OVERVIEW

1. 2x USB-C 3.2 Gen 2
2. Headphone / microphone combo jack (3.5mm)
3. Card reader
4. 2x USB 3.2 Gen 2 (one Always On)
5. Power connector
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 / 9 series 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>
<tr>
<td>AMD Ryzen 9 5900HX</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>4.6GHz</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

<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>1282 MHz / 1425 MHz</td>
<td>100W</td>
<td>Advanced Optimus, Resizable BAR, Dynamic Boost 2.0, VR ready, DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 3 independent displays via native display and 2 external monitors; supports external monitors via USB-C (up to 5120x2160@60Hz)

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
- Up to 32GB (16GB soldered + 16GB SO-DIMM) DDR4-3200 offering
- Up to 24GB (8GB soldered + 16GB SO-DIMM) DDR4-3200 offering

Memory Slots
One memory soldered to systemboard, one DDR4 SO-DIMM slot, 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 2 drives, 2x M.2 2280 SSD
- M.2 2280 SSD up to 2TB

Storage Type
### Removable Storage

**Optical**
None

**Card Reader**
4-in-1 card reader (SD, SDHC, SDXC, MMC)

### Multi-Media

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

**Speakers**
Stereo speakers, 2W x2, Nahimic Audio, HARMAN-branded, Smart AMP

**Microphone**
Dual array microphone

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

### Sensor

**Sensors**
Accelerometer (G) sensor

### Battery

**Battery**
Integrated Li-Polymer 71Wh battery, supports Rapid Charge Express (get 3 hours of runtime with a 15-minute charge)

**Max Battery Life**
MobileMark® 2018: 7.8 hr

**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**
- 170W slim tip AC adapter
- 230W slim tip AC adapter

### DESIGN

### Display

**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>15.6&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300 nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>170°</td>
<td>Refresh rate 165Hz, Dolby® Vision, Free-Sync, G-Sync, DC dimmer</td>
</tr>
<tr>
<td>15.6&quot;</td>
<td>UHD (3840x2160)</td>
<td>None</td>
<td>IPS</td>
<td>500 nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1500:1</td>
<td>100% Adobe® RGB</td>
<td>178°</td>
<td>Refresh rate 60Hz, VESA HDR 400, Dolby Vision™, Free-Sync, DC dimmer</td>
</tr>
</tbody>
</table>
Color Calibration
• X-Rite Pantone factory color calibration
• No 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.cairecycle.ca.gov/Electronics/Consumer

Input Device

Keyboard
6-row, spill-resistant, multimedia Fn keys, numeric keypad

Keyboard Backlight
• RGB LED backlight
• White LED backlight

Touchpad
Buttonless glass surface multi-touch touchpad, supports Precision TouchPad (PTP)

Mechanical

Dimensions (WxDxH)
356 x 252 x 15.9-18.9 mm (14.02 x 9.92 x 0.63-0.74 inches)

Weight
1.9 kg (4.19 lbs)

Case Color
• Shadow black
• Storm grey

Surface Treatment
Anodizing

Case Material
Aluminium (top), aluminium (bottom)

System Lighting
• “Y” logo white lighting on top cover
• RGB lighting on power button

Notes:
1. The system weight varies depending on configurations

CONNECTIVITY

Network

Onboard Ethernet
No Ethernet

WLAN + Bluetooth
• Wi-Fi 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card
• Killer Wi-Fi 6 AX1650, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card

Ports

Standard Ports
• 1x USB 3.2 Gen 2
• 1x USB 3.2 Gen 2 (Always On)
• 2x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 100w and DisplayPort™ 1.4)
• 1x card reader
• 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

**Monitor Cable**

Monitor Cable
• Lenovo USB-C 3-in-1 Hub (USB-C to VGA / HDMI® / USB-A)
• No monitor cable

**SECURITY & PRIVACY**

**Security**
Fingerprint Reader
Touch style fingerprint reader on power button

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

**Other Security**
Camera privacy 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

- ENERGY STAR® 8.0
- ErP Lot 3