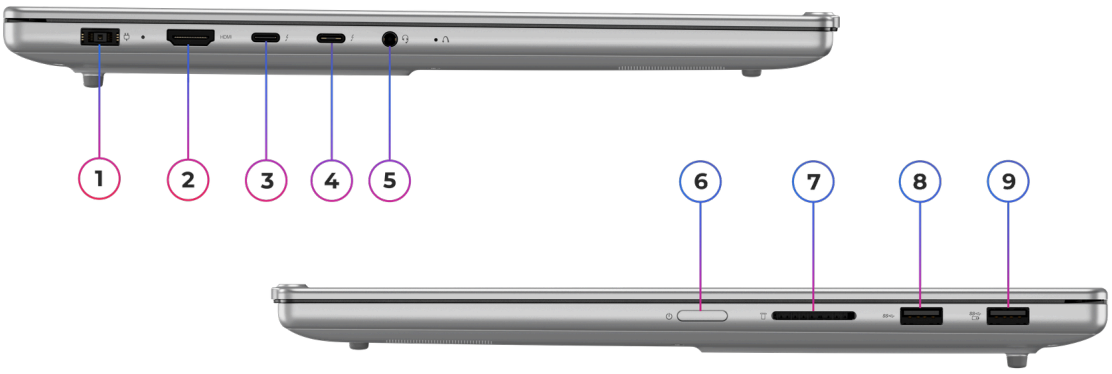
# OVERVIEW




| | |
|---|---|
| 1. Slim tip (rectangle) power connector * | 6. Power button |
| 2. HDMI | 7. SD card reader |
| 3. Thunderbolt 4 | 8. USB-A (USB 5Gbps) |
| 4. Thunderbolt 4 | 9. USB-A (USB 5Gbps), Always On |
| 5. Headphone / microphone combo jack (3.5mm) | |

Notes:

- Items with * are only available on selected models

# PERFORMANCE

## Processor

**Processor Family**

Intel® Core™ Ultra 7 / 9 / X9 Processor (Series 3)

**Processor****

| Processor Name | Cores | Threads | Base Frequency | Max Frequency | Cache | Processor Graphics | NPU |
|---|---|---|---|---|---|---|---|
| Core Ultra 7 356H | 16 (4 P-core + 8 E-core + 4 LP E-core) | 16 | P-core 1.9GHz / E-core 1.5GHz / LP E-core 1.5GHz | P-core 4.7GHz / E-core 3.5GHz / LP E-core 3.3GHz | 18MB Intel® Smart Cache | Intel® Graphics, up to 40 TOPS | Up to 50 TOPS |
| Core Ultra 9 386H | 16 (4 P-core + 8 E-core + 4 LP E-core) | 16 | P-core 2.1GHz / E-core 1.6GHz / LP E-core 1.6GHz | P-core 4.9GHz / E-core 3.7GHz / LP E-core 3.5GHz | 18MB Intel® Smart Cache | Intel® Graphics, up to 40 TOPS | Up to 50 TOPS |
| Core Ultra X9 378H | 16 (4 P-core + 8 E-core + 4 LP E-core) | 16 | P-core 2.0GHz / E-core 1.6GHz / LP E-core 1.6GHz | P-core 5.0GHz / E-core 3.8GHz / LP E-core 3.6GHz | 18MB Intel® Smart Cache | Intel® Arc™ B390 GPU, up to 122 TOPS | Up to 50 TOPS |
| Core Ultra X9 388H | 16 (4 P-core + 8 E-core + 4 LP E-core) | 16 | P-core 2.1GHz / E-core 1.6GHz / LP E-core 1.6GHz | P-core 5.1GHz / E-core 3.8GHz / LP E-core 3.7GHz | 18MB Intel® Smart Cache | Intel® Arc™ B390 GPU, up to 122 TOPS[1] | Up to 50 TOPS |

Notes:

[1] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

## AI (Artificial Intelligence)

**AI PC Category**

Copilot+ PC[1]

**NPU**

Up to 50 TOPS

Notes:

[1] Copilot+ PCs have at least 16GB RAM, 256GB storage, and a NPU that runs 40+ TOPs to run the latest AI tools build-in latest Windows® 11 to accelerate productivity and creativity.

## Operating System

**Operating System****

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

## Graphics

**Graphics****

| Graphics | Type | Memory | TGP | AI TOPS (Peak) | Key Features |
|---|---|---|---|---|---|
| Intel® Graphics | Integrated | Shared | - | - | DirectX® 12 Ultimate |
| Intel® Arc™ B390 GPU[1] | Integrated | Shared | - | - | DirectX® 12 Ultimate |
| NVIDIA® GeForce RTX™ 5050 Laptop GPU | Discrete | 8GB GDDR7 | 105W | 440 TOPS | DirectX® 12 Ultimate |
| NVIDIA® GeForce RTX™ 5060 Laptop GPU | Discrete | 8GB GDDR7 | 105W | 572 TOPS | DirectX® 12 Ultimate |

Notes:

[1] Intel® Arc™ graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

## Monitor Support

**Monitor Support**[1]

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
• HDMI® supports up to 8K@60Hz
• Thunderbolt™ supports up to 8K@60Hz

Notes:

[1] 8K resolution support needs 2 display pipes. That is, simultaneous display number will "-1" when 8K resolution displayed.

## Chipset

**Chipset**

Intel® SoC (System on Chip) platform

## Memory

**Max Memory**

32GB soldered memory, not upgradable

**Memory Slots**

Memory soldered to systemboard, no slots, dual-channel

**Memory Type****

- LPDDR5X-8533
- LPDDR5X-9600

## Storage

**Max Storage Support**[1][2]

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

**Storage Slot**[3]

Two M.2 slots
• One M.2 2242 PCIe® 5.0 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 | 1TB |

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The system supports dual SSD via two M.2 slots, but Lenovo® offers only one SSD configuration with a second slot for user self-expansion.
[3] 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

**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****

- 84Wh Rechargeable Li-ion Battery, supports Rapid Charge Express (get 3 hours of runtime with a 15-minute charge)
- 99.9Wh Rechargeable Li-ion Battery, supports Rapid Charge Express (get 3 hours of runtime with a 15-minute charge)

**Max Battery Life**[1]

- Models with 84Wh battery and discrete graphics
  MobileMark® 30@250nits: 10.1 hr
  Local video (1080p) playback@150nits: 31.4 hr
- Models with 84Wh battery and integrated graphics
  MobileMark® 30@250nits: 18.6 hr
  Local video (1080p) playback@150nits: 24.9 hr
- Models with 99.9Wh battery and discrete graphics
  MobileMark® 30@250nits: 11.5 hr
  Local video (1080p) playback@150nits: 29.4 hr
- Models with 99.9Wh battery and integrated graphics
  MobileMark® 30@250nits: 23.8 hr
  Local video (1080p) playback@150nits: 34.2 hr

Notes:

[1] 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
- No power adapter

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″ | 2.8K (2880x1800) | Non-touch | OLED | 500nits (typical) / 1100nits (peak) | Glossy | 16:10 | 1,000,000:1 | 100% DCI-P3 | 120Hz VRR | 85° / 85° / 85° / 85° | DisplayHDR™ True Black 1000 |
| 16″ | 2.8K (2880x1800) | Multi-touch | OLED | 500nits (typical) / 1100nits (peak) | Glossy | 16:10 | 1,000,000:1 | 100% DCI-P3 | 120Hz VRR | 85° / 85° / 85° / 85° | DisplayHDR™ True Black 1000 |

**Touchscreen**

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

**Screen-to-Body Ratio**

90% AAR (active area ratio)

**Color Calibration**

X-Rite® factory color calibration

## Input Device

**Pen**

No support

**Keyboard**

6-row, multimedia Fn keys, numeric keypad, key travel 1.5mm, Copilot key

**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]

| Models | Dimensions |
|---|---|
| Models with discrete graphics and non-touch display | 356 x 250 x 15.64 mm (14.02 x 9.84 x 0.62 inches) |
| Models with integrated graphics | 356 x 250 x 15.85 mm (14.02 x 9.84 x 0.62 inches) |
| Models with discrete graphics and touch display | 356 x 250 x 16.53 mm (14.02 x 9.84 x 0.65 inches) |

**Weight**[2]

| Models | Weight |
|---|---|
| Models with 84Wh battery, discrete graphics and non-touch display | Starting at 1.76 kg (3.88 lbs) |
| Models with 84Wh battery, discrete graphics and touch display | Starting at 1.91 kg (4.21 lbs) |
| Models with 84Wh battery and integrated graphics | Starting at 1.65 kg (3.64 lbs) |
| Models with 99.9Wh battery and integrated graphics | Starting at 1.7 kg (3.75 lbs) |
| Models with 99.9Wh battery, discrete graphics and non-touch display | Starting at 1.82 kg (4.01 lbs) |
| Models with 99.9Wh battery, discrete graphics and touch display | Starting at 1.99 kg (4.39 lbs) |

**Case Color****

- Glacier white
- Luna 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® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Wi-Fi® 7, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4, 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), Always On
- 1x USB-A (USB 5Gbps)
- 2x Thunderbolt™ 4, with USB PD 65-100W and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD card reader

**Optional Ports**

1x Slim tip (rectangle) 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.

## Docking

**Docking**

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for IdeaPad® Pro 5 16IPH11

# 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® 16" Laptop ECO Backpack B210 (black)
- Lenovo® WL310 Bluetooth® Silent Mouse (grey)
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for IdeaPad® Pro 5 16IPH11.

# 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: 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 1.0 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® Flicker Free
- 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.
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Copilot+PC

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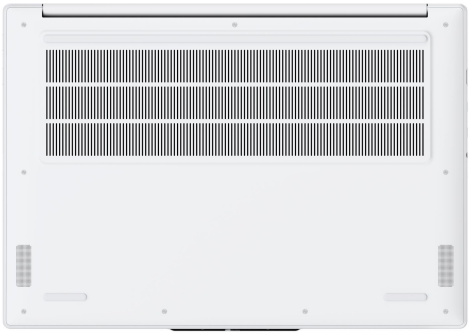

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