# **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<sup>™</sup> 5 / 7 Processor

#### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
AMD Ryzen 5 5600H	6	12 3.3GHz		4.2GHz	3MB L2 / 16MB L3	DDR4-3200	AMD Radeon™ Graphics
AMD Ryzen 7 5800H	zen 7 8 16		3.2GHz	4.4GHz	4MB L2 / 16MB L3	DDR4-3200	AMD Radeon Graphics

# **Operating System**

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

- Windows® 11 Pro 64
- Windows 11 Home 64
- Windows 10 Pro 64
- Windows 10 Home 64
- No operating system

# Graphics

#### Graphics\*\*

Graphics	Туре	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce GTX 1650 Laptop GPU	Discrete	4GB GDDR6	-	-	DirectX® 12
NVIDIA GeForce RTX™ 3050 Laptop GPU	Discrete	4GB GDDR6	1500 MHz / 1635 MHz	85W	Resizable BAR, Dynamic Boost 2.0, DirectX 12 Ultimate
NVIDIA GeForce RTX 3050 Ti Laptop GPU	Discrete	4GB GDDR6	1485 MHz / 1597.5 MHz	85W	Resizable BAR, Dynamic Boost 2.0, DirectX 12 Ultimate
NVIDIA GeForce RTX 3060 Laptop GPU	Discrete	6GB GDDR6	1282 MHz / 1485 MHz	90W	Resizable BAR, 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<sup>[1]</sup>

Up to 16GB DDR4-3200 offering

## **Memory Slots**

Two DDR4 SO-DIMM slots, dual-channel capable

## Memory Type

DDR4-3200

Notes:

<sup>1.</sup> The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.

# Storage

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

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

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

- RTX 3060 model: two M.2 slots
  - One M.2 2242 PCIe® Gen 3x4 slot, supports M.2 2242 SSD
  - One M.2 2280 PCIe Gen 3x2 slot, supports M.2 2242/2280 SSD
- Non-RTX 3060 model: one 2.5" drive slot + two M.2 slots
  - One 2.5" drive slot, supports 2.5" HDD
  - One M.2 2242 PCIe Gen 3x4 slot, supports M.2 2242 SSD
  - One M.2 2280 PCIe Gen 3x2 slot, supports M.2 2242/2280 SSD
  - 2.5" drive slot and M.2 2280 slot are used exclusively

#### Storage Type\*\*\*

Disk Type	Interface	RPM	Offering	Security
2.5" SATA HDD	SATA 6Gb/s	5.4K	-	-
M.2 2242 SSD	PCIe NVMe®, PCIe 3.0 x4	-	-	-
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	-	-

Notes:

- 1. The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.
- 2. 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 array microphone

#### Camera

HD 720p, with camera 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<sup>[1]</sup>

- MobileMark<sup>®</sup> 2018: 5 hr (45Wh)
- MobileMark 2018: 7 hr (60Wh)

Notes:

Lenovo

1. All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, JEITA 2.0, 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 and depends 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

Display\*\*[1]

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
15.6″	FHD (1920x1080)	None	IPS	250 nits	Anti- glare	16:9	800:1	45% NTSC	170°	Refresh rate 60Hz, DC dimmer
15.6″	FHD (1920x1080)	None	IPS	250 nits	Anti- glare	16:9	800:1	45% NTSC	170°	Refresh rate 120Hz, Free-Sync, DC dimmer
15.6″	FHD (1920x1080)	None	IPS	300 nits	Anti- glare	16:9	1000:1	100% sRGB	170°	Refresh rate 165Hz, Free-Sync, DC dimmer

## Touchscreen

Non-touch

### Notes:

1. California Electronic Waste Recycling Fee

In California, per state law, Lenovo charges an electronic waste recycling fee on this covered device at the time of sale of the product. For more information, go to https://www.calrecycle.ca.gov/Electronics/Consumer

# **Input Device**

## Keyboard

6-row, multimedia Fn keys, numeric keypad

## Keyboard Backlight\*\*

- White backlight
- 4-Zone RGB backlight

#### Touchpad

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

# **Mechanical**<sup>III</sup>

Dimensions (WxDxH)

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

Around 2.25 kg (4.96 lbs)

#### Packaging Weight

3.44 kg (7.58 lbs)

Case Color

# IdeaPad Gaming 3 15ACH6

Shadow black

#### Surface Treatment

IMR (in-mold decoration by roller)

#### **Case Material**

PC + ABS (top), PC + ABS (bottom)

Notes:

1. The system dimensions and weight vary depending on configurations.

# CONNECTIVITY

## **Network**

**Onboard Ethernet** 

Gigabit Ethernet

#### WLAN + Bluetooth®\*\*[1]

- 802.11ac 2x2 Wi-Fi<sup>®</sup> + Bluetooth 5.0, M.2 card
- Wi-Fi 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.0, M.2 card

Notes:

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

## **Ports**<sup>III</sup>

#### **Standard Ports**

- 2x USB 3.2 Gen 1
- 1x USB-C<sup>®</sup> 3.2 Gen 1 (support data transfer only)
- 1x HDMI 2.0
- 1x Ethernet (RJ-45)
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Power connector

Notes:

- 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;
- USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;

Thunderbolt™ 3/4: 40 Gbit/s

# **SECURITY & PRIVACY**

# Security

**Security Chip** 

Firmware TPM 2.0 integrated in SoC

## **Fingerprint Reader**

No fingerprint reader

#### **BIOS Security**

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

#### **Other Security**

Camera privacy shutter

# SERVICE

# Warranty

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### Base Warranty\*\*[1]

- 1-year depot service
- 1-year depot with 2-year system board service (Korea only)
- 2-year (1-yr battery) depot service
- 3-year (1-yr battery) depot service
- No base warranty

#### Notes:

1. More information of warranty policy, please access https://pcsupport.lenovo.com/warranty

# **ENVIRONMENTAL**

# **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)
- Maximum temperature when operating under unpressurized conditions: 31.3°C (88°F)

#### 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).

# ACCESSORIES

# **Bundled Accessories**

## **Bundled Accessories**

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

# CERTIFICATIONS

# **Green Certifications**

## Green Certifications

- ErP Lot 3
- RoHS compliant
- 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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