

OVERVIEW



1. SD card reader	5. Power connector *
2. Headphone / microphone combo jack (3.5mm)	6. HDMI
3. USB-A (USB 5Gbps)	7. USB-C (USB 20Gbps), with USB PD 3.0 & DP 2.1
4. USB-A (USB 5Gbps), Always On	8. Thunderbolt 4

- Notes:
- Items with * are only available on selected models

PERFORMANCE

Processor

Processor Family

Intel® H Series Core Ultra 5 / 7 / 9 Processor (Series 1)

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU	Overall TOPS
Core Ultra 5 125H	14 (4 P-core + 8 E-core + 2 LP E-core)	18	P-core 1.2GHz / E-core 700MHz / LP E-core 700MHz	P-core 4.5GHz / E-core 3.6GHz / LP E-core 2.5GHz	18MB Intel® Smart Cache	Intel® Arc™ Graphics, up to 18 TOPS	Intel® AI Boost, up to 11 TOPS	Up to 33 TOPS
Core Ultra 7 155H	16 (6 P-core + 8 E-core + 2 LP E-core)	22	P-core 1.4GHz / E-core 900MHz / LP E-core 700MHz	P-core 4.8GHz / E-core 3.8GHz / LP E-core 2.5GHz	24MB Intel® Smart Cache	Intel® Arc™ Graphics, up to 18 TOPS	Intel® AI Boost, up to 11 TOPS	Up to 33 TOPS
Core Ultra 9 185H	16 (6 P-core + 8 E-core + 2 LP E-core)	22	P-core 2.3GHz / E-core 1.8GHz / LP E-core 1GHz	P-core 5.1GHz / E-core 3.8GHz / LP E-core 2.5GHz	24MB Intel® Smart Cache	Intel® Arc™ Graphics, up to 19 TOPS	Intel® AI Boost, up to 11 TOPS	Up to 35 TOPS

AI (Artificial Intelligence)

AI PC Category

AI PC^[1]

NPU

Integrated Intel® AI Boost, up to 11 TOPS

Notes:

[1] AI PCs have a NPU capable of 10+ TOPs to run the Copilot assistant by pressing the optional Microsoft® Copilot key or using Win + C.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

Graphics

Graphics**^[1]

Graphics	Type	Memory	Boost Clock	TGP	Key Features
Intel® Arc™ Graphics	Integrated	Shared	-	-	DirectX® 12.2
NVIDIA® GeForce RTX™ 3050 Laptop GPU	Discrete	6GB GDDR6	1732 MHz	80W	Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4050 Laptop GPU	Discrete	6GB GDDR6	2355 MHz	80W	Dynamic Boost 2.0, DirectX® 12 Ultimate

Notes:

[1] Boost clock, TGP test results were obtained in a laboratory environment at the temperature of 25°C (70°F).

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)

- HDMI® supports up to 4K@60Hz

- USB-C® supports up to 4K@60Hz
- Thunderbolt™ supports up to 8K@60Hz

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory

- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots

Memory soldered to systemboard, no slots, dual-channel

Memory Type

LPDDR5X-7467

Storage

Max Storage Support^[1]

Up to two drives, 2x M.2 SSD

- M.2 2242 SSD up to 1TB

Storage Slot^[2]

Two M.2 slots

- One M.2 2242 PCIe® 4.0 x4 slot
- One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

Disk Type	Interface	Offering
M.2 2242 SSD	PCIe® NVMe®, PCIe® 4.0 x4	512GB / 1TB

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

[2] The actual data transfer rate of the following PCIe® interface also depends on the capabilities of the connected PCIe® device. The listed values represent theoretical maximums.

PCIe® 3.0 (x2 / x4): 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps);

PCIe® 4.0 (x2 / x4): 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps);

PCIe® 5.0 (x2 / x4): 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps).

Removable Storage

Card Reader

SD card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers

Stereo speakers, 2W x2, optimized with Dolby Atmos®

Microphone

Dual-microphone array

Camera

FHD 1080p + IR, with privacy shutter, fixed focus, with ToF sensor

Sensor

Sensors

- Hall sensor
- ToF sensor

Battery

Battery

84Wh Rechargeable Li-ion Battery, supports Rapid Charge Express (get 3 hours of runtime with a 15-minute charge)^[1]

Max Battery Life^[2]

- Integrated graphics models:
MobileMark® 25@250nits: 10 hr
Local video (1080p) playback@150nits: 21.5 hr
- Discrete graphics models:
MobileMark® 25@250nits: 6 hr
Local video (1080p) playback@150nits: 15 hr

Notes:

[1] Rapid Charge Express is only effective in hibernates or fully shutting down the computer.
[2] All battery life claims are approximate maximum and based on results using the MobileMark® 2014, MobileMark® 2018, MobileMark® 25, MobileMark® 30, JEITA 2.0, JEITA 3.0, continuous 1080p video playback (with 150nits brightness and default volume level) or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

Power Adapter

Power Adapter**^[1]

- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

[1] AC adapter offerings depend on the country.

DESIGN

Display

Display**

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16"	2.5K (2560x1600)	Non-touch	IPS ^[1]	350nits	Anti-glare	16:10	1200:1	100% sRGB	120Hz (Max)	89° / 89° / 89° / 89°	Eyesafe® Certified 2.0
16"	2K (2048x1280)	Non-touch	OLED	400nits	Glossy	16:10	100,000:1	100% DCI-P3	120Hz (Max)	85° / 85° / 85° / 85°	Eyesafe® Certified 2.0, DisplayHDR™ True Black 500
16"	2K (2048x1280)	Multi-touch	OLED	400nits	Glossy	16:10	100,000:1	100% DCI-P3	120Hz (Max)	85° / 85° / 85° / 85°	Eyesafe® Certified 2.0, DisplayHDR™ True Black 500, Glass

Touchscreen

- OGS (One Glass Solution) multi-touch, supports 10-point touch
- Non-touch

Screen-to-Body Ratio

91.6% AAR (active area ratio)

Notes:

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

Input Device

Pen

No support

- Keyboard**
6-row, multimedia Fn keys, key travel 1.3mm, numeric keypad
- Keyboard Backlight**
LED backlight
- Touchpad**
Buttonless glass surface multi-touch touchpad, supports Precision TouchPad (PTP), 80 x 135 mm (3.15 x 5.31 inches)

Mechanical

Dimensions (WxDxH)^[1]
356 x 251 x 17.5 mm (14.02 x 9.88 x 0.69 inches)

Weight^[2]

Models	Weight
Integrated graphics models	Starting at 1.91 kg (4.21 lbs)
Discrete graphics models	Starting at 1.94 kg (4.28 lbs)

- Case Color**
Arctic grey
- Case Material**
Aluminium (top), aluminium (bottom)

- Surface Treatment**
Aluminium stamping (anodized with sandblasting)

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

- WLAN + Bluetooth[®]^[1]**
Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card
- WWAN**
No support
- Ethernet**
No onboard Ethernet

Notes:

[1] Wi-Fi® operation (including Wi-Fi® 6, Wi-Fi® 6E, Wi-Fi® 7, etc.) is subject to the regulatory requirements of each country. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

Ports^[1]

- Standard Ports**
 - 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
 - 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
 - 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), with USB PD 3.0 and DisplayPort™ 2.1
 - 1x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
 - 1x HDMI® 2.1, up to 4K/60Hz
 - 1x Headphone / microphone combo jack (3.5mm)
 - 1x SD card reader
- Optional Ports**
1x Slim tip power connector (models with discrete graphics)

Notes:

[1] The transfer speed of the 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.

SECURITY & PRIVACY

Security

Security Chip

Firmware TPM 2.0 integrated in SoC

Fingerprint Reader

No fingerprint reader

BIOS Security

- Administrator password
- Master hard disk password
- Power-on password
- User hard disk password
- User password
- Self-healing BIOS
- More BIOS security features, please visit [BIOS Simulator](#)^[1]

Other Security

- Camera privacy shutter
- IR camera for Windows® Hello (facial recognition)

Notes:

[1] The BIOS simulator is just for reference. Default settings and some options may vary depending on the hardware, operating system and BIOS version.

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 2-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) courier or carry-in service

ACCESSORIES

Bundled Accessories

Bundled Accessories***^[1]

- Lenovo® E310 True Wireless Stereo Earbuds (white)
- Lenovo® WL310 Bluetooth® Silent Mouse (grey)
- None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for IdeaPad® Pro 5 16IMH9](#)

OPERATING REQUIREMENTS

Operating Environment

Temperature^[1]

- At altitudes up to 2438 m (8,000 ft)
 - Operating: 5°C to 35°C (41°F to 95°F)
 - Storage: 5°C to 43°C (41°F to 109°F)

- At altitudes above 2438 m (8,000 ft)
 - Maximum temperature when operating under the unpressurized condition: 31.3°C (88°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

CERTIFICATIONS

Green Certifications^[1]

Green Certifications^[2]

- ENERGY STAR® 9.0
- EPEAT™ Gold Registered^[3]
- ErP Lot 6/26
- RoHS compliant

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit <https://compliance.lenovo.com>.

[2] EPEAT™ registration and ENERGY STAR® certification are optional and only available on the models with preloaded OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed (21 test items)

Other Certifications

- (Optional) Intel® Evo™ Platform
- Eyesafe® Certified 2.0
- TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
- Feature with *** means that one or more options listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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