

# **OVERVIEW**



1. Smart card reader *	6. Ethernet (GbE RJ-45)
2. Nano-SIM card slot *	7. Kensington Nano Security Slot
3. Headphone / microphone combo jack (3.5mm)	8. HDMI
4. SD Express 7.0 card reader	9. 2x Thunderbolt 4
5. USB-A (USB 10Gbps)	10. USB-A (USB 10Gbps), Always On

#### Notes

• Items with \* are only available on selected models



## **PERFORMANCE**

### **Processor**

### **Processor Family**

Intel $^{\circ}$  H Series Core Ultra 5 / 7 / 9 Processor (Series 2); supports up to 16 cores; up to 5.4GHz; base TDP ratings of up to 60W (without discrete GPU loading) / 45W (with discrete GPU loading)

### Processor\*\*[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	Intel® vPro® Eligibility	NPU	Overall TOPS
Core Ultra 7 255H	16 (6 P- core + 8 E-core + 2 LPE- core)	16	P-core 2GHz / E-core 1.5GHz / LPE-core 700MHz	P-core 5.1GHz / E-core 4.4GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ 140T GPU, up to 74 TOPS	-	Intel® AI Boost, up to 13 TOPS	Up to 96 TOPS
Core Ultra 7 265H	16 (6 P- core + 8 E-core + 2 LPE- core)	16	P-core 2.2GHz / E-core 1.7GHz / LPE-core 700MHz	P-core 5.3GHz / E-core 4.5GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ 140T GPU, up to 75 TOPS	Intel® vPro® Enterprise	Intel® AI Boost, up to 13 TOPS	Up to 97 TOPS
Core Ultra 9 285H	16 (6 P- core + 8 E-core + 2 LPE- core)	16	P-core 2.9GHz / E-core 2.7GHz / LPE-core 1GHz	P-core 5.4GHz / E-core 4.5GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ 140T GPU, up to 77 TOPS	Intel® vPro® Enterprise	Intel® AI Boost, up to 13 TOPS	Up to 99 TOPS

#### Notes:

[1] Intel® vPro® platform requires an eligible Intel® processor, a supported operating system, Intel® LAN and / or WLAN silicon, firmware enhancements, and other hardware and software necessary to deliver the manageability use cases, security features, system performance, and stability that define the platform. For detailed vPro® support information, please refer to the System Management section.

# Al (Artificial Intelligence)

### **AI PC Category**

Al-Ready Workstations

NPU

Integrated Intel® AI Boost, up to 13 TOPS

# **Operating System**

## **Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Ubuntu Linux
- Red Hat Enterprise Linux 10 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)[1]

#### Notes:

[1] Red Hat Enterprise Linux 10 certification will be available in November 2025.

### **Graphics**

### Graphics

Graphics	Туре	Memory	TGP
NVIDIA® RTX PRO 500 Blackwell Generation 6GB GDDR7 Laptop GPU	Discrete	6GB GDDR7	45W (non-boost); 60W (boost)
NVIDIA® RTX PRO 1000 Blackwell Generation 8GB GDDR7 Laptop GPU	Discrete	8GB GDDR7	45W (non-boost); 60W (boost)



NVIDIA® RTX PRO 2000 Blackwell Generation 8GB GDDR7 Laptop GPU	Discrete	8GB GDDR7	45W (non-boost); 60W (boost)
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# **Monitor Support**

#### **Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ 4 and HDMI®). Max resolution for multiple external display:

• 3x 3840x2160@60Hz (Thunderbolt™ 4 and HDMI®)

Max resolution for single external display:

- Thunderbolt<sup>™</sup> 4 supports up to 7680x4320@60Hz
- HDMI® supports up to 7680x4320@60Hz

### Chipset

#### Chipset

Intel® SoC (System on Chip) platform

### Memory

# **Max Memory**

Up to 96GB (2x 48GB DDR5 CSODIMM)

#### **Memory Slots**

Two DDR5 SODIMM / CSODIMM slots, dual-channel capable

### Memory Type\*\*

- DDR5-5600 SODIMM, non-ECC, maximum transfer speeds of up to 5600 MT/s, 16GB / 32GB memory modules are available
- DDR5-6400 CSODIMM, non-ECC, maximum transfer speeds of up to 6400 MT/s, 32GB / 48GB memory modules are available

# **Storage**

### Max Storage Support[1]

Up to two M.2 2280 Gen 5 Performance SSD; up to 4TB total, 2TB each

### Storage Slot<sup>[2]</sup>

Two M.2 2280 PCIe® 4.0 x4 slots

# **Storage Type**

Disk Type	Interface	Offering	Security
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	512GB / 1TB	Opal 2.0
M.2 2280 SSD	PCIe® NVMe®, PCIe® 5.0 x4 Performance[3]	512GB / 1TB / 2TB	Opal 2.0

### RAID

RAID 0/1 support

#### Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

[2] The actual data transfer rate of the following PCIe® interface also depends on the capabilities of the connected PCIe® device. The listed values represent theoretical maximums.

PCle<sup>®</sup> 3.0 (x2 / x4): 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps);

 $PCle^{\circ} 4.0 (x2 / x4): 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps);$ 

PCIe<sup>®</sup> 5.0 (x2 / x4): 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps).

[3] Gen 5 SSD on M.2 PCle® 4.0 slot will run on PCle® 4.0 protocols.

## Removable Storage

### Card Reader

SD Express 7.0 card reader

### Multi-Media

### **Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec



#### **Speakers**

Stereo speakers, 2W x2, Dolby Audio™

#### Microphone

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

#### Camera\*\*

- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus, temporal noise reduction
- 5.0MP with privacy shutter, fixed focus, temporal noise reduction
- No camera

# **Battery**

### **Battery**

90Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr)

# **Power Adapter**

### Power Adapter[1]

140W USB-C® GaN (3-pin) AC adapter, supports PD 3.1, 100-240V, 50-60Hz

Notes:

[1] AC adapter offerings depend on the country.

# **DESIGN**

# **Display**

### Display\*\*

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16"	WUXGA (1920x1200)	Non- touch	IPS	400nits	Anti-glare	16:10	1200:1	45% NTSC	-	89° / 89° /	87.7% screen to body ratio, TÜV Low Blue Light, AICCP color calibration, DC dimming
16"	WUXGA (1920x1200)	Non- touch	IPS	500nits	Anti-glare	16:10	1200:1	100% sRGB	-	85° / 85° / 85° / 85°	87.7% screen to body ratio, AICCP color calibration, Low power, TÜV Low Blue Light, Eyesafe® 2.0 Certified, DC dimming
16"	WQUXGA (3840x2400)	Add- on Film Touch	OLED	400nits	Anti- glare, anti- reflection, anti- smudge	16:10	100,000:1	100% DCI- P3	60Hz	87.5° / 87.5° / 87.5° / 87.5°	87.7% screen to body ratio, Eyesafe® Certified 2.0, TÜV Low Blue Light, Dolby Vision®, X-Rite® Factory Color Calibration, PWM dimming

Touchscreen

# ThinkPad P16v Gen 3 (Intel)



- Add-on Film Touch, supports 10-point touch (OLED models)
- Non-touch

### Screen-to-Body Ratio

87.7%

#### Color Calibration\*\*

- AICCP color calibration (WUXGA display)
- X-Rite® factory color calibration (OLED display)

### **Input Device**

#### Pen

No support

#### Keyboard

6-row, spill-resistant, multimedia Fn keys, numeric keypad, Copilot key

#### **Keyboard Backlight**

- · LED backlight
- · Non-backlight

#### UltraNav™

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

### Mechanical

#### Dimensions (WxDxH)[1]

361.5 x 248.6 x 12.8 / 19.55 (front / rear), 26.3 (maximum) mm 14.23 x 9.79 x 0.50 / 0.77 (front / rear), 1.04 (maximum) inches

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

Around 2.1 kg (4.6 lbs)

#### **Case Color**

Black

### **Case Material**

Aluminium (top), PC-ABS (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.

### CONNECTIVITY

### **Network**

### WLAN + Bluetooth®\*\*[1]

- Intel® Wi-Fi® 7 BE201, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4
- Intel® Wi-Fi® 7 BE201, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4, Intel® vPro® technology support

#### WWAN\*\*

- Wireless WAN upgradable to 5G (with antenna ready)
- Rolling Wireless RW350R-GL, 5G Sub-6 GHz, M.2 card, with embedded eSIM functionality<sup>[2]</sup>
- No support

### SIM Card

No physical SIM card inbox

### Ethernet\*\*

- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

### **NFC**

- · Near Field Communication
- No support



#### Notes:

[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] RW350R-GL is only available in EMEA, ANZ. and Japan.

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

#### **Standard Ports**

- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (GbE RJ-45)
- 1x SD Express 7.0 card reader
- 1x Security keyhole
- 2x Thunderbolt<sup>™</sup> 4, with USB PD 3.1, 140W input / 15W output

#### **Optional Ports**

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

#### 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;

USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;

USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;

Thunderbolt™ 3/4: 40 Gbit/s.

# **SECURITY & PRIVACY**

### Security

### **Security Chip**

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

#### **Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

#### **Smart Card Reader**

- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

#### **Fingerprint Reader**

Touch style fingerprint reader integrated in power button, match-on-chip

### **BIOS Security**

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

#### **Other Security**

- Bottom cover tamper detection
- Camera privacy shutter
- (Optional) Ultrasonic Human Presence Detection for IR camera
- (Optional) IR camera for Windows® Hello (facial recognition)

### **MANAGEABILITY**

# **System Management**



#### **System Management**

- Intel® vPro® Enterprise
- Non-vPro®

# **SERVICE**

# **Warranty**

#### 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

# **ACCESSORIES**

### **Bundled Accessories**

#### **Bundled Accessories**

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to VGA Adapter

### OPERATING REQUIREMENTS

# **Operating Environment**

#### Temperature[1]

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

### **Relative 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).

## **ENVIRONMENTAL**

### Sustainability

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

75% Recycled Aluminum A Cover

30% PCC Plastic C Cover

30% PCC Plastic D Cover

90% PCC Plastic 140W AC Adapter

Plastic free packaging with 90% recycled and/or FSC certified content (standard/bulk)

Notes:

[1] PCC: Post Consumer Content, recycled materials from customers.

### **CERTIFICATIONS**

### Green Certifications<sup>(1)</sup>



#### Green Certifications[2]

- ENERGY STAR® 9.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 10.0

#### Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit <a href="https://compliance.lenovo.com">https://compliance.lenovo.com</a>.

[2] EPEAT™ registration and ENERGY STAR® certification are optional and only available on the models with preloaded OS. Please visit <u>epeat.net</u> and <u>energystar.gov</u> for more information.

### **Other Certifications**

### Mil-Spec Test

MIL-STD-810H military test passed

#### **Other Certifications**

- (Optional) Eyesafe® Certified 2.0
- TÜV Rheinland® Low Blue Light

### **ISV Certifications**

#### **ISV Certifications**

Please visit ISV certifications for Lenovo® Workstations

- Feature with \*\* means that only one option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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