

OVERVIEW



1. Optical drive *	7. Card reader *
2. Microphone mute button	8. DisplayPort
3. USB-C 3.2 Gen 1	9. Power connector
4. 2x USB 3.2 Gen 2	10. Serial *
5. Headphone / microphone combo jack (3.5mm)	11. Ethernet (RJ-45)
6. Power button	12. 4x USB 3.2 Gen 1

Notes:

• Ports with * are only available on selected models



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

Operating System

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

Graphics

Graphics[1]

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:

Monitor Support

Monitor Support

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

Chipset

Chipset

Intel Q470 chipset

^{1.} 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)



Memory

Memory Type

- DDR4-2666
- DDR4-2933

Memory Slots

Two DDR4 DIMM slots, dual-channel capable

Memory Protection

Non-ECC

Max Memory[1]

Up to 64GB DDR4-2933

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.

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[1]

RAID 0/1 support for HDDs

Storage Type

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

Notes:

Removable Storage

Optical

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

Card Reader

- 3-in-1 card reader
- No card reader

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)

^{1.} RAID is not preset by default, user can config RAID 0/1 according to the demand



- IR &1080p, with ThinkShutter (physical switch on/off), Windows Hello support
- · No camera

Power Supply

Power Supply

Power	Туре	Efficiency	Key Features
150W	Adapter	89%	Autosensing
170W	Adapter	89%	Autosensing

DESIGN

Display

Display^[2]

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

Touchscreen

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

2. PrivacyGaurd is only available for MT 11JX

Input Device

Keyboard

- Lenovo Calliope Keyboard (USB connector), black
- Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo Traditional Keyboard (USB connector), black
- · No keyboard

Mouse

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

Mechanical

Ruttons

- 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 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 PrivacyGuard, with camera)	541 x 46 x 340.5 mm (21.3 x 1.8 x 13.4 inches)
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, 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 (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, 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)
- No stand

Mounting

Supports VESA mount (100mm)



CONNECTIVITY

Network

Onboard Ethernet

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

Optional Ethernet

No optional Ethernet

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
- No WLAN and Bluetooth

Ports^[1]

Rear Ports[2]

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

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

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, formely USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;

USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formely 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

Monitor Cable

Monitor Cable

- DP to VGA dongle
- DP to dual DP dongle
- DP to DVI-D dongle
- DP to HDMI® 1.4 dongle
- No monitor cable

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified

Physical Locks

Kensington® Security Slot

Chassis Intrusion Switch

- · Chassis intrusion switch
- · No chassis intrusion switch



Fingerprint Reader

- · Touch style fingerprint reader on mouse
- No fingerprint reader

Other Security

- ThinkShutter camera cover
- None

BIOS Security

- · 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

System Management[1]

- · Intel vPro with Intel AMT 14.0
- None

Notes:

1. 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

ENVIRONMENTAL

Operating Environment

Temperature[1]

- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Humidity

Operating: 20% to 80% (non-condensing)

Altitude

- Operating: From -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: From -15.2 m (-50 ft) to 10668 m (35,000 ft)

Notes:

1. If your computer is stored or transported in temperatures less than 10°C (50°F), allow the computer to rise slowly to an optimal operating temperature before use. This process might take up to two hours. Using the computer in a lower operating temperature might result in irreparable damage to your computer.

CERTIFICATIONS

Green Certifications

ThinkCentre M90a



Green Certifications[1]

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

Notes:

1. 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

- TUV 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)













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