## OVERVIEW

<table>
<thead>
<tr>
<th>1.</th>
<th>USB 3.2 Gen 1 (Always On)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>3.</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>4.</td>
<td>USB-C 3.2 Gen 1 (data transfer / DP 1.2 only)</td>
</tr>
<tr>
<td>5.</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>6.</td>
<td>HDMI 2.0</td>
</tr>
<tr>
<td>7.</td>
<td>Power connector</td>
</tr>
<tr>
<td>8.</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>9.</td>
<td>Power light</td>
</tr>
<tr>
<td>10.</td>
<td>NOVO button hole</td>
</tr>
<tr>
<td>11.</td>
<td>USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
**PERFORMANCE**

**Processor**

**Processor Family**
AMD Ryzen™ 5 / 7 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 4600H</td>
<td>6</td>
<td>12</td>
<td>3.0GHz</td>
<td>4.0GHz</td>
<td>3MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen 7 4800H</td>
<td>8</td>
<td>16</td>
<td>2.9GHz</td>
<td>4.2GHz</td>
<td>4MB L2 / 8MB 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
- FreeDOS
- No operating system

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® GeForce® GTX 1650</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® GeForce GTX 1650 Ti</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>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 HDMI® (up to 4096x2160@60Hz) or USB-C (up to 3840x2160@60Hz)

**Chipset**

**Chipset**
AMD SoC (System on Chip) platform

**Memory**

**Max Memory**
Up to 32GB DDR4-3200

**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**
- HDD/SSD mode: up to two drives, 1x HDD + 1x M.2 SSD
  - 2.5” HDD up to 2TB
  - M.2 2280 SSD up to 1TB
  - M.2 2242 SSD up to 512GB
- Dual SSD mode: up to two drives, 2x M.2 2280 SSD or 2x M.2 2242 SSD
  - M.2 2280 SSD up to 1TB
• M.2 2242 SSD up to 512GB

Storage Slot
• SSD mode: two M.2 slots for M.2 SSD
  • 2x M.2 2280 PCIe 3.0 slot, supports M.2 PCIe 3.0 x4 SSD
• HDD mode: one HDD slot and one M.2 slot
  • 1x 2.5” HDD slot, supports 2.5” SATA HDD
  • 1x M.2 2280 PCIe 3.0 slot, supports M.2 PCIe 3.0 x4 SSD

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
<td>-</td>
</tr>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<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® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby® Atmos® for gaming, HARMAN-branded

Microphone
Dual array microphone

Camera
720p, with privacy shutter, fixed focus

Battery

Battery
• Integrated Li-Polymer 60Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
• Integrated Li-Polymer 80Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)

Max Battery Life
• MobileMark® 2018: 7.8 hr (60W)
• MobileMark 2018: 9.3 hr (80W)

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

DESIGN

Display

<table>
<thead>
<tr>
<th>Display Attribute</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td></td>
</tr>
<tr>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>Touch</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td></td>
</tr>
<tr>
<td>Brightness</td>
<td></td>
</tr>
<tr>
<td>Surface</td>
<td></td>
</tr>
<tr>
<td>Aspect</td>
<td></td>
</tr>
<tr>
<td>Contrast</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td></td>
</tr>
<tr>
<td>Viewing</td>
<td></td>
</tr>
<tr>
<td>Key Features</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ratio</td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>15.6&quot; FHD (1920x1080)</td>
<td>None</td>
</tr>
<tr>
<td>15.6&quot; FHD (1920x1080)</td>
<td>None</td>
</tr>
<tr>
<td>15.6&quot; FHD (1920x1080)</td>
<td>None</td>
</tr>
</tbody>
</table>

**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](https://www.calrecycle.ca.gov/Electronics/Consumer)

**Input Device**

**Keyboard**

6-row, multimedia Fn keys, numeric keypad

**Keyboard Backlight**

- White LED backlight
- 4-Zone RGB LED backlight

**Touchpad**

Buttonless Mylar® surface multi-touch touchpad

**Mechanical**

**Dimensions (WxDxH)**

363.06 x 259.61 x 22-24 mm (14.3 x 10.22 x 0.87-0.94 inches)

**Weight**

2.3 kg (5.07 lbs)

**Case Color**

Phantom black

**Surface Treatment**

Painting

**Case Material**

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

**System Lighting**

No system lighting

**Notes:**

1. The system weight varies depending on configurations

**CONNECTIVITY**

**Network**

**Onboard Ethernet**

Gigabit Ethernet

**WLAN + Bluetooth™**

802.11ax 2x2 Wi-Fi + Bluetooth 5.0, M.2 Card

**Ports**

**Standard Ports**

- 1x USB 3.2 Gen 1 (Always On)
• 3x USB 3.2 Gen 1
• 1x USB-C 3.2 Gen 1 (support data transfer and DisplayPort™ 1.2)
• 1x HDMI 2.0
• 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

Physical Locks
Kensington® Security Slot

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 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)
ACCESSORIES

Bundled Accessories

- Lenovo Legion™ M300 RGB Gaming Mouse (USB connector)
- None

CERTIFICATIONS

Green Certifications

- ErP Lot 3
- RoHS compliant