

OVERVIEW



1. 2x USB 3.2 Gen 1	7. 2x USB 2.0
2. Headphone (3.5mm)	8. Ethernet (RJ-45)
3. Microphone (3.5mm)	9. 3x Audio line-out (3.5mm)
4. Power button	10. Optional ports on expansion cards
5. 2x USB 3.2 Gen 1	11. Power connector
6. USB-C 3.2 Gen 2	

PERFORMANCE

Processor

Processor Family

10th Generation Intel® Core™ i5 / i7 or 11th Generation Intel Core i5 / i7 / i9 Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i5-10400	6	12	2.9GHz	4.3GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i5-10400F	6	12	2.9GHz	4.3GHz	12MB	DDR4-2666	-
Core i5-11400	6	12	2.6GHz	4.4GHz	12MB	DDR4-3200	Intel UHD Graphics 730
Core i5-11400F	6	12	2.6GHz	4.4GHz	12MB	DDR4-3200	-
Core i5-11500	6	12	2.7GHz	4.6GHz	12MB	DDR4-3200	Intel UHD Graphics 750
Core i5-11600	6	12	2.8GHz	4.8GHz	12MB	DDR4-3200	Intel UHD Graphics 750
Core i7-10700	8	16	2.9GHz	4.8GHz	16MB	DDR4-2933	Intel UHD Graphics 630
Core i7-10700F	8	16	2.9GHz	4.8GHz	16MB	DDR4-2933	-
Core i7-11700	8	16	2.5GHz	4.9GHz	16MB	DDR4-3200	Intel UHD Graphics 750
Core i7-11700F	8	16	2.5GHz	4.9GHz	16MB	DDR4-3200	-
Core i9-11900	8	16	2.5GHz	5.2GHz	16MB	DDR4-3200	Intel UHD Graphics 750
Core i9-11900F	8	16	2.5GHz	5.2GHz	16MB	DDR4-3200	-

Operating System

Operating System**

- Windows® 11 Pro 64
- Windows 11 Home 64
- Windows 10 Pro 64
- Windows 10 Home 64
- No operating system

Graphics

Graphics**[1]

Graphics	Type	Memory	Connector	Max Resolution	Key Features	Remark
NVIDIA® GeForce® GTX 1650 SUPER	Discrete	4GB GDDR6	1x HDMI® 2.0b, 2x DP 1.4	7680x4320 @60Hz(DP), 4096x2160@60Hz(HDMI)	DirectX® 12	-
NVIDIA GeForce GTX 1660 SUPER	Discrete	6GB GDDR6	1x DVI, 1x HDMI 2.0b, 1x DP 1.4	4096x2160@60Hz(HDMI), 5120x3200@60Hz(DP), 2560x1660@60Hz(DVI)	DirectX 12	-
NVIDIA GeForce RTX™ 3060	Discrete	12G GDDR6	3x DP 1.4a, 1x HDMI 2.1	7680x4320@60Hz(HDMI), 7680x4320@60Hz(DP)	DirectX 12	-
NVIDIA GeForce RTX 3060 Ti	Discrete	8G GDDR6	3x DP 1.4a, 1x HDMI 2.1	7680x4320@60Hz(HDMI), 7680x4320@60Hz(DP)	DirectX 12	-
NVIDIA GeForce RTX 3070	Discrete	8G GDDR6	3x DP 1.4a, 1x HDMI 2.1	7680x4320@60Hz(HDMI); 7680x4320@60Hz(DP)	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 4 independent displays via discrete graphics

Chipset

Chipset

Intel B560 chipset

Memory

Max Memory^[1]

Up to 128GB DDR4-3200

Memory Slots

Four DDR4 UDIMM slots, dual-channel capable

Memory Type**

- DDR4-3200
- DDR4-3200, Armor

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.

Storage

Storage Support^{[1][2]}

Up to five drives, 2x 3.5" HDD + 2x M.2 SSD + 1x open 2.5 HDD Bay

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

Storage Type***

Disk Type	Interface	RPM
3.5" SATA HDD	SATA 6Gb/s	7.2K
M.2 2280 SSD	PCIe® NVMe®, PCIe 3.0 x4	-
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4	-

RAID

No support

Notes:

1. The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.
2. 2.5" HDD bay is for customer self upgrade purpose and the hard drive is sold separately.

Removable Storage

Optical

None

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC887 codec

Speakers

No speakers

Power Supply

Power Supply**

Power	Type	Efficiency	Key Features
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350W	Fixed	85%	100-240V, 50-60Hz
400W	Fixed	90%	100-240V, 50-60Hz
550W	Fixed	88%	220V
650W	Fixed	90%	100V - 240V

DESIGN

Input Device

Keyboard

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

Mouse

- Lenovo Calliope Mouse (USB connector), black
- No mouse

Mechanical

Form Factor

Tower (26L)

Dimensions (WxDxH)

205 x 396 x 411 mm (8.1 x 15.6 x 16.2 inches)

Packaging Dimensions (WxDxH)

All models: 370 x 485 x 550 mm (14.57 x 19.09 x 21.65 inches)

Weight

14 kg (30.86 lbs)

Packaging Weight

All models: 16 kg (35.27 lbs)

Case Color

Black

Chassis**

- Normal side cover
- Transparent side cover
- Transparent side cover and inner decorate cover

Bays

- 1x 2.5" disk bay
- 2x 3.5" disk bay

Expansion Slots

- One PCIe 4.0 x16
- One PCIe 3.0 x4
- Three M.2 slots (one for WLAN, two for SSD)

Cooling System (Fan & Cooler)***

- (Optional) 1x front system fan, 1x rear system fan
- (Optional) 1x rear system fan with ARGB
- (Optional) 1x rear system fan
- (Optional) 2x top system fan for airflow with ARGB, 2x front system fan with ARGB, 1x rear system fan for airflow with ARGB
- (Optional) 2x front system fan with ARGB, 1x rear system fan for airflow with ARGB
- (Optional) 65W basic cooler, 95W advance cooler, 150W premium cooler
- (Optional) M.2 SSD heatsink or M.2. SSD DECO MYLAR heatsink
- (Optional) CPU VRM heatsink
- (Optional) PCH heatsink

System Lighting***

- (Optional) Internal ambient lighting
- Legion OY iconic LED

Others

(Optional) Dust Filter (bottom-air-inlet & top-air-venting)

CONNECTIVITY**Network****Onboard Ethernet**

Gigabit Ethernet, Realtek RTL8111H, 1x RJ-45

WLAN + Bluetooth^[1]

Wi-Fi® 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card

Notes:

1. Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitation

Ports^[1]**Rear Ports^{[1][2]}**

- 2x USB 2.0
- 2x USB 3.2 Gen 1
- 1x USB-C® 3.2 Gen 2 (support data transfer and 5V@3A charging)
- 3x audio out (5.1 channel)
- 1x Ethernet (RJ-45)
- 1x power connector

Top Ports

- 2x USB 3.2 Gen 1
- 1x headphone (3.5mm)
- 1x microphone (3.5mm)

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™ 3/4: 40 Gbit/s
2. For video ports on discrete graphics, please see graphics section

SECURITY & PRIVACY**Security****BIOS Security**

- Administrator password
- Power-on password

SERVICE**Warranty****Base Warranty^{**[1]}**

- 1-year mail-in service
- 1-year depot service
- 1-year limited onsite service
- 2-year depot service
- 3-year depot service
- OB

Notes:

1. More information of warranty policy, please access <https://pcsupport.lenovo.com/warranty>

ENVIRONMENTAL

Operating Environment

Temperature

Storage: -40°C (-40°F) to 60°C (140°F)

Humidity

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

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

Green Certifications

- ENERGY STAR® 8.0 (only available for MT 90RS)
- ErP Lot 3
- RoHS compliant

- 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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