

OVERVIEW



1. OSD joystick	8. Microphone mute button
2. 3x USB 3.2 Gen 1	9. Thunderbolt 4
3. USB-C 3.2 Gen 2 (data transfer, 15W charging)	10. 2x USB 3.2 Gen 2
4. Ethernet (RJ-45)	11. Thunderbolt 3 (for display and file sharing) *
5. HDMI in 1.4 / out 2.1 TMDS combo port	12. Headphone / microphone combo jack (3.5mm)
6. DisplayPort 1.4	13. Card reader *
7. Power connector	14. Power button

- Notes:
- Items with * are only available on selected models
 - Please note the optional Thunderbolt 3 is not a Thunderbolt host port. For the details, please refer to the Ports section of specifications.

PERFORMANCE

Processor

Processor Family

13th Generation Intel® Core™ i5 / i7 / i9 Processor

Processor**[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core i5-13400	10 (6 P-core + 4 E-core)	16	P-core 2.5GHz / E-core 1.8GHz	P-core 4.6GHz / E-core 3.3GHz	20MB	Intel UHD Graphics 730
Core i5-13500	14 (6 P-core + 8 E-core)	20	P-core 2.5GHz / E-core 1.8GHz	P-core 4.8GHz / E-core 3.5GHz	24MB	Intel UHD Graphics 770
Core i5-13600[2]	14 (6 P-core + 8 E-core)	20	P-core 2.7GHz / E-core 2.0GHz	P-core 5.0GHz / E-core 3.7GHz	24MB	Intel UHD Graphics 770
Core i7-13700	16 (8 P-core + 8 E-core)	24	P-core 2.1GHz / E-core 1.5GHz	Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz	30MB	Intel UHD Graphics 770
Core i9-13900	24 (8 P-core + 16 E-core)	32	P-core 2.0GHz / E-core 1.5GHz	Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz	36MB	Intel UHD Graphics 770

Notes:

[1] Intel Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see <http://www.intel.com/technology/turboboost/> for more information.

[2] Special bid only.

Operating System

Operating System**[1]

- Windows® 11 DG Windows 10 Pro 64
- Windows 11 Home
- Windows 11 Home Single Language
- Windows 11 Pro
- No operating system

Notes:

[1] Windows 10 drivers support Windows 10 21H1, 21H2 and 22H2, and Windows 11 drivers support Windows 11 21H2, 22H2 and MayCI

Graphics

Graphics**

Graphics	Type	Memory	Connector	Max Resolution	Key Features
Intel UHD graphics 730	Integrated	Shared	1x HDMI® 2.1 TMDS, 1x DP 1.4, 1x Thunderbolt™ 4	4096x2160@60Hz(HDMI), 4096x2304@60Hz - 36 bpp / 5120x3200@60Hz - 24 bpp (DP), 7680x4320@60Hz - 30 bpp (Thunderbolt 4)	DirectX® 12, OpenGL 4.6
Intel UHD graphics 770	Integrated	Shared	1x HDMI 2.1 TMDS, 1x DP 1.4, 1x Thunderbolt 4	4096x2160@60Hz(HDMI), 4096x2304@60Hz - 36 bpp / 5120x3200@60Hz - 24 bpp (DP), 7680x4320@60Hz - 30 bpp (Thunderbolt 4)	DirectX 12, OpenGL 4.6
NVIDIA® GeForce RTX™ 4050	Discrete	6GB GDDR6	1x HDMI 2.1a TMDS, 1x DP 1.4, 1x Thunderbolt 4	4096x2160@60Hz(HDMI), 4096x2304@60Hz - 36 bpp / 5120x3200@60Hz - 24 bpp (DP), 7680x4320@60Hz - 30 bpp (Thunderbolt 4)	DirectX 12, OpenGL 4.6

Monitor Support

Monitor Support

Supports up to 4 independent displays via native display and 3 external monitors; supports external monitors via DisplayPort™, HDMI and Thunderbolt 4; work as standalone monitor via HDMI (HDMI in / out combo) or optional Thunderbolt 3 port

Chipset

Chipset

Intel Q670 chipset

Memory

Max Memory^{[1][2]}

- Models with Core i5: Up to 64GB DDR5-4800
- Models with Core i7/i9: Up to 64GB DDR5-5200

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type^{**[3]}

- DDR5-4800
- DDR5-5200
- DDR5-5600

Memory Protection

Non-ECC

Notes:

- [1] The max memory is based on the test results with current Lenovo® memory offerings.
- [2], [3] Installed memory is actually 5600MHz, but may run at 4800MHz or 5200MHz depending on the memory support capability of processor.

Storage

Storage Support^[1]

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

- 2.5" HDD up to 1TB
- M.2 SSD up to 1TB each

Storage Type^{***}

Disk Type	Interface	RPM	Security
2.5" SATA HDD	SATA 6Gb/s	7.2K	-
M.2 2280 SSD	PCIe® NVMe®, PCIe 4.0 x4	-	Opal 2.0

RAID^[2]

RAID 0/1 support for SSDs

Notes:

- [1] The max capacity of each disk type is based on the test results with current Lenovo storage offerings.
- [2] RAID is not preset by default, user can config RAID 0/1 according to the demand.

Removable Storage

Optical

- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

Card Reader

- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC256-NL codec

Speakers

Stereo speakers, 5W x2, Dolby® Atmos®

Microphone

Dual-microphone array

Camera**

- 5.0-megapixel, IR + RGB hybrid, with ThinkShutter (physical switch on/off) and Human Presence Detection (Radar Sensor), ±20° view angle adjustable, Windows Hello support
- 5.0-megapixel, IR + RGB hybrid, with ThinkShutter (physical switch on/off), ±20° view angle adjustable, Windows Hello support
- 5.0-megapixel, with ThinkShutter (physical switch on/off), ±20° view angle adjustable

Power Supply

Power Supply

Power	Type	Efficiency	Key Features
230W	Fixed	92%	100V - 240V, 50-60Hz

DESIGN

Display

Display^[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
27"	QHD (2560x1440)	None	IPS	350nits	Anti-glare	16:9	1000:1	99% sRGB	60Hz	89° / 89° / 89° / 89°	14ms response Time, 16.7 million color support, borderless design, TÜV Rheinland® Low Blue Light (Hardware Solution), TÜV Rheinland Flicker Free, Eyesafe® Certified 2.0

Touchscreen

Non-touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

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 Mouse (USB connector), black
- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

Mechanical

Buttons

- Microphone mute button
- OSD joystick
- Power button

Form Factor

AIO (27 inches)

Dimensions (WxDxH)^[1]

Models	Dimensions
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Models without stand and camera	613.6 x 54.5 x 383.4 mm (24.2 x 2.1 x 15.1 inches)
Models (with UltraFlex V stand, with camera)	Lowest in flat mode: 613.6 x 364.54 x 227.11 mm (24.2 x 14.4 x 8.9 inches) Highest in vertical mode: 613.6 x 252.59 x 461.37 mm (24.2 x 9.9 x 18.2 inches)
Models (with full function monitor stand, with camera)	Lowest in vertical mode: 613.6 x 219.81 x 411.04 mm (24.2 x 8.7 x 16.2 inches) Highest in vertical mode: 613.6 x 219.81 x 521.81 mm (24.2 x 8.7 x 20.5 inches)

Packaging Dimensions (WxDxH)

764 x 235 x 545 mm (30.1 x 9.3 x 21.5 inches)

Weight^[2]

11.2 kg (24.8 lbs, maximum configuration)

Packaging Weight

2.4 kg (5.28 lbs), packaging only

Case Color

Black

Bays

- 1x 2.5" disk bay
- 1x slim ODD bay

Expansion Slots

Three M.2 slots (one for WLAN, two for SSD)

EOU

Toolless cover, stand, motherboard shielding, HDD, and memory assembly / removal

Stand**

- UltraFlex V stand, supports -5° to +70° tilt, up to 70°±2° lift (up to 166.3mm lift in flat mode / up to 63mm lift in vertical mode)
- Full function monitor stand, supports -5° to +20° tilt, left & right 45° swivel, 90° pivot, up to 110mm lift
- No stand

Mounting

Supports VESA mount 100mm

Others

- (Optional) Conference Call Base, 3W x4 Harman speakers, 4 digital microphones array with AI noise suppression, Physical button for Teams, USB-C® connector
- Supports Smart Power On

Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Onboard Ethernet

Gigabit Ethernet, Intel Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**

- Realtek Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi + Bluetooth 5.1, M.2 card
- Intel Wi-Fi 6E AX211, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, Intel vPro® technology support, M.2 Card
- No WLAN and Bluetooth

Ports^[1]

Rear Ports

- 1x USB-C 3.2 Gen 2 (support data transfer and 15W charging)
- 3x USB 3.2 Gen 1
- 1x HDMI (HDMI in 1.4 / HDMI out 2.1 TMDS combo port)
- 1x DisplayPort 1.4
- 1x Ethernet (RJ-45)

Optional Rear Ports

None

Right Ports

- 1x Thunderbolt 4 / USB4® 40Gbps (support data transfer, 15W charging and DisplayPort 1.4)
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

Optional Right Ports

- 1x ThunderBolt 3^[2]
- 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, 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;

USB4 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;

USB4 40Gbps (USB 40Gbps): 40 Gbit/s;

Thunderbolt 3/4: 40 Gbit/s.

[2] This Thunderbolt 3 port is not a Thunderbolt host port. By connecting it to a laptop or desktop Thunderbolt port with the included Type-C cable, customers can share M90a Pro Gen 4 as a Thunderbolt monitor and share the files saved on the 2nd SSD of M90a Pro Gen 4. A Type-C cable is bundled with the models with Thunderbolt 3 port.

Monitor Cable**Monitor Cable****

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

SECURITY & PRIVACY**Security****Security Chip**

Discrete TPM 2.0, TCG certified

Physical Locks

Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch

- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader

No fingerprint reader

Other Security

- (Optional) Smart Human Presence Detection (Camera with Radar Sensor)
- ThinkShutter camera cover

BIOS Security

- Administrator password
- Power-on password

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

MANAGEABILITY

System Management

System Management^[1]

- Intel vPro Enterprise
- Non-vPro

Notes:

[1] Intel vPro offers a superset of DASH's defined capabilities.

SERVICE

Warranty^[1]

Base Warranty**

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

Notes:

[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to <https://smartfind.lenovo.com/>. To learn more details of warranty policy, please access <https://pcsupport.lenovo.com/warranty>.

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%

Altitude

- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications^[1]

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0
- TCO edge
- VOC Report

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-

declaration.

Other Certifications

Other Certifications

- (Optional) TÜV Rheinland Ultra Low Noise
- Eyesafe Certified 2.0
- TÜV Rheinland Flicker Free
- TÜV Rheinland Low Blue Light (Hardware Solution)
- UL Anti-dust

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, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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