PERFORMANCE

Processor

Processor Family
10th Generation Intel® Core™ i5 / i7 / i9 Processor or Intel Xeon® W 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 i7-10750H</td>
<td>6</td>
<td>12</td>
<td>2.6GHz</td>
<td>5.0GHz</td>
<td>12MB</td>
<td>DDR4-2933</td>
<td>Intel UHD Graphics</td>
</tr>
<tr>
<td>Core i7-10850H</td>
<td>6</td>
<td>12</td>
<td>2.7GHz</td>
<td>5.1GHz</td>
<td>12MB</td>
<td>DDR4-2933</td>
<td>Intel UHD Graphics</td>
</tr>
<tr>
<td>Core i7-10875H</td>
<td>8</td>
<td>16</td>
<td>2.3GHz</td>
<td>5.1GHz</td>
<td>16MB</td>
<td>DDR4-2933</td>
<td>Intel UHD Graphics</td>
</tr>
<tr>
<td>Core i9-10885H</td>
<td>8</td>
<td>16</td>
<td>2.4GHz</td>
<td>5.3GHz</td>
<td>16MB</td>
<td>DDR4-2933</td>
<td>Intel UHD Graphics</td>
</tr>
<tr>
<td>Xeon W-10855M</td>
<td>6</td>
<td>12</td>
<td>2.8GHz</td>
<td>5.1GHz</td>
<td>12MB</td>
<td>DDR4-2933</td>
<td>Intel UHD Graphics</td>
</tr>
</tbody>
</table>

Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- Windows 10 Pro 64 for Workstations
- Fedora Linux
- Red Hat Enterprise Linux (certified only)
- Ubuntu Linux LTS
- 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>Intel UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® Quadro® T1000 Max-Q</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>DirectX 12</td>
</tr>
<tr>
<td>NVIDIA Quadro T2000 Max-Q</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>DirectX 12</td>
</tr>
</tbody>
</table>

Monitor Support

Supports up to 4 independent displays via native display and 3 external monitors; supports external monitors via HDMI® (up to 4K@60Hz) or Thunderbolt™ (up to 5K@60Hz)

Chipset

Intel WM490 chipset

Memory

Memory Type
- DDR4-2933 ECC
- DDR4-2933 non-ECC

Notes:
- Non-ECC memory is actually DDR4-3200 but may run at DDR4-2933 due to processor limitation

Memory Slots
Two DDR4 DIMM slots, dual-channel capable

Memory Protection
ECC on models with ECC DIMMs and Xeon processor

Max Memory
Up to 64GB

Notes:
- 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 2280 SSD
• M.2 2280 SSD up to 2TB each

RAID
RAID 0/1 support

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 2280 SSD</td>
<td>PCIe NVMe</td>
<td>-</td>
<td>Opal2</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Removable Storage
Optical
Not Support
Card Reader
SD card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3286 codec

Speakers
Stereo speakers, Dolby® Atmos® sound system

Microphone
• Dual array microphone, far-field
• Not configured

Camera
• 720p, with ThinkShutter, fixed focus
• IR & 720p, with ThinkShutter, fixed focus
• Not configured

Battery
Integrated Li-Polymer 80Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 135W AC adapter

Max Battery Life
MobileMark® 2014: 15.9 hr
MobileMark 2018: 12 hr

Notes:
• All battery life claims are approximate maximum and based on results using the MobileMark 2014 and/or MobileMark 2018 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
• 135W slim tip AC adapter
• 170W 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>15.6&quot;</td>
<td>UHD</td>
<td>Multi-</td>
<td>OLED</td>
<td>SDR 400nit, Anti-</td>
<td>16:9</td>
<td>1000000:1</td>
<td>100%</td>
<td>170°</td>
<td>Dolby</td>
<td></td>
</tr>
</tbody>
</table>
### Notes:
- **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)

### Color Calibration
- X-Rite Pantone factory color calibration (UHD display)
- Not configured

### Touchscreen
- On-cell touch, supports 10-point touch
- Non-touch

### Input Device
- **Pen**
  - Lenovo Pen Pro
  - None
- **Keyboard**
  6-row, spill-resistant, multimedia Fn keys with Unified Communications controls
- **Keyboard Backlight**
  LED backlight
- **UltraNav™**
  3-button TrackPoint® pointing device and 2-button glass surface multi-touch touchpad

### Mechanical

#### Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-touch models</td>
<td>361.8 x 245.7 x 18.4 mm (14.24 x 9.67 x 0.72 inches)</td>
</tr>
<tr>
<td>Touch models</td>
<td>361.8 x 245.7 x 18.7 mm (14.24 x 9.67 x 0.74 inches)</td>
</tr>
</tbody>
</table>

#### Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-touch</td>
<td>1.7 kg (3.75 lbs)</td>
</tr>
<tr>
<td>Touch</td>
<td>1.8 kg (3.97 lbs)</td>
</tr>
</tbody>
</table>

#### Case Color
- Black

#### Case Material
- Carbon Fiber (Black) + PC + PPS Hybrid (top), Aluminum + PC + ABS (bottom)
- Carbon Fiber (Woven pattern) + PC + PPS Hybrid (top), Aluminum + PC + ABS (bottom)

### CONNECTIVITY

#### Network
- Onboard Ethernet
• Lenovo USB-C to Ethernet Adapter
• Not configured

**WLAN + Bluetooth™**
• Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card
• Not configured

**WWAN**
• Integrated Mobile Broadband 4G LTE-A, Fibocom L860-GL, MIMO 2x2, M.2 card
• Not configured

**SIM Card**
Not support

**NFC**
Not support

**Ports**

**Standard Ports**
• 2x USB 3.2 Gen 1 (one Always On)
• 2x USB-C 3.2 Gen 2 / Thunderbolt 3 (support data, PD and DP)
• 1x HDMI 2.0
• 1x SD card reader
• 1x headphone / microphone combo jack (3.5mm)
• 1x Security keyhole

**Optional Ports**
1x Nano-SIM card slot (WWAN models)

**Monitor Cable**
• Lenovo HDMI to VGA Monitor Adapter
• Lenovo USB-C to DisplayPort™ Adapter
• Lenovo USB-C to VGA Adapter

**SECURITY & PRIVACY**

**Security**

**Security Chip**
• Discrete TPM 2.0, TCG certified
• Firmware TPM 2.0 integrated in chipset
• Disabled (in some regions)

**Physical Locks**

**Kensington® Security Slot**

**Smart Card Reader**
Not Support

**Fingerprint Reader**
Touch style fingerprint reader on palm rest, match-on-chip

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

**Other Security**
• (Optional) ThinkShutter camera cover
• (Optional) IR camera for Windows Hello

**MANAGEABILITY**
System Management
- Intel vPro Technology, DASH
- None

SERVICE

Warranty
Base Warranty
- 1-year depot service
- 1-year limited onsite service
- 1-year depot with 2-year system board service
- 1-year + 2-year depot service
- 1-year + 2-year limited onsite service
- 3-year (1-yr battery) depot service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories
Not Support

CERTIFICATIONS

Green Certifications
- EPEAT™ Gold
- ENERGY STAR® 8.0
- RoHS

Other Certifications
Mil-Spec Test
MIL-STD-810G military test passed

ISV Certifications
Please visit www.thinkworkstations.com/isv-certifications/