# OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>E-camera shutter switch</td>
</tr>
<tr>
<td>2</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>4</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>5</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>6</td>
<td>HDMI 2.1</td>
</tr>
<tr>
<td>7</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>8</td>
<td>Power connector</td>
</tr>
<tr>
<td>9</td>
<td>USB-C 3.2 Gen 2 (data transfer / DP 1.4 only)</td>
</tr>
<tr>
<td>10</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 Processor

Processor

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

Operating System

Operating System
- Windows® 10 Home 64
- Windows 10 Pro 64
- No operating system

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Boost Clock</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® GeForce® RTX™ 3060 Laptop GPU</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>1425 MHz / 1702 MHz</td>
<td>130W</td>
<td>VR ready, DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA GeForce RTX 3070 Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>1560 MHz / 1620 MHz</td>
<td>140W</td>
<td>VR ready, DirectX 12</td>
</tr>
</tbody>
</table>

Notes:
1. Free-Sync via integrated graphics; G-Sync via discrete graphics

Monitor Support

Monitor Support
Supports up to 4 independent displays via native display and 3 external monitors; supports external monitors via HDMI® (up to 7680x4320@60Hz) or USB-C (up to 5120x3200@60Hz)

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
Up to 32GB 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. The system may support more memory as the technology develops.

Storage

Storage Support
Up to two drives, 2x M.2 SSD
- M.2 2280 SSD up to 1TB
- M.2 2242 SSD up to 512GB
### Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe NVMe, PCIe 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe, PCIe 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Removable Storage

**Optical**
None

**Card Reader**
No card reader

### Multi-Media

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3306 codec

**Speakers**
Stereo speakers, 2W x2, Nahimic Audio

**Microphone**
Dual array microphone

**Camera**
720p, with E-camera shutter, fixed focus

### Battery

**Battery**
Integrated Li-Polymer 80Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)

**Max Battery Life**
MobileMark® 2018: 4.2 hr (discrete mode) or 8.1 hr (hybrid mode)

Notes:
1. All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, and/or JEITA 2.0 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**
- 230W slim tip AC adapter
- 300W slim tip AC adapter

### DESIGN

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.0&quot;</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>500 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>178°</td>
<td>Refresh rate 165Hz, Dolby® Vision™, VESA HDR 400, Free-Sync, G-Sync, DC dimmer</td>
</tr>
</tbody>
</table>

**Color Calibration**
X-Rite Pantone factory color calibration

**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
   - Stingray model: 6-row, multimedia Fn keys, numeric keypad, moon white keycap
   - Storm grey model: 6-row, multimedia Fn keys, numeric keypad, black keycap
Keyboard Backlight
   - White LED backlight
   - Blue LED backlight
   - 4-Zone RGB LED backlight
Touchpad
   Buttonless Mylar® surface multi-touch touchpad

Mechanical
Dimensions (WxDxH)
356 x 260.4-264.4 x 21.7-26.85 mm (14.02 x 10.25-10.41 x 0.85-1.07 inches)
Weight
2.45 kg (5.4 lbs)
Case Color
   - Stingray (top), dove grey (bottom)
   - Storm grey (top), black (bottom)
Surface Treatment
   - Anodize electrophoresis deposition
   - Anodizing
Case Material
   Aluminium (top), aluminium (bottom)
System Lighting
   - "Y" logo with blue lighting on top cover
   - "Y" logo with white lighting on top cover

Notes:
1. The system weight varies depending on configurations

CONNECTIVITY
Network
Onboard Ethernet
Gigabit Ethernet, Realtek RTL8111H
WLAN + Bluetooth®
Wi-Fi 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card
Ports
Standard Ports
   - 4x USB 3.2 Gen 1 (one Always On)
   - 1x USB-C 3.2 Gen 2 (support data transfer and DisplayPort™ 1.4)
   - 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery and DisplayPort 1.4)
   - 1x HDMI 2.1
   - 1x Ethernet (RJ-45)
   - 1x headphone / microphone combo jack (3.5mm)
   - 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;
- USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- Thunderbolt™ 3: 40 Gbit/s;
- FireWire 400: 400 Mbit/s;
- FireWire 800: 800 Mbit/s

2. Depending on many factors, actual data transfer speed may be lower than theoretical speed.

SECURITY & PRIVACY

Security

Security Chip
Firmware TPM 2.0 integrated in chipset

Fingerprint Reader
No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- Hard disk password

Other Security
E-Camera shutter

SERVICE

Warranty

Base Warranty
- 1-year depot service
- 1-year depot with 2-year system board service
- 2-year (1-yr battery) depot service

ENVIRONMENTAL

Operating Environment

Temperature
- 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)

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)

CERTIFICATIONS

Green Certifications

Green Certifications
- ErP Lot 3
- RoHS compliant

Other Certifications

Other Certifications
• TÜV Rheinland High Gaming Performance
• TÜV Rheinland Low Blue Light (Hardware Solution)