# **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 10Gbps), with USB PD 3.0 & DP 1.4
4. USB-A (USB 5Gbps), Always On	8. USB-C (USB4 40Gbps), with USB PD 3.0 & DP 1.4

Notes:

• Items with \* are only available on selected models

# PERFORMANCE

### Processor

#### **Processor Family**

AMD Ryzen<sup>™</sup> 5 / 7 8000 Series Processor

#### Processor\*\*

Processor Name	Cores	Threads	hreads Base Max Frequency Frequency		Cache	Processor Graphics	NPU
AMD Ryzen™ 5 8645HS	6	12	4.3GHz 5.0GHz 6N		6MB L2 / 16MB L3	AMD Radeon™ 760M	AMD Ryzen™ AI
AMD Ryzen™ 7 8845HS	8	16	3.8GHz	5.1GHz	8MB L2 / 16MB L3	AMD Radeon™ 780M	AMD Ryzen™ AI

# AI (Artificial Intelligence)

### AI PC Category

AI PC

NPU

Integrated AMD Ryzen<sup>™</sup> AI, up to 16 TOPS

# **Operating System**

#### **Operating System**\*\*

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

## Graphics

#### Graphics

Graphics	Туре	Memory	Boost Clock	TGP	Key Features
AMD Radeon™ 780M	Integrated	Shared	-	Share CPU TDP	DirectX® 12
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	2370 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® and USB-C®)

- HDMI<sup>®</sup> supports up to 4K@60Hz
- USB-C<sup>®</sup> supports up to 4K@60Hz

### Chipset

#### Chipset

AMD 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

## Storage

#### Storage Support<sup>[1]</sup>

Up to two drives, 2x M.2 SSD • M.2 2242 SSD up to 1TB

#### Storage Slot

- Two M.2 slots
- One M.2 2242 PCIe® 4.0 x4 slot
- One M.2 2280 PCIe<sup>®</sup> 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.

## Removable Storage

#### **Card Reader**

SD card reader

## Multi-Media

#### Audio Chip

High Definition (HD) Audio

#### 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

# Battery

#### Battery

Integrated Li-Polymer 84Wh battery, supports Rapid Charge Express (get 3 hours of runtime with a 15-minute charge)

#### Max Battery Life<sup>[1]</sup>

- Integrated graphics models: MobileMark<sup>®</sup> 25@250nits: 13 hr Local video (1080p) playback@150nits: 21.5 hr
- Discrete graphics models: MobileMark<sup>®</sup> 25@250nits: 8.5 hr Local video (1080p) playback@150nits: 14 hr

#### Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark<sup>®</sup> 2014, MobileMark<sup>®</sup> 2018, MobileMark<sup>®</sup> 25, MobileMark<sup>®</sup> 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<sup>®</sup> 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:

PSREF

Reference

Product Specifications

Lenovo

<sup>[1]</sup> AC adapter offerings depend on the country.

# DESIGN

# Display

### Display\*\*

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16″	2K (2048x1280)	None	OLED	400nits	Glossy	16:10	100,000:1	100% DCI-P3	120Hz	85° / 85° / 85° / 85°	Eyesafe® Certified 2.0, DisplayHDR™ True Black 500
16″	2.5K (2560x1600)	None	IPS <sup>[1]</sup>	350nits	Anti- glare	16:10	1200:1	100% sRGB	120Hz	89° / 89° / 89° / 89°	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

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<sup>[2]</sup>

Starting at 1.91 kg (4.21lbs)

Case Color

Arctic grey

#### Surface Treatment

Aluminium stamping (anodized)

#### **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<sup>®</sup> 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®\*\*[1]

- Wi-Fi<sup>®</sup> 6, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.2, M.2 card
- Wi-Fi<sup>®</sup> 6E, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.2, M.2 card<sup>[2]</sup>

Notes:

[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] Wi-Fi $^{\circ}$  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<sup>[1]</sup>

#### Standard Ports

- 1x HDMI<sup>®</sup> 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD card reader
- 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<sup>®</sup> (USB 10Gbps / USB 3.2 Gen 2), with USB PD 3.0 and DisplayPort<sup>™</sup> 1.4
- 1x USB-C<sup>®</sup> (USB4<sup>®</sup> 40Gbps), with USB PD 3.0 and DisplayPort<sup>™</sup> 1.4

#### **Optional Ports**

1x 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

Microsoft<sup>®</sup> Pluton TPM 2.0 Enabled

#### 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
- 3-year (1-yr battery) courier or carry-in service

# ACCESSORIES

## **Bundled Accessories**

Bundled Accessories<sup>[1]</sup>

Lenovo® WL310 Bluetooth® Silent Mouse

• None

Notes:

[1] For more compatible accessory solutions, please visit <u>Accessories for IdeaPad® Pro 5 16AHP9</u>.

# **OPERATING REQUIREMENTS**

### **Operating Environment**

#### Temperature<sup>[1]</sup>

- 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**<sup>III</sup>

#### Green Certifications<sup>[2]</sup>

- ENERGY STAR® 8.0
- EPEAT<sup>™</sup> Gold Registered<sup>[3]</sup>
- ErP Lot 6
- ErP Lot 26 RoHS compliant
- 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 <u>https://compliance.lenovo.com</u>.

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

[3] EPEAT<sup>™</sup> is registered where applicable, please visit <u>epeat.net</u> 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<sup>®</sup> Low Blue Light (Hardware Solution)
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