

OVERVIEW



1. Headphone / microphone combo jack (3.5mm)	5. Ethernet (RJ-45)
2. USB 3.2 Gen 1	6. HDMI 2.0
3. USB 3.2 Gen 1	7. USB-C 3.2 Gen 1
4. Power connector	

PERFORMANCE

Processor

Processor Family

AMD Ryzen™ 5 / 7 Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
AMD Ryzen™ 5 5500H	4	8	3.3GHz	4.2GHz	2MB L2 / 8MB L3	AMD Radeon™ Graphics
AMD Ryzen™ 5 5600H	6	12	3.3GHz	4.2GHz	3MB L2 / 16MB L3	AMD Radeon™ Graphics
AMD Ryzen™ 7 5800H	8	16	3.2GHz	4.4GHz	4MB L2 / 16MB L3	AMD Radeon™ Graphics

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 10 Pro 64
- Windows® 10 Home 64
- Windows® 10 Home 64 Single Language
- No preload operating system

Graphics

Graphics**

Graphics	Type	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce GTX 1650 Laptop GPU	Discrete	4GB GDDR6	-	-	DirectX® 12
NVIDIA® GeForce RTX™ 2050 Laptop GPU	Discrete	4GB GDDR6	-	-	DirectX® 12
NVIDIA® GeForce RTX™ 3050 Laptop GPU	Discrete	4GB GDDR6	1500 MHz / 1635 MHz	85W	Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 3050 Ti Laptop GPU	Discrete	4GB GDDR6	1485 MHz / 1597.5 MHz	85W	Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 3060 Laptop GPU	Discrete	6GB GDDR6	1282 MHz / 1485 MHz	90W	Dynamic Boost 2.0, 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 3840x2162@60Hz

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory^[1]

Up to 16GB DDR4-3200 offering

Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type

DDR4-3200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support^[1]

- RTX 3060 models: up to two drives, 2x M.2 SSD
 - M.2 2242 SSD up to 512GB
 - M.2 2280 SSD up to 1TB
- Non-RTX 3060 models: up to two drives, 2x M.2 SSD or 1x 2.5" HDD + 1x M.2 SSD
 - 2.5" HDD up to 1TB
 - M.2 2242 SSD up to 512GB
 - M.2 2280 SSD up to 1TB

Storage Slot^[2]

- RTX 3060 models: two M.2 2280 PCIe® 3.0 x4 slots
 - Non-RTX 3060 models: one 2.5" drive slot + two M.2 slots
 - One 2.5" SATA HDD slot
 - One M.2 2242 PCIe® 3.0 x4 slot
 - One M.2 2280 PCIe® 3.0 x2 slot
- HDD slot and M.2 2280 slot are used exclusively

Storage Type^{***}

Disk Type	Interface	RPM
2.5" SATA HDD	SATA 6Gb/s	5.4K
M.2 2242 SSD ^[3]	PCIe® NVMe®, PCIe® 3.0 x4	-
M.2 2242 SSD	PCIe® NVMe®, PCIe® 4.0 x4	-
M.2 2280 SSD ^[4]	PCIe® NVMe®, PCIe® 3.0 x4	-

- Notes:
- [1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
- [2] If install one piece of M.2 2242 SSD, you need to purchase a 2242 barcket kit separately.
- [3] Installed M.2 2242 SSD is PCIe® 3x4 but run at PCIe® 3x2 due to M.2 SSD adapter limitation.
- [4] Installed M.2 2280 SSD is PCIe® 3x4 but run at PCIe® 3x2 due to M.2 SSD adapter limitation.

Removable Storage

Optical

None

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers

Stereo speakers, 2W x2, Nahimic Audio

Microphone

Dual-microphone array

Camera

HD 720p, with privacy shutter, fixed focus

Battery

Battery^{**}

- Integrated Li-Polymer 45Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- Integrated Li-Polymer 60Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)

Max Battery Life^{**[1]}

- MobileMark® 2018: 5 hr (45Wh)
- MobileMark® 2018: 7 hr (60Wh)

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

Notes:

[1] AC adapter offerings depend on the country.

DESIGN

Display

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
15.6"	FHD (1920x1080)	None	IPS	250nits	Anti-glare	16:9	800:1	45% NTSC	60Hz	85° / 85° / - / -	DC dimmer
15.6"	FHD (1920x1080)	None	IPS	250nits	Anti-glare	16:9	800:1	45% NTSC	120Hz	85° / 85° / - / -	AMD FreeSync™, DC dimmer
15.6"	FHD (1920x1080)	None	IPS	300nits	Anti-glare	16:9	1000:1	45% NTSC	144Hz	85° / 85° / 85° / 85°	AMD FreeSync™, DC dimmer
15.6"	FHD (1920x1080)	None	IPS	300nits	Anti-glare	16:9	1000:1	100% sRGB	165Hz	85° / 85° / 85° / 85°	AMD FreeSync™, DC dimmer

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**
- 4-Zone RGB backlight
 - White backlight

Touchpad

Buttonless Mylar® surface multi-touch touchpad, 70 x 120 mm (2.76 x 4.72 inches)

Mechanical

Dimensions (WxDxH)[1]

359.6 x 251.9 x 24.2 mm (14.16 x 9.92 x 0.95 inches)

Packaging Dimensions (WxDxH)

535 x 324 x 104 mm (21.06 x 12.76 x 4.09 inches)

Weight^[2]

Around 2.25 kg (4.96 lbs)

Packaging Weight

3.44 kg (7.58 lbs)

Case Color

Shadow black

Surface Treatment

IMR (in-mold decoration by roller)

Case Material

PC-ABS (top), PC-ABS (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

Gigabit Ethernet

WLAN + Bluetooth®**

- Wi-Fi® 5, 802.11ac 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card^[1]

Notes:

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

Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports^[1]

Standard Ports

- 2x USB 3.2 Gen 1
- 1x USB-C® 3.2 Gen 1 (support data transfer only)
- 1x HDMI® 2.0
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 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 supported via USB-C®.

For more compatible docking solutions, please visit [Docking for IdeaPad® Gaming 3 15ACH6](#)

SECURITY & PRIVACY

Security

Security Chip

Firmware TPM 2.0 integrated in SoC

Fingerprint Reader

No fingerprint reader

BIOS Security

- Supervisor password
- Power-on password
- Hard disk password

Other Security

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
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories^[1]

- Lenovo® IdeaPad® Gaming M100 RGB Mouse (USB connector)
- None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for IdeaPad® Gaming 3 15ACH6](#)

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)
- Maximum temperature when operating under unpressurized conditions: 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]

- 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.

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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