# OVERVIEW

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<th>1. USB 3.2 Gen 1</th>
<th>6. HDMI 2.1</th>
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<td>2. E-camera shutter switch</td>
<td>7. Power connector</td>
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<td>3. Ethernet (RJ-45)</td>
<td>8. Thunderbolt 4</td>
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<tr>
<td>4. Thunderbolt 4</td>
<td>9. Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5. 3x USB 3.2 Gen 1 (one Always On)</td>
<td></td>
</tr>
</tbody>
</table>
PERFORMANCE

Processor

Processor Family
11th Generation Intel® Core™ i7 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>Core i7-11800H</td>
<td>8</td>
<td>16</td>
<td>2.3GHz</td>
<td>4.6GHz</td>
<td>24MB</td>
<td>DDR4-3200</td>
<td>Intel UHD Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 10 Pro 64
- Windows 10 Home 64
- Windows 11 Pro 64
- Windows 11 Home 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>Advanced Optimus, Resizable BAR, Dynamic Boost 2.0, 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>Advanced Optimus, Resizable BAR, Dynamic Boost 2.0, DirectX 12</td>
</tr>
</tbody>
</table>

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 5120x2880@60Hz)

Chipset

Chipset
Intel HM570 chipset

Memory

Max Memory[(1)]
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 2242 SSD up to 512GB
- M.2 2280 SSD up to 1TB

Storage Slot
Two M.2 slots
- One M.2 2280 PCIe Gen 3x4 slot, supports M.2 2242/2280 SSD
• One M.2 2280 PCIe Gen 4x4 slot, supports M.2 2242/2280 SSD

### Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</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>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe, PCIe 3.0 x4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
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<td>PCIe NVMe, PCIe 4.0 x4</td>
<td>-</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: 7.3 hr

Notes:

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**

- 230W slim tip (3-pin) AC adapter
- 300W slim tip (3-pin) 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>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, 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**
- Blue backlight
- White backlight
- 4-Zone RGB backlight

**Touchpad**
Buttonless Mylar® surface multi-touch touchpad

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All models</td>
<td>356 x 260.2-264.2 x 21.7-26.15 mm (14.02 x 10.24-10.40 x 0.85-1.03 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
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<tr>
<th>Models</th>
<th>Weight</th>
</tr>
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<tbody>
<tr>
<td>All models</td>
<td>2.3 kg (5.07 lbs)</td>
</tr>
</tbody>
</table>

**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 (Stingray model)
- “Y” logo with white lighting on top cover (Storm Grey model)

**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**
- 3x USB 3.2 Gen 1
• 1x USB 3.2 Gen 1 (Always On)
• 1x Thunderbolt™ 4 / USB4™ 40Gbps (support data transfer and DisplayPort™ 1.4)
• 1x Thunderbolt 4 / USB4 40Gbps (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

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)

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

CERTIFICATIONS

Green Certifications
Green Certifications
• ErP Lot 3
• RoHS compliant

Other Certifications
Other Certifications
TÜV Rheinland® Low Blue Light (Hardware Solution)

• Feature with “**” means that only one offering listed under the feature is configured on selected models.
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