## OVERVIEW

<table>
<thead>
<tr>
<th>Number</th>
<th>Port Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power button</td>
</tr>
<tr>
<td>2</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>3</td>
<td>USB 3.2 Gen 2</td>
</tr>
<tr>
<td>4</td>
<td>USB 3.2 Gen 2</td>
</tr>
<tr>
<td>5</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>6</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>7</td>
<td>3x Audio ports (3.5mm)</td>
</tr>
<tr>
<td>8</td>
<td>Serial *</td>
</tr>
<tr>
<td>9</td>
<td>2x PS/2 ports (keyboard / mouse)</td>
</tr>
<tr>
<td>10</td>
<td>2x USB 2.0</td>
</tr>
<tr>
<td>11</td>
<td>4x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>12</td>
<td>Ethernet (1GbE RJ-45)</td>
</tr>
</tbody>
</table>

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

Processor

Processor Family
Up to one AMD Ryzen™ Threadripper PRO 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 Threadripper PRO 3945WX</td>
<td>12</td>
<td>24</td>
<td>4.0GHz</td>
<td>4.3GHz</td>
<td>6MB L2 / 64MB L3</td>
<td>DDR4-3200</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen Threadripper PRO 3955WX</td>
<td>16</td>
<td>32</td>
<td>3.9GHz</td>
<td>4.3GHz</td>
<td>8MB L2 / 64MB L3</td>
<td>DDR4-3200</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen Threadripper PRO 3975WX</td>
<td>32</td>
<td>64</td>
<td>3.5GHz</td>
<td>4.2GHz</td>
<td>16MB L2 / 128MB L3</td>
<td>DDR4-3200</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen Threadripper PRO 3995WX</td>
<td>64</td>
<td>128</td>
<td>2.7GHz</td>
<td>4.2GHz</td>
<td>32MB L2 / 256MB L3</td>
<td>DDR4-3200</td>
<td>-</td>
</tr>
</tbody>
</table>

Processor Sockets

1x Socket SP3

Operating System

Operating System**

- Windows® 10 Pro 64
- Ubuntu Linux LTS
- No operating system

Graphics

Discrete Graphics Support

Supports up to two NVIDIA® Quadro® RTX 8000 with NVLink

Discrete Graphics Offering**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>SLI / NVlink</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quadro P620</td>
<td>2GB GDDR5</td>
<td>40W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>Quadro P1000</td>
<td>4GB GDDR5</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>Quadro P2200</td>
<td>5GB GDDR5</td>
<td>75W</td>
<td>4x DP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA T600</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA Ti1000</td>
<td>4GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>Quadro RTX 4000</td>
<td>8GB GDDR6</td>
<td>160W</td>
<td>3x DP 1.4, 1x VirtualLink</td>
<td>None</td>
</tr>
<tr>
<td>Quadro RTX 5000</td>
<td>16GB GDDR6</td>
<td>265W</td>
<td>4x DP 1.4, 1x VirtualLink</td>
<td>NVLink</td>
</tr>
<tr>
<td>Quadro RTX 6000</td>
<td>24GB GDDR6</td>
<td>295W</td>
<td>4x DP 1.4, 1x VirtualLink</td>
<td>NVLink</td>
</tr>
<tr>
<td>Quadro RTX 8000</td>
<td>48GB GDDR6</td>
<td>295W</td>
<td>4x DP 1.4, 1x VirtualLink</td>
<td>NVLink</td>
</tr>
<tr>
<td>NVIDIA RTX A4000</td>
<td>16GB GDDR6 with ECC</td>
<td>140W</td>
<td>4x DP 1.4a</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA RTX A5000</td>
<td>24GB GDDR6 with ECC</td>
<td>230W</td>
<td>4x DP 1.4a</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA RTX A6000</td>
<td>48GB GDDR6 with ECC</td>
<td>300W</td>
<td>4x DP 1.4a</td>
<td>None</td>
</tr>
<tr>
<td>Quadro GV100</td>
<td>32GB HBM2</td>
<td>250W</td>
<td>4x DP 1.4</td>
<td>NVLink</td>
</tr>
<tr>
<td>AMD Radeon™ Pro WX 3200</td>
<td>4GB GDDR5</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>AMD Radeon Pro W5500</td>
<td>8GB GDDR6</td>
<td>125W</td>
<td>4x DP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>AMD Radeon Pro W5700</td>
<td>8GB GDDR6</td>
<td>205W</td>
<td>5x miniDP 1.4, 1x USB-C</td>
<td>None</td>
</tr>
<tr>
<td>AMD Radeon Pro VII</td>
<td>16GB HBM2</td>
<td>250W</td>
<td>6x DP 1.4</td>
<td>None</td>
</tr>
</tbody>
</table>

Monitor Support
Monitor Support
Supports multiple displays via discrete graphics, the number of maximum monitors supported depends on the graphic card in use.

Chipset
Chipset
AMD WRX80

Memory
Max Memory\(^1\)
Up to 1TB (8x 128GB DDR4-3200 RDIMMs)
Memory Type
DDR4-3200 RDIMM ECC
Memory Slots
8 DDR4 DIMM slots, 8 channels capable
Memory Protection
ECC

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 5x 3.5” SATA HDD + 9x M.2 SSD
- 3.5” HDD up to 4TB each
- M.2 SSD up to 2TB each
Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB / 2TB / 4TB</td>
</tr>
<tr>
<td>M.2 PCIe® SSD</td>
<td>PCIe NVMe*, PCIe 3.0</td>
<td>-</td>
<td>256GB / 512GB / 1TB / 2TB</td>
</tr>
<tr>
<td>M.2 PCIe SSD</td>
<td>PCIe NVMe, PCIe 4.0</td>
<td>-</td>
<td>256GB / 512GB / 1TB / 2TB</td>
</tr>
</tbody>
</table>

Storage Controllers

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated NVMe controller</td>
<td>Standard</td>
<td>PCIe NVMe</td>
<td>0/1/10/5</td>
<td>None</td>
</tr>
<tr>
<td>Integrated SATA controller</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>0/1/10/5</td>
<td>None</td>
</tr>
</tbody>
</table>

Removable Storage
Optical Support
Optional one 9.0mm optical drive, DVD-ROM or DVD±RW
Card Reader
- 15-in-1 card reader
- No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC4050H codec

Power Supply
Power Supply

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000W Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
</tbody>
</table>
DESIGN

Mechanical

Form Factor
Tower (33L)

Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All models</td>
<td>165 x 460 x 446 mm (6.5 x 18.1 x 17.6 inches, with feet)</td>
</tr>
</tbody>
</table>

Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>All models</td>
<td>24 kg (52.91 lbs, maximum configuration)</td>
</tr>
</tbody>
</table>

Bays

- 2x 3.5" disk bay (standard)
- 3x 3.5" disk bay (optional):
  - 2 bays come with 3rd disk or Storage Bay Upgrade Kit
  - 1 bay via flex bay

Flex Bays

1x flex bay, supports one of the following:
- Front Access Storage Enclosure
- 5.25" Slim ODD and HDD cage

M.2 Slots

Up to 11x M.2 SSD:
- 2 via onboard slots
- 8 via Quad M.2 to PCIe adapters (only supports PCIe 3.0 SSD)
- 1 via Single M.2 to PCIe adapter (only supports PCIe 3.0 SSD)

Expansion Slots

- Two PCIe 4.0 x8
- Four PCIe 4.0 x16

Expansion Slots Offering

Slot 1: PCIe 4.0 x16, full height, full length, by CPU
Slot 2: PCIe 4.0 x8, full height, full length, by CPU
Slot 3: PCIe 4.0 x16, full height, full length, by CPU
Slot 4: PCIe 4.0 x16, full height, full length, by CPU
Slot 5: PCIe 4.0 x16, full height, full length, by CPU
Slot 6: PCIe 4.0 x8, full height, full length, by IOH

CONNECTIVITY

Network

Onboard Ethernet
10GbE Ethernet, Marvell AQtion AQN-107, 1x 10GbE RJ-45

Optional Ethernet
Additional Ethernet options via PCIe adapter

WLAN + Bluetooth®
- Intel® Wireless-AC 9260, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth 5.1
- No WLAN and Bluetooth

Ports

Front Ports
- 1x USB 3.2 Gen 2
- 1x USB 3.2 Gen 2 (Always On and fast charge)
- 2x USB-C 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
Rear Ports

- 2x USB 2.0
- 4x USB 3.2 Gen 2
- 2x PS/2 ports (keyboard / mouse)
- 1x Ethernet (10GbE RJ-45)
- 1x line-in (3.5mm)
- 1x line-out (3.5mm)
- 1x microphone (3.5mm)

Optional Rear Ports***

- 1x Thunderbolt™ 3
- 1x serial

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. For video ports on discrete graphics, please see graphics section

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks

- (Optional) Access Panel Lock Kit with Common Key
- (Optional) Access Panel Lock Kit with Unique Key
- Kensington® Security Slot

Chassis Intrusion Switch
Chassis intrusion switch

BIOS Security

- Administrator password
- Power-on password

MANAGEABILITY

System Management

System Management
AMD Pro Manageability

Diagnostic

Diagnostic

- Photo-audio transfer with Lenovo PC Diagnostics for Android™ and iOS
- ThinkStation® Diagnostics for Windows
- Front 4-digit diagnostic
- Lenovo UEFI Bootable Diagnostics

SERVICE

Warranty

Base Warranty[3]
3-year limited onsite service with 9x5 NBD (for most models)
Notes:
1. More information of warranty policy, please access https://pcsupport.lenovo.com/warranty

ENVIROMENTAL

Operating Environment

Temperature
• Operating: 10°C (50°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

CERTIFICATIONS

Green Certifications

EPEAT™ Silver
• ENERGY STAR® 8.0 (on model 30E00006US)
• GREENGUARD®
• RoHS compliant

ISV Certifications

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

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

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

• Lenovo reserves the right to change specifications or other product information without notice. Lenovo is not responsible for photographic or typographical errors. LENOVO PROVIDES THIS PUBLICATION “AS IS,” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore this disclaimer may not apply to you.

• The specifications on this page may not be available in all regions, and may be changed or updated without notice.