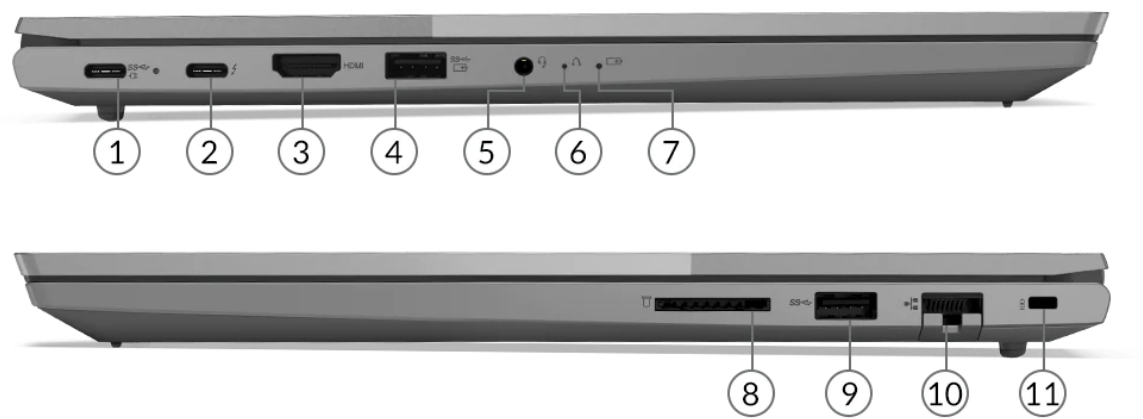


OVERVIEW



1. USB-C 3.2 Gen 2	7. Battery light
2. Thunderbolt 4	8. Card reader
3. HDMI 1.4b	9. USB 3.2 Gen 1
4. USB 3.2 Gen 1 (Always On)	10. Ethernet (RJ-45)
5. Headphone / microphone combo jack (3.5mm)	11. Kensington Nano Security Slot
6. NOVO button hole	

PERFORMANCE

Processor

Processor Family

11th Generation Intel® Core™ i3 / i5 / i7 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i3-1115G4	2	4	3.0GHz	4.1GHz	6MB	DDR4-3200	Intel UHD Graphics
Core i5-1135G7	4	8	2.4GHz	4.2GHz	8MB	DDR4-3200	Intel Iris® Xe Graphics
Core i7-1165G7	4	8	2.8GHz	4.7GHz	12MB	DDR4-3200	Intel Iris Xe Graphics

Operating System

Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- No operating system

Graphics

Graphics^[1]

Graphics	Type	Memory	Key Features
Intel UHD Graphics	Integrated	Shared	DirectX® 12
Intel Iris Xe Graphics	Integrated	Shared	DirectX 12
NVIDIA® GeForce® MX450	Discrete	2GB GDDR6	DirectX 12

Notes:

1. Intel Iris Xe Graphics capability requires system to be configured with Intel Core i5 or i7 processor and dual channel memory. On the system with Intel Core i5 or i7 processor and single channel memory, Intel Iris Xe Graphics will function as Intel UHD graphics

Monitor Support

Monitor Support

Supports up to 4 independent displays via native display and 3 external monitors; supports external monitors via HDMI® (up to 3840x2160@30Hz), USB-C (up to 5120x3200@60Hz) or Thunderbolt™ (up to 5120x3200@60Hz)

Chipset

Chipset

Intel SoC (System on Chip) platform

Memory

Max Memory^[1]

- Up to 36GB (4GB soldered + 32GB SO-DIMM) DDR4-3200
- Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200

Memory Slots

One memory soldered to systemboard, one DDR4 SO-DIMM slot, dual-channel capable

Memory Type

DDR4-3200

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]

- Dual SSD mode: up to two drives, 2x M.2 SSD
 - M.2 2280 SSD up to 1TB

- M.2 2242 SSD up to 512GB
- HDD/SSD mode: up to two drives, 1x HDD + 1x M.2 SSD
 - 2.5" HDD up to 2TB
 - M.2 2280 SSD up to 1TB
 - M.2 2242 SSD up to 512GB

Storage Type^[2]

Disk Type	Interface	RPM	Security
2.5" SATA HDD	SATA 6Gb/s	5.4K	APS (Active Protection System™)
2.5" SATA HDD	SATA 6Gb/s	7.2K	APS (Active Protection System)
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4	-	-
M.2 2242 SSD	PCIe NVMe, PCIe 3.0 x4	-	-
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	-

- Notes:
1. System supports 1x M.2 2280 PCIe 4.0x4 SSD slot + 1x HDD bay or 1x M.2 2280 PCIe 4.0x4 SSD slot + 1x M.2 2280 PCIe 3.0x2 SSD slot, depends on model configuration
 2. System that comes with two M.2 SSD slots doesn't support to add an extra 2.5" HDD.

Removable Storage

Optical

None

Card Reader

4-in-1 card reader (SD, SDHC, SDXC, MMC)

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers

Stereo speakers, 2W x2, Dolby® Audio™

Microphone

Dual array microphone, support WoV (Wake-on-Voice)

Camera

720p, with ThinkShutter, fixed focus

Battery

Battery^[1]

- Integrated Li-Polymer 45Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- Integrated Li-Polymer 60Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Max Battery Life^[2]

- MobileMark® 2018: 6 hr (45Wh)
- MobileMark 2018: 8 hr (60Wh)

- Notes:
1. 60Wh battery is not available for models with HDD bay
 2. All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, and/or JEITA 2.0 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

Power Adapter^[1]

- 65W USB-C slim (Wall Mount) AC adapter
- 65W USB-C AC adapter

- Notes:
1. 65W USB-C slim (Wall Mount) AC adapter is only available in selected countries

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	TN	220 nits	Anti-glare	16:9	500:1	45% NTSC	90°	-
15.6"	FHD (1920x1080)	None	IPS	300 nits	Anti-glare	16:9	800:1	45% NTSC	170°	-
15.6"	FHD (1920x1080)	Multi-touch	IPS	300 nits	Anti-glare	16:9	800:1	45% NTSC	170°	-
15.6"	FHD (1920x1080)	None	IPS	250 nits	Anti-glare	16:9	700:1	45% NTSC	170°	-
15.6"	FHD (1920x1080)	None	IPS	300 nits	Anti-glare	16:9	1200:1	100% sRGB	170°	-

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, numeric keypad

Keyboard Backlight

- LED backlight
- Not support

Touchpad

Buttonless Mylar® surface multi-touch touchpad, supports Precision TouchPad (PTP)

Mechanical

Dimensions (WxDxH)

357 x 235 x 18.9 mm (14.1 x 9.25 x 0.74 inches)

Weight

1.7 kg (3.75 lbs)

Case Color

Mineral grey, dual tone design

Surface Treatment

Anodizing sandblasting

Case Material

Aluminium (top), PC + ABS (bottom)

CONNECTIVITY

Network

Onboard Ethernet

Gigabit Ethernet

WLAN + Bluetooth™^[1]

- 802.11ac 2x2 Wi-Fi + Bluetooth 5.0, M.2 Card

- 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card

Notes:

1. WiFi 6 full features might be limited by country level restrictions
BT5.1 is supported on Windows 10 version 2004 or above (limited to BT5.0 on earlier version)

Ports^[1]**Standard Ports^[2]**

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Thunderbolt 4 / USB4™ 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort 1.4)
- 1x HDMI 1.4b
- 1x card reader
- 1x Ethernet (RJ-45)
- 1x headphone / microphone combo jack (3.5mm)

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. Depending on many factors, actual data transfer speed may be lower than theoretical speed

SECURITY & PRIVACY

Security

Security Chip

Firmware TPM 2.0 integrated in chipset

Physical Locks

Kensington® Security Slot

Fingerprint Reader

Touch style fingerprint reader on smart power button

BIOS Security

- Power-on password
- Supervisor password
- Hard disk password
- Self-healing BIOS

Other Security

ThinkShutter camera cover

SERVICE

Warranty

Base Warranty

- 1-year depot service
- 1-year depot with 2-year system board service
- 2-year (1-yr battery) depot service

ENVIRONMENTAL

Operating Environment

Temperature^[1]

- At altitudes up to 2438 m (8,000 ft)
 - Operating: 5°C to 35°C (41°F to 95°F)
 - Storage: 5°C to 43°C (41°F to 109°F)
- At altitudes above 2438 m (8,000 ft)
 - Maximum temperature when operating under the unpressurized condition: 31.3°C (88°F)

Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage: 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^[1]

(Optional) ThinkBook Integrated Earbuds

Notes:

1. Earbuds are only optional for models with dual SSD slots and are not available for models with HDD.

CERTIFICATIONS

Green Certifications

Green Certifications

- EPEAT™ Silver
- ENERGY STAR® 8.0
- ErP Lot 3
- RoHS compliant

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

Other Certifications

(Optional) TÜV Low Blue Light certified

