

OVERVIEW



|                                                    |                                  |
|----------------------------------------------------|----------------------------------|
| 1. USB-C (USB 10Gbps), with USB PD 45-65W & DP 1.4 | 6. SD card reader                |
| 2. USB-A (USB 5Gbps), Always On                    | 7. USB-A (USB 5Gbps)             |
| 3. HDMI                                            | 8. Ethernet (RJ-45)              |
| 4. Thunderbolt 4                                   | 9. Kensington Nano Security Slot |
| 5. Headphone / microphone combo jack (3.5mm)       |                                  |

PERFORMANCE

Processor

Processor Family

- 13th Generation Intel® H Series Core i5 Processor
- Intel® H Series Core 5 / 7 Processor (Series 2)
- Intel® U Series Core 3 Processor (Series 1)

Processor\*\*

| Processor Name | Cores                    | Threads | Base Frequency                | Max Frequency                 | Cache                   | Processor Graphics  |
|----------------|--------------------------|---------|-------------------------------|-------------------------------|-------------------------|---------------------|
| Core i5-13420H | 8 (4 P-core + 4 E-core)  | 12      | -                             | P-core 4.6GHz / E-core 3.4GHz | 12MB Intel® Smart Cache | Intel® UHD Graphics |
| Core 3 100U    | 6 (2 P-core + 4 E-core)  | 8       | P-core 1.2GHz / E-core 900MHz | P-core 4.7GHz / E-core 3.3GHz | 10MB Intel® Smart Cache | Intel® Graphics     |
| Core 5 210H    | 8 (4 P-core + 4 E-core)  | 12      | P-core 2.2GHz / E-core 1.6GHz | P-core 4.8GHz / E-core 3.6GHz | 12MB Intel® Smart Cache | Intel® Graphics     |
| Core 7 240H    | 10 (6 P-core + 4 E-core) | 16      | P-core 2.5GHz / E-core 1.8GHz | P-core 5.2GHz / E-core 4.0GHz | 24MB Intel® Smart Cache | Intel® 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 | TGP           | Key Features  |
|---------------------|------------|--------|---------------|---------------|
| Intel® UHD Graphics | Integrated | Shared | Share CPU TDP | DirectX® 12.1 |
| Intel® Graphics     | Integrated | Shared | Share CPU TDP | DirectX® 12.2 |

Monitor Support

Monitor Support<sup>[1]</sup>

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

- HDMI® supports up to 4096x2160@60Hz
- USB-C® supports up to 5120x2880@60Hz
- Thunderbolt™ supports up to 5120x2880@60Hz

Notes:

[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory<sup>[1]</sup>

- Up to 64GB DDR5-5200
- Up to 64GB DDR5-5600

Memory Slots

Two DDR5 SODIMM slots, dual-channel capable

Memory Type\*\*

- DDR5-5200<sup>[2]</sup>

- DDR5-5600

Notes:

- [1] Maximum memory is only to test technical readiness of notebook. Available memory to sell would vary.
- [2] The memory installed on the model with Intel® Core™ i5-13420H is actually DDR5-5600 but runs as DDR5-5200 due to platform limitation.

Storage

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

- Up to two drives, 2x M.2 SSD
- M.2 2242 SSD up to 2TB
  - M.2 2280 SSD up to 2TB

Storage Slot<sup>[2]</sup>

- 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 | 256GB / 512GB / 1TB |

Notes:

- [1] 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.
- The max storage capacity is only technical readiness and may be different from 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, Dolby Audio™

Microphone

Dual-microphone array with smart noise-cancelling

Camera\*\*

- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- 5.0MP, with privacy shutter, fixed focus

Battery

Battery\*\*

- 48Wh Rechargeable Li-ion Battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- 71Wh Rechargeable Li-ion Battery

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

Configuration 1

MobileMark® 30: up to 10.98 hr @250nits

Local video playback: up to 16.03 hr @150nits

Configuration 2

MobileMark® 30: up to 7.71 hr @250nits

Local video playback: up to 14.28 hr @150nits

Notes:

- [1] Configuration 1: WUXGA (non-touch), Intel® Core™ 7 240H, 32GB DDR5, Win 11, 71Wh battery, best power efficiency power mode
- Configuration 2: WUXGA (non-touch), Intel® Core™ 5 210H, 16GB DDR5, Win 11, 48Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using [MobileMark® 30](#), continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level). Actual battery life will vary and depends on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to [Microsoft® link](#) for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter\*\*[1]

- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin, wall-mount) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:

- [1] AC adapter offerings depend on the country.

Special Features

Special Features

Modern Standby

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"  | WUXGA (1920x1200) | Non-touch     | IPS[1] | 400nits    | Anti-glare | 16:10        | 1000:1         | 45% NTSC    | 60Hz         | 89° / 89° / 89° / 89°   | TÜV Low Blue Light (Software) |
| 16"  | WUXGA (1920x1200) | In-cell touch | IPS[2] | 400nits    | Anti-glare | 16:10        | 1200:1         | 100% sRGB   | 120Hz        | 89° / 89° / 89° / 89°   | Eyesafe® Certified 2.0        |

Touchscreen

- In-cell multi-touch, supports 10-point touch
- Non-touch

Screen-to-Body Ratio

90%

Notes:

- [1], [2] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Pen

No support

Keyboard

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

Keyboard Backlight

- LED backlight
- Non-backlight

**Touchpad**

Buttonless Mylar® surface multi-touch touchpad, supports Precision TouchPad (PTP), 75 x 120 mm (2.95 x 4.72 inches)

**Mechanical****Dimensions (WxDxH)<sup>[1]</sup>**

356 x 253.5 x 17.5 mm (14.01 x 9.98 x 0.69 inches)

**Weight<sup>[2]</sup>**

Starting at 1.7 kg (3.75 lbs)

**Case Color**

Arctic grey, dual-tone design

**Case Material**

Aluminium (top), PC-ABS (bottom)

**Surface Treatment**

Anodizing sandblasting (top), texture (bottom)

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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®\*\*<sup>[1]</sup>**

- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card
- Intel® Wi-Fi® 6 AX203, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card
- Intel® Wi-Fi® 6E AX211, 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<sup>[2]</sup>**

Gigabit Ethernet, 1x RJ-45, supports Wake-on-LAN

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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.

[2] Wake-on-LAN needs the power adapter plugged in.

**Ports<sup>[1]</sup>****Standard Ports**

- 1x USB-A (USB 5Gbps), Always On
- 1x USB-A (USB 5Gbps)
- 1x USB-C® (USB 10Gbps), with USB PD 45-100W and DisplayPort™ 1.4
- 1x Thunderbolt™ 4, with USB PD 45-100W and DisplayPort™ 1.4
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x SD card reader

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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™ or USB-C®.

For more compatible docking solutions, please visit [Docking for ThinkBook® 16 G9 IRL](#)

## SECURITY & PRIVACY

### Security

#### Security Chip

Discrete TPM 2.0, TCG certified, FIPS 140-3 certified

#### Physical Locks

Kensington® Nano Security Slot™, 2.5 x 6 mm

#### Fingerprint Reader

- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

#### BIOS Security

- Hard disk password
- Power-on password
- Supervisor password
- User password
- Self-healing BIOS
- More BIOS security features, please visit [BIOS Simulator](#)

#### Other Security

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

## SERVICE

### Warranty

#### Base Warranty\*\*

- 1-year courier or carry-in service
- 2-year (1-yr battery) courier or carry-in service
- No base warranty

## ACCESSORIES

### Bundled Accessories

#### Bundled Accessories\*\*\*[1]

- Lenovo® 16" Laptop ECO Topload T210 (black)
- Lenovo® Essential Wired Mouse (Plastic Free)
- Lenovo® USB-A Wired Stereo Headset Gen 2 (Plastic Free)
- ThinkBook® Bluetooth® Silent Mouse (Plastic Free)
- None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for ThinkBook® 16 G9 IRL](#).

## 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).

## ENVIRONMENTAL

### Sustainability

**Material<sup>[1]</sup>**

30% PCC recycled plastic used in the battery pack enclosure  
50% PCC recycled plastic used in key caps  
30% PCC recycled plastic used in speaker  
90% PCC recycled plastic used in standard 65W adapter  
Plastic free packaging (for EMEA & NA)  
Dry pressed pulp cushion  
90% recycled content in OBP bag or bamboo fiber bag  
FSC certified content in carton box

Notes:

[1] PCC: Post Consumer Content, recycled materials from customers.

## CERTIFICATIONS

### Green Certifications<sup>[1]</sup>

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

- ENERGY STAR® 9.0
- EPEAT™ Gold Registered<sup>[3]</sup>
- ErP Lot 6/26
- RoHS compliant
- TCO Certified, generation 10

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](https://epeat.net) and [energystar.gov](https://energystar.gov) for more information.

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

### Other Certifications

**Mil-Spec Test**

MIL-STD-810G military test passed

**Other Certifications**

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