODD, without PrivacyGuard, with camera)	7.51 kg (16.6 lbs)
Models (with UltraFlex IV stand, without ODD, without PrivacyGuard, with camera)	8.26 kg (18.2 lbs)
Models (without stand, with ODD, without PrivacyGuard, with camera)	5.57 kg (12.3 lbs)
Models (with full function monitor stand, without ODD, with PrivacyGuard, with camera)	8.39 kg (18.5 lbs)
Models (with UltraFlex IV stand, without ODD, with PrivacyGuard, with camera)	9.14 kg (20.1 lbs)
Models (without stand, with ODD, with PrivacyGuard, with camera)	6.45 kg (14.2 lbs)
Models (with full function monitor stand, with ODD, without PrivacyGuard, with camera)	7.84 kg (17.3 lbs)
Models (without stand, without ODD, without PrivacyGuard, with camera)	5.25 kg (11.6 lbs)
Models (with full function monitor stand, with ODD, with PrivacyGuard, with camera)	8.71 kg (19.2 lbs)
Models (without stand, without ODD, with PrivacyGuard, with camera)	6.13 kg (13.5 lbs)
Models (with UltraFlex IV stand, with ODD, with PrivacyGuard, with camera)	9.46 kg (20.9 lbs)
Models (with UltraFlex IV stand, with ODD, without PrivacyGuard, with camera)	8.58 kg (18.9 lbs)

Case Color

Black

Bays

- 1x slim ODD bay
- 2x 2.5" disk bay (2nd 2.5" HDD occupies ODD bay)

Expansion Slots

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

EOU

Toolless cover and stand assembly / removal

Stand

- Full function monitor stand, supports -5° to +30° tilt, up to 80mm lift
- UltraFlex IV stand, supports -5° to +70° tilt, up to 164mm lift (flat mode) / up to 115mm lift (vertical mode)
- Not configured

Mounting

Support VESA mount (100mm)



CONNECTIVITY

Network

Onboard Ethernet

Gigabit Ethernet, Intel Ethernet Connection I219-LM, 1x RJ45, supports Wake-on-LAN

Optional Ethernet

Not Support

WLAN + Bluetooth™

- Realtek RTL8822CE, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.0, M.2 card
- Intel Wireless-AC 9560, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.0, M.2 card
- Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, Intel vPro technology support, M.2 Card
- · Not configured

Ports

Rear Ports

- 4x USB 3.2 Gen 1 (one supports Smart Power On)
- 1x Ethernet (RJ-45)
- 1x DisplayPort

Notes:

• For video ports on discrete graphics, please see graphics section

Optional Rear Ports

1x serial

Right Ports

- 2x USB 3.2 Gen 2
- 1x USB-C 3.2 Gen 1 (5V/3A charging)
- 1x headphone / microphone combo jack (3.5mm)

Optional Right Ports

1x card reader

Monitor Cable

- DP to VGA dongle
- DP to dual DP dongle
- DP to DVI-D dongle
- DP to HDMI® 1.4 dongle
- · Not configured

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified

Physical Locks

Kensington® Security Slot

Chassis Intrusion Switch

- · Chassis intrusion switch
- · Not configured

Fingerprint Reader

- Touch style fingerprint reader on mouse
- · Not configured

Other Security

- ThinkShutter camera cover
- None

BIOS Security

ThinkCentre M90a



- · Power-on password
- Administrator password
- · Hard disk password
- · Boot sequence control
- · Boot without keyboard and mouse
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- Individual USB port disablement
- Self-healing BIOS

MANAGEABILITY

System Management

- Intel vPro with Intel AMT 14.0
- None

Notes:

· Require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection

SERVICE

Warranty

Base Warranty

- 1-year depot service
- 1-year limited onsite service
- 3-year limited onsite service
- · No base warranty

CERTIFICATIONS

Green Certifications

- EPEAT™ Silver
- ENERGY STAR® 8.0
- ErP Lot 3
- TCO Certified 8.0
- TCO edge
- RoHS

Notes:

• Energy Star 8.0 and EPEAT are only available for MT 11CD/11CE, TCO 8.0 and TCO Edge are not for the models with PrivacyGaurd.

Other Certifications

Other Certifications

- · TÜV Low Blue Light certified
- TÜV Eye comfort certified
- (Optional) TÜV Ultra Low Noise certified

Mil-Spec Test

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation)

























