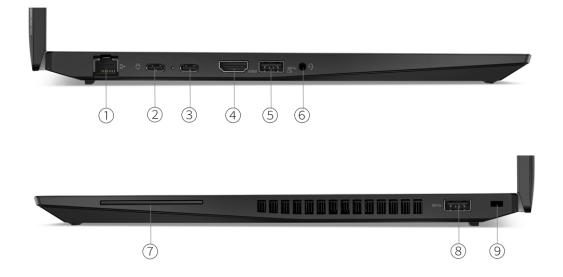
# **OVERVIEW**



1. Ethernet (RJ-45)	6. Headphone / microphone combo jack (3.5mm)
2. USB-C 3.2 Gen 2	7. Smart card reader *
3. USB-C 3.2 Gen 2	8. USB 3.2 Gen 1
4. HDMI	9. Security keyhole
5. USB 3.2 Gen 1 (Always On)	

Notes:

- Items with \* are only available on selected models
- Two USB-C 3.2 Gen 2 ports support data transfer, Power Delivery and DisplayPort 1.4

# PERFORMANCE

# **Processor**

## **Processor Family**

AMD Ryzen<sup>™</sup> 5 / 7 PRO 6000 Series Processor

### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
AMD Ryzen 5 PRO 6650U	6	12	2.9GHz	4.5GHz	3MB L2 / 16MB L3	AMD Radeon™ 660M Graphics
AMD Ryzen 7 PRO 6850U	8	16	2.7GHz	4.7GHz	4MB L2 / 16MB L3	AMD Radeon 680M Graphics

# **Operating System**

### Operating System<sup>[1][2]</sup>

- Windows® 11 Pro
- Windows 11 Home
- Windows 11 Home Single Language
- Windows 11 DG Windows 10 Pro 64
- Fedora Linux
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 8.6 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)

#### Notes:

- 1. Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.
- 2. As preloaded OS, Ubuntu Linux will be available in September 2022

# Graphics

### Graphics\*\*[1]

Graphics Type		Memory	TGP	Key Features
AMD Radeon 660M	Integrated	Shared	Share CPU TDP	DirectX® 12
AMD Radeon 680M	Integrated	Shared	Share CPU TDP	DirectX 12

Notes:

1. Integrated AMD Radeon 660M / 680 graphics use system memory as dedicated video memory, from 512MB to 8GB (8GB video memory requires system memory >= 32GB)

# Monitor Support

## **Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)

- HDMI supports up to 3840x2160@60Hz
- USB-C supports up to 5120x2880@60Hz (USB-C to DP)

# Chipset

# Chipset

AMD SoC (System on Chip) platform

# Memory

## Max Memory<sup>[1]</sup>

- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

#### **Memory Slots**

Memory soldered to systemboard, no slots, dual-channel

#### Memory Type

## LPDDR5-6400 non-ECC

#### Notes:

1. The max memory is based on the test results with current Lenovo<sup>®</sup> memory offerings. The system may support more memory as the technology develops.

## Storage

### Storage Support<sup>[1]</sup>

One drive, up to 2TB M.2 2280 SSD

#### Storage Slot

One M.2 2280 PCIe<sup>®</sup> 4.0 x4 slot

#### Storage Type\*\*

Disk Type	Interface	RPM	Offering	Security
M.2 2280 SSD	PCIe NVMe <sup>®</sup> , PCIe 4.0 x4	-	256GB / 512GB / 1TB	Opal 2.0
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4 Performance	-	512GB / 1TB / 2TB	Opal 2.0

Notes:

1. The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.

# **Removable Storage**

#### **Card Reader**

No card reader

## **Multi-Media**

#### **Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

#### Speakers

Stereo speakers, 2W x2, Dolby<sup>®</sup> Audio™

#### Microphone

- Dual-microphone array, far-field, Dolby Voice
- No microphone

#### Camera\*\*

- HD 720p, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- FHD 1080p + IR, with privacy shutter, fixed focus
- No camera

# Battery

#### Battery\*\*

- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 86Wh battery

## **Power Adapter**

#### Power Adapter\*\*[1]

- 65W USB-C (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

## Notes:

1. AC adapter offerings depend on the country.

# DESIGN

# Display

## Display\*\*[1]

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle (L/R/U/D)	Key Features
16″	WUXGA (1920x1200)	None	IPS	300 nits	Anti- glare	16:10	800:1	45% NTSC	85°/85°/85°/85°	85.4% screen to body ratio, DC dimming
16″	WUXGA (1920x1200)	None	IPS	400 nits	Anti- glare	16:10	1000:1	100% sRGB	89°/89°/89°/89°	ICC Template color calibration, Low power, Low blue light, TUV Eye Comfort, 85.4% screen to body ratio, DC dimming
16″	WUXGA (1920x1200)	Multi- touch	IPS	300 nits	Anti- glare	16:10	800:1	45% NTSC	85°/85°/85°/85°	85.4% screen to body ratio, DC dimming
16″	WUXGA (1920x1200)	Multi- touch	IPS	500 nits	Anti- glare	16:10	1000:1	100% sRGB	85°/85°/85°/85°	ThinkPad® Privacy Guard, Low Blue Light, TUV Eye Comfort, 85.4% screen to body ratio, DC dimming
16″	WQXGA (2560x1600)	None	IPS	400 nits	Anti- glare	16:10	1200:1	100% sRGB	85°/85°/85°/85°	Dolby Vision <sup>™</sup> , X- Rite® Pantone® Factory Color Calibration (ΔE<2), Low blue light, TUV Eye Comfort, 85.4% screen to body ratio, DC dimming

#### **Color Calibration\*\***

• X-Rite Pantone factory color calibration (WQXGA display)

• ICC Template color calibration (selected WUXGA display)

• No color calibration

#### Touchscreen

- Capacitive-type on-cell multi-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, spill-resistant, multimedia Fn keys with Unified Communications controls

#### Keyboard Backlight

- LED backlight
- Non-backlight

#### UltraNav™

3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 67 x 115 mm (2.64 x 4.53 inches)

# **Mechanical**

#### Dimensions (WxDxH)[1]

361.98 x 255.5 x 20.5 mm (14.25 x 10.06 x 0.81 inches)

### Weight<sup>[2][3]</sup>

Models	Weight
Models with black cover	Starting at 1.81 kg (3.99 lbs)
Models with grey cover	Starting at 1.85 kg (4.08 lbs)

#### Case Color\*\*[4]

- Black
- Storm grey

#### Case Material\*\*

- Models with black cover: PC 50% GF + PC 20% CF (top), PPS (bottom)
- Models with grey cover: aluminium (top), PPS (bottom)

#### Notes:

- 1. The system dimensions may vary depending on configurations.
- 2. The system weight is approximate and based on results in Lenovo lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
- 3. Starting weight is based on minimal configuration (integrated graphics, lowest capacity battery, no WWAN, etc).
- 4. Storm grey case will be available on September 2022

# CONNECTIVITY

### **Network**

#### Ethernet\*\*

- Gigabit Ethernet, supports Wake-on-LAN
- Gigabit Ethernet, supports Wake-on-LAN and AMD Pro Manageability

#### WLAN + Bluetooth®\*\*[1]

- AMD Wi-Fi<sup>®</sup> 6E RZ616, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1
- Qualcomm<sup>®</sup> Wi-Fi 6E NFA725A, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1

#### WWAN\*\*

- Wireless WAN upgradable to 4G (with antenna ready)
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- No support

#### SIM Card

- Gemalto eSIM card (physical)
- No SIM card inbox
- NFC
- Near Field Communication
- No support

Notes:

1. Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitations.

## **Ports**<sup>III</sup>

#### Standard Ports

- 2x USB 3.2 Gen 1 (one Always On)
- 2x USB-C 3.2 Gen 2 (support data transfer, Power Delivery and DisplayPort™ 1.4)
- 1x HDMI, up to 4K/60Hz
- 1x Ethernet (RJ-45)
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Security keyhole

#### **Optional Ports**\*\*\*

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

## 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;

Lenovo

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™ 3/4: 40 Gbit/s

# Docking

### Docking

Various docking solutions supported via USB-C. For more compatible docking solutions, please visit <u>Docking for ThinkPad P16s Gen 1 (AMD)</u>

# **Monitor Cable**

#### Monitor Cable\*\*\*

- Lenovo HDMI to VGA Monitor Adapter
- Lenovo USB-C to VGA Adapter
- Lenovo USB-C to DisplayPort Adapter
- No monitor cable

# **SECURITY & PRIVACY**

# Security

#### Security Chip\*\*[1]

- Discrete TPM 2.0, TCG certified
- Microsoft<sup>®</sup> Pluton TPM 2.0 integrated in SoC

#### Physical Locks

Kensington® Nano Security Slot™, 2.5 x 6 mm

#### Smart Card Reader

- Smart card reader
- No smart card reader

## **Fingerprint Reader**

- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

### **BIOS Security**

- Power-on password
- Supervisor password
- NVMe password
- Self-healing BIOS

### **Other Security**

- (Optional) Camera privacy shutter
- (Optional) IR camera for Windows Hello

#### Notes:

1. Discrete TPM 2.0 is for special bid only.

# MANAGEABILITY

## **System Management**

### System Management

- AMD Pro Manageability
- Non-DASH
- NOIFDASH

# SERVICE

## **Warranty**<sup>III</sup>

#### Base Warranty\*\*

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)

- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

#### Notes:

 The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to <u>https://smartfind.lenovo.com/</u>. To learn more details of warranty policy, please access <u>https://pcsupport.lenovo.com/warranty</u>.

# ENVIRONMENTAL

# **Sustainability**

## Material

97% PCC recycled plastic used in speaker enclosure97% PCC recycled plastic used in the 52.5Wh battery95% PCC recycled plastic used in standard 65W adapterLow-temperature solder90% recycled and/or sustainable packaging

Operating Environment

#### Temperature<sup>[1]</sup>

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

#### Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 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).

# ACCESSORIES

## **Bundled Accessories**

#### Bundled Accessories

- Lenovo USB-C to Ethernet Adapter (1Gbps)
- None

# **CERTIFICATIONS**

# **Green Certifications**<sup>III</sup>

#### Green Certifications<sup>[2]</sup>

- EPEAT™ Gold
- ENERGY STAR<sup>®</sup> 8.0
- TCO Certified 9.0
- RoHS compliant

#### Notes:

- 1. The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration.
- 2. EPEAT is registered where applicable, please see https://www.epeat.net for registration status by country.

# **Other Certifications**

#### **Mil-Spec Test**

MIL-STD-810H military test passed

#### Other Certifications

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# ThinkPad P16s Gen 1 (AMD)

- (Optional) TÜV Rheinland<sup>®</sup> Low Blue Light
- (Optional) TÜV Rheinland Eye Comfort Certification

# **ISV Certifications**

### **ISV Certifications**

Please visit ISV certifications for Lenovo Workstations

- 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.
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