

OVERVIEW



1. Power connector	5. SD card reader
2. HDMI	6. Headphone / microphone combo jack (3.5mm)
3. USB-C 3.2 Gen 2	7. USB 3.2 Gen 1
4. Thunderbolt 4	8. USB 3.2 Gen 1 (Always On)

PERFORMANCE

Processor

Processor Family

13th Generation Intel® H Series Core™ i5 / i7 Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core™ i5-13500H	12 (4 P-core + 8 E-core)	16	P-core 2.6GHz / E-core 1.9GHz	P-core 4.7GHz / E-core 3.5GHz	18MB	Intel® Iris® Xe Graphics
Core™ i7-13700H	14 (6 P-core + 8 E-core)	20	P-core 2.4GHz / E-core 1.8GHz	P-core 5.0GHz / E-core 3.7GHz	24MB	Intel® Iris® Xe Graphics

Operating System

Operating System**

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

Graphics

Graphics**

Graphics	Type	Memory	Boost Clock	TGP	Key Features
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

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

LPDDR5-5200

Storage

Storage Support^[1]

Up to two drives, 2x M.2 SSD

- M.2 2242 SSD up to 1TB
- M.2 2280 SSD up to 1TB

Storage Slot

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 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	1TB
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.

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

Integrated Li-Polymer 75Wh battery, supports Rapid Charge Express (get 3 hours of runtime with a 15-minute charge)^[1]

Max Battery Life^[2]

MobileMark® 2018@200nits: 8.5 hr

Local video (1080p) playback@150nits: 14 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, JEITA 2.0, 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

170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

DESIGN

Display

Display^[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect	Contrast	Color	Refresh	Viewing Angle	Key
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						Ratio	Ratio	Gamut	Rate	(L/R/U/D)	Features
16"	2.5K (2560x1600)	None	IPS	350nits	Anti-glare	16:10	1200:1	100% sRGB	120Hz (Max)	80°/80°/80°/80°	Eyesafe® Certified 2.0, G-Sync

Touchscreen

Non-touch

Notes:

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

Input Device**Keyboard**

6-row, multimedia Fn keys, 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]

Starting at 1.95 kg (4.30 lbs)

Case Color

Arctic grey

Surface Treatment

Aluminium stamping (anodized with sandblasting)

Case Material

Aluminium (top), aluminium (bottom)

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****Ethernet**

No onboard Ethernet

WLAN + Bluetooth[®]**

- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card^[1]
- Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card^[2]

Notes:

[1] Wi-Fi® 6 full features might be limited by country-level restrictions.

[2] Wi-Fi® 6E full features might be limited by country-level restrictions.

6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Ports^[1]**Standard Ports**

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD card reader
- 1x Power connector

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.

Docking

Docking

Various docking solutions are supported via Thunderbolt™ or USB-C®.

For more compatible docking solutions, please visit [Docking for IdeaPad® Pro 5 16IRH8](#)

SECURITY & PRIVACY

Security

Security Chip

Firmware TPM 2.0 integrated in SoC

Fingerprint Reader

No fingerprint reader

BIOS Security

- Administrator password
- User password
- Master hard disk password
- User hard disk password
- Self-healing BIOS

Other Security

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

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

ENVIRONMENTAL

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).

ACCESSORIES

Bundled Accessories

Bundled Accessories^[1]

None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for IdeaPad® Pro 5 16IRH8](#).

CERTIFICATIONS

Green Certifications^[1]

Green Certifications^[2]

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered^[3]
- ErP Lot 6
- ErP Lot 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.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit [epeat.net](#) and [energystar.gov](#) for more information.

[3] EPEAT™ is registered where applicable, please see [epeat.net](#) for registration status by country.

Other Certifications

Mil-Spec Test

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

Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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