

OVERVIEW



1. Headphone / microphone combo jack (3.5mm)	6. Kensington Security Slot
2. SD card reader	7. Power connector
3. HDMI	8. Thunderbolt 4
4. 2x USB 3.2 Gen 1	9. Smart card reader *
5. Ethernet (RJ-45)	

Notes:

- Ports with * are only available on selected models
- Nano-SIM card slot on the rear side (not shown on the sample product above)

PERFORMANCE

Processor

Processor Family

12th Generation H series Intel® Core™ i7 processor, supports processors up to 14 cores; up to 4.8 GHz

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i7-12700H	14 (6 P-core + 8 E-core)	20	P-core 2.3GHz / E-core 1.7GHz	P-core 4.7GHz / E-core 3.5GHz	24MB	DDR5-4800	Intel Iris® Xe Graphics
Core i7-12800H	14 (6 P-core + 8 E-core)	20	P-core 2.4GHz / E-core 1.8GHz	P-core 4.8GHz / E-core 3.7GHz	24MB	DDR5-4800	Intel Iris Xe Graphics

Operating System

Operating System

- Windows® 11 Pro 64
- Windows 11 Home 64
- Windows 11 DG Windows 10 Pro 64
- Ubuntu Linux
- Red Hat Enterprise Linux (certified only)
- No operating system

Graphics

Graphics

Graphics	Type	Memory	TGP	Key Features
NVIDIA® GeForce® RTX™ 3050 Laptop GPU	Discrete	4GB GDDR6	35W	Resizable BAR, Dynamic Boost 2.0, DirectX® 12

Monitor Support

Monitor Support

Supports up to 3 independent displays (native display and 2 external monitors via HDMI® and Thunderbolt™)

- HDMI supports up to 3840x2160@60Hz
- Thunderbolt supports up to 5120x3200@60Hz (Thunderbolt or USB-C to DP)

Chipset

Chipset

Intel SoC (System on Chip) platform

Memory

Max Memory^[1]

Up to 64GB DDR5-4800

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type

DDR5-4800 non-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^[1]

Up to two drives, 2x M.2 SSD

- M.2 2280 SSD up to 4TB, 2TB each
- RAID 0/1 support

Storage Slot

Two M.2 2280 PCIe® Gen 4x4 slots

Storage Type

Disk Type	Interface	RPM	Offering	Security
M.2 2280 SSD	PCIe NVMe®, PCIe 4.0 x4 Performance	-	512GB / 1TB / 2TB	Opal2
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4 Value	-	256GB / 512GB / 1TB	Opal2

RAID

RAID 0/1 support

Notes:

- 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

Optical

None

Card Reader

SD card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers

Stereo speakers, 2W x2, Dolby® Audio™ Premium

Microphone

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

Camera

- HD 720p, with privacy shutter, fixed focus
- IR & 720p hybrid, with privacy shutter, fixed focus
- No camera

Battery

Battery

Integrated Li-Polymer 68Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Power Adapter

Power Adapter^[1]

- 135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- No power adapter

Notes:

- AC adapter offerings depend on the country.

DESIGN

Display

Display^[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
15.6"	FHD (1920x1080)	None	IPS	300 nits	Anti-glare	16:9	1200:1	100% sRGB	170°	DC dimming
15.6"	FHD (1920x1080)	None	IPS	300 nits	Anti-glare	16:9	800:1	45% NTSC	170°	DC dimming

15.6"	UHD (3840x2160)	None	IPS	600 nits	Anti-glare	16:9	1400:1	100% Adobe® RGB	170°	Dolby Vision™, DisplayHDR™ 400, DC dimming
15.6"	FHD (1920x1080)	Multi-touch	IPS	300 nits	Anti-glare	16:9	800:1	45% NTSC	170°	DC dimming

Touchscreen

- On-cell touch, supports 10-point touch (FHD models only)
- 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.ca-recycle.ca.gov/Electronics/Consumer>

Input Device**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

Keyboard Backlight

- LED backlight
- Non-backlight

UltraNav™

3-button TrackPoint® pointing device and Mylar® surface multi-touch touchpad

Mechanical^[1]**Dimensions (WxDxH)**

366.5 x 250 x 22.7 mm (14.43 x 9.84 x 0.89 inches)

Weight

Models	Weight
Model with discrete graphics	Starting at 2.226 kg (4.91 lbs)

Case Color

Black

Case Material

PC + ABS (top), PC + ABS (bottom)

Notes:

1. The system dimensions and weight vary depending on configurations.

CONNECTIVITY**Network****Onboard 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

WLAN + Bluetooth^[1]

Intel Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2

WWAN

- Wireless WAN upgradable to 4G (with antenna ready)
- Integrated Mobile Broadband 4G LTE-A, Fibocom L860-GL, CAT16, MIMO 4x4, M.2 card
- No support

SIM Card

No SIM card inbox

NFC

No support

Notes:

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

Ports^[1]**Standard Ports**

- 2x USB 3.2 Gen 1 (one Always On)
- 1x Thunderbolt 4 / USB4™ 40Gbps (support data transfer, Power Delivery 3.0, and DisplayPort™ 1.4)
- 1x HDMI, up to 4K/60Hz
- 1x SD card reader
- 1x Ethernet (RJ-45)
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Power connector

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;

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;

FireWire 400: 400 Mbit/s;

FireWire 800: 800 Mbit/s

Docking**Docking**

Various docking solutions supported via Thunderbolt, USB-C, or USB-A.

For more compatible docking solutions, please visit

[Docking for ThinkPad® T15p Gen 3](#)

Monitor Cable**Monitor Cable**

- (Optional) Lenovo USB-C to DisplayPort Adapter
- (Optional) Lenovo HDMI to VGA Monitor Adapter
- (Optional) Lenovo USB-C to VGA Adapter

SECURITY & PRIVACY**Security****Security Chip**

- Discrete TPM 2.0, TCG certified
- Firmware TPM 2.0 integrated in chipset

Physical Locks

Kensington® Security Slot

Smart Card Reader

- Smart card reader
- No smart card reader

Fingerprint Reader

Touch style fingerprint reader on palm rest, match-on-chip

BIOS Security

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

Other Security

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

MANAGEABILITY

System Management

System Management

- Intel vPro Enterprise
- Non-vPro

SERVICE

Warranty

Base Warranty^[1]

- 1-year depot service
- 1-year depot with 2-year system board service (Korea only)
- 1-year limited onsite 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

Notes:

1. More information of warranty policy, please access <https://pcsupport.lenovo.com/warranty>

ENVIRONMENTAL

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)

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).

CERTIFICATIONS

Green Certifications

Green Certifications

- EPEAT™ Gold
- ENERGY STAR® 8.0
- RoHS compliant

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

ISV Certifications

ISV Certifications

Please visit [ISV certifications for Lenovo Workstations](#)

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