## OVERVIEW

| | |
|---|---|
| 1. USB-A (USB 5Gbps) | 5. HDMI |
| 2. USB-A (USB 5Gbps) | 6. Ethernet (RJ-45) |
| 3. Headphone / microphone combo jack (3.5mm) | 7. USB-A (USB 10Gbps) |
| 4. USB-C (USB 5Gbps), with USB PD 65-100W | 8. Slim tip (rectangle) power connector |

# PERFORMANCE

## Processor

**Processor Family**

Intel® Core™ 5 / 7 Processor (Series 2)

**Processor****

| Processor Name | Cores | Threads | Base Frequency | Max Frequency | Cache |
|---|---|---|---|---|---|
| Core 5 205H | 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 |
| Core 7 230H | 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 |

## 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 | AI TOPS (Peak) | Key Features |
|---|---|---|---|---|---|---|
| NVIDIA® GeForce RTX™ 3050 Laptop GPU | Discrete | 4GB GDDR6 | 1740 MHz | 75W | 114 TOPS | DLSS, DirectX® 12 Ultimate |
| NVIDIA® GeForce RTX™ 3050 Laptop GPU | Discrete | 6GB GDDR6 | 1732 MHz | 75W | 142 TOPS | DLSS, DirectX® 12 Ultimate |

## Monitor Support

**Monitor Support**

Supports up to 2 independent displays (native display and 1 external monitor via HDMI®)
• HDMI® supports up to 4K@60Hz

## Chipset

**Chipset**

Intel® SoC (System on Chip) platform

## Memory

**Max Memory**[1]

- Up to 32GB DDR4-3200
- Up to 32GB DDR5-4800
- Up to 32GB DDR5-5200

**Memory Slots**

Two DDR5 SODIMM slots, dual-channel capable

**Memory Type****

- DDR4-3200
- DDR5-4800
- DDR5-5200[2]

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR5-5600 but may run as DDR5-5200 due to processor limitation.

## Storage

**Max Storage Support**[1]

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

**Storage Slot**[3]

Two M.2 2280 PCIe® 4.0 x4 slots

**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 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**

No card reader

## Multi-Media

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**

Stereo speakers, 2W x2, optimized with Nahimic Audio

**Microphone**

Dual-microphone array

**Camera**

HD 720p, with E-shutter, fixed focus

## Battery

**Battery**

60Wh Rechargeable Li-ion Battery, supports Rapid Charge Pro (charge up to 50% in 30min)

**Max Battery Life**[1]

Models with 60Wh battery:
MobileMark® 30@250nits: 3.2 hr
Local video (1080p) playback@150nits: 4 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]

- 135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- No power adapter

Notes:

[1] AC adapter offerings depend on the country.

## Special Features

**Special Features**

AI Chip: LA1

# 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.3″ | WUXGA (1920x1200) | Non-touch | IPS[1] | 300nits | Anti-glare | 16:10 | 1000:1 | 100% sRGB | 165Hz | 89° / 89° / 89° / 89° | TÜV Rheinland® Low Blue Light |

**Touchscreen**

Non-touch

**Screen-to-Body Ratio**

92% AAR (active area ratio)

**Color Calibration**

No color calibration

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, numeric keypad, key travel 1.6mm, cap recess 0.3mm, Copilot key

**Keyboard Backlight**

Purple 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)**[1][2]

344.9 x 254.83 x 20.9-23.25 mm (13.58 x 10.03 x 0.82-0.92 inches)

**Weight**[3]

Starting at 2.1 kg (4.6 lbs)

**Case Color**

Luna grey

**Case Material**

PC-ABS + 25% Talc (top), PC-ABS + 15% Talc (bottom)

**Surface Treatment**

Painting (top), texture (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The height does not include the bump 1.7mm.
[3] 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

**WWAN**

No support

**Ethernet[2]**

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 AC adapter plugged in and the system in S3 mode (sleep mode). Since Wake-on-LAN is enabled by default, there are no options displayed in the BIOS.

## Ports[1]

**Standard Ports**

- 2x USB-A (USB 5Gbps), with 4.5W output
- 1x USB-A (USB 10Gbps), with 4.5W output
- 1x USB-C® (USB 5Gbps), with USB PD 65-100W input / 15W output[2]
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Slim tip (rectangle) power connector

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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.

[2] Support Lenovo® protocol on 140W (20V/7A) charging, but requires a unique Lenovo® adapter for operation.

## Docking

**Docking**

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for LOQ™ 15IRH11E

# SECURITY & PRIVACY

## Security

**Security Chip**

Firmware TPM 2.0 integrated in SoC

**Fingerprint Reader**

No fingerprint reader

**BIOS Security**

- Hard disk 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

**Other Security**

E-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**[1]

- Lenovo® Legion™ M220 Wireless RGB Gaming Mouse
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for LOQ™ 15IRH11E.

# 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)

**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 Silver Registered
- ErP Lot 3
- 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.

## Other Certifications

**Mil-Spec Test**

MIL-STD-810H military test passed

**Other Certifications**

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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