## OVERVIEW

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<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>NOVO button hole</td>
</tr>
<tr>
<td>2.</td>
<td>Card reader</td>
</tr>
<tr>
<td>3.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>4.</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>5.</td>
<td>Power connector *</td>
</tr>
<tr>
<td>6.</td>
<td>USB-C 3.2 Gen 1</td>
</tr>
<tr>
<td>7.</td>
<td>HDMI 1.4b</td>
</tr>
<tr>
<td>8.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
</tbody>
</table>

**Notes:**
- Ports with * are only available on selected models
### PERFORMANCE

**Processor**

**Processor Family**
AMD Ryzen™ 3 / 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 3 4300U</td>
<td>4</td>
<td>4</td>
<td>2.7GHz</td>
<td>3.7GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen 5 4500U</td>
<td>6</td>
<td>6</td>
<td>2.3GHz</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 5 4600U</td>
<td>6</td>
<td>12</td>
<td>2.1GHz</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 4700U</td>
<td>8</td>
<td>8</td>
<td>2.0GHz</td>
<td>4.1GHz</td>
<td>4MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon Graphics</td>
</tr>
<tr>
<td>AMD Ryzen 7 4800U</td>
<td>8</td>
<td>16</td>
<td>1.8GHz</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 Home in S mode
- Windows 10 Pro 64
- FreeDOS
- No operating system

**Graphics**

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Memory Type</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon Graphics</td>
<td>Integrated</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 3840x2160@30Hz) or USB-C (up to 3840x2160@60Hz)

**Chipset**

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

**Memory**

**Max Memory**
- 4GB soldered memory, not upgradable
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable

**Memory Slots**
- Memory soldered to systemboard, no slots (4GB model)
- Memory soldered to systemboard, no slots, dual-channel (8GB or 16GB model)

**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
- Model with 45Wh or 57Wh battery: up to two drives, 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
- Model with 70Wh battery: one drive, 1x M.2 SSD
  - M.2 2242 SSD up to 512GB
  - M.2 2280 SSD up to 1TB

Storage Slot
- Model with 45Wh or 57Wh battery: one 2.5" drive slot + one M.2 slot
  - One 2.5" drive slot, supports 2.5" SATA HDD
  - One M.2 2280 PCIe Gen 3x4 slot, supports M.2 2242/2280 SSD
- Model with 70Wh battery: one M.2 slot
  - One M.2 2280 PCIe Gen 3x4 slot, supports M.2 2242/2280 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&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe NVMe, PCIe 3.0 x2</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
- USB external DVD burner (DVD±RW), 9.5mm high
- None

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

Multi-Media

Audio Chip
- High Definition (HD) Audio

Speakers
- Stereo speakers, 2W x2, Dolby® Audio™

Microphone
- Dual array microphone

Camera
- 720p, with privacy shutter, fixed focus

Battery

Battery
- Integrated Li-Polymer 45Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 95W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 95W AC adapter
- Integrated Li-Polymer 70Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 95W AC adapter

Max Battery Life
- MobileMark® 2014: 11.5 hr (45Wh)
- MobileMark 2014: 14 hr (57Wh)
- MobileMark 2014: 17 hr (70Wh)

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
- 65W USB-C (3-pin) AC adapter
- 65W round tip (3-pin) AC adapter
- 65W round tip (2-pin, wall-mount) AC adapter
- 95W USB-C (3-pin) 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>15.6” FHD</td>
<td>(1920x1080)</td>
<td>None</td>
<td>TN</td>
<td>250 nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>-</td>
<td>45% NTSC</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15.6” FHD</td>
<td>(1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300 nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>-</td>
<td>100% sRGB</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell touch, supports 10-point touch
- 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
- LED backlight
- No support

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

Mechanical

Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium (top), aluminium (bottom) models</td>
<td>356.67 x 233.13 x 16.9-19.1 mm (14.04 x 9.18 x 0.67-0.75 inches)</td>
</tr>
<tr>
<td>Aluminium (top), PC + ABS (bottom) models</td>
<td>356.67 x 233.13 x 17.9-19.9 mm (14.04 x 9.18 x 0.7-0.78 inches)</td>
</tr>
</tbody>
</table>

Weight
1.66 kg (3.66 lbs)

Case Color
- Abyss blue
- Graphite grey
- Light teal
- Platinum grey

Surface Treatment
Anodizing

Case Material
- Aluminium (top), aluminium (bottom)
- Aluminium (top), PC + ABS (bottom)

Notes:
1. The system weight varies depending on configurations
**CONNECTIVITY**

**Network**

**Onboard Ethernet**

No Ethernet

**WLAN + Bluetooth®**

- 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

**Ports**

1. **Standard Ports**
   - 1x USB 3.2 Gen 1
   - 1x USB 3.2 Gen 1 (Always On)
   - 1x USB-C 3.2 Gen 1 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.2)
   - 1x HDMI 1.4b
   - 1x Card reader
   - 1x Headphone / microphone combo jack (3.5mm)

2. **Optional Ports**
   - 1x Power connector (model with plastic bottom)

**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**

- Touch style fingerprint reader on power button
- No fingerprint reader

**BIOS Security**

- Administrator 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)

Notes:
1. When you charge the battery, its temperature must be no lower than 10°C (50°F)

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- ErP Lot 3
- RoHS compliant