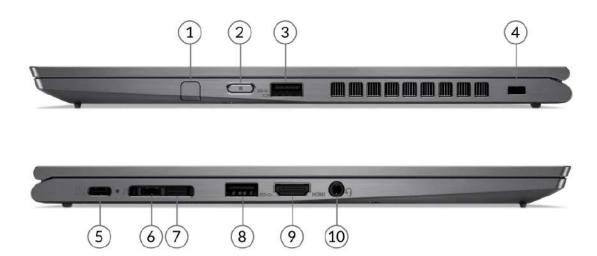


# **OVERVIEW**



1. Pen slot	6. USB-C 3.2 Gen 2 / Thunderbolt 3
2. Power button	7. Ethernet extension connector
3. USB 3.2 Gen 1 (Always On)	8. USB 3.2 Gen 1
4. Kensington Security Slot	9. HDMI 1.4b
5. USB-C 3.2 Gen 2 / Thunderbolt 3	10. Headphone / microphone combo jack (3.5mm)

### Notes:

- Optional nano-SIM card slot on the rear side (not shown on the sample product above)
- The combination of 5, 6 and 7 is side docking connector



# **PERFORMANCE**

### **Processor**

### **Processor Family**

10th Generation Intel® Core™ i5 / i7 Processor

#### **Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i5-10210U	4	8	1.6GHz	4.2GHz	6MB	LPDDR3-2133	Intel UHD Graphics
Core i5-10310U	4	8	1.7GHz	4.4GHz	6MB	LPDDR3-2133	Intel UHD Graphics
Core i7-10510U	4	8	1.8GHz	4.9GHz	8MB	LPDDR3-2133	Intel UHD Graphics
Core i7-10610U	4	8	1.8GHz	4.9GHz	8MB	LPDDR3-2133	Intel UHD Graphics
Core i7-10710U	6	12	1.1GHz	4.7GHz	12MB	DDR4-2666	Intel UHD Graphics
Core i7-10810U	6	12	1.1GHz	4.9GHz	12MB	DDR4-2666	Intel UHD Graphics

# **Operating System**

### **Operating System**

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

## **Graphics**

### **Graphics**

<ul><li>Ubuntu Linux</li><li>No operating sys</li></ul>	stem			
Graphics				con.
Graphics				
Graphics	Туре	Memory	Key Features	, pt
Intel UHD Graphics	Integrated	Shared	DirectX® 12	07,
Monitor Support Monitor Support	t		S	
6 1 7 .			and a settle of a little of the	10 1

## **Monitor Support**

## **Monitor Support**

Supports up to 3 independent displays via native display and 2 external monitors; supports external monitors via HDMI® (up to 4K@24Hz) or Thunderbolt™ (up to 5K@60Hz)

## **Chipset**

#### Chipset

Intel SoC (System on Chip) platform

## **Memory**

### Max Memory[1]

- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable

### **Memory Slots**

Memory soldered to systemboard, no slots, dual-channel

### **Memory Type**

LPDDR3-2133

### 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**

One drive, up to 2TB M.2 2280 SSD, optional Intel Optane™ Memory integrated with SSD, M.2

## **Storage Type**



Disk Type	Interface	RPM	Security
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	Opal2
Intel Optane Memory with Solid State Storage, M.2 2280	PCIe NVMe, PCIe 3.0 x4	-	-

## **Removable Storage**

### **Optical**

None

#### **Card Reader**

No card reader

### Multi-Media

### **Audio Chip**

High Definition (HD) Audio, USI 4551-513711-00 codec

#### **Speakers**

Stereo speakers, 2W x2 and 0.8W x2, Dolby® Atmos®

#### Microphone

Four array microphones, 360° far-field

#### Camera

- 720p, with ThinkShutter, fixed focus
- IR & 720p hybrid, with ThinkShutter, fixed focus

## Sensor

#### Sensors

- Accelerometer (G) sensor
- Proximity (P) sensor
- Ambient light sensor (ALS)
- e-Compass
- · Gyroscope sensor

### **Battery**

## **Battery**

Integrated Li-Polymer 51Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

#### Max Battery Life[1]

MobileMark® 2014: 19.3 hr MobileMark 2018: 13.0 hr JEITA 2.0: 19.3 hr

### Notes:

1. 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**

- 45W USB-C AC adapter
- · 65W USB-C slim AC adapter
- 65W USB-C AC adapter

### DESIGN

## **Display**

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

Size	Resolution	Touch	Type Brightn	ess Surface	Aspect Ratio		Color Gamut	Viewing Angle	Key Features
------	------------	-------	--------------	-------------	-----------------	--	----------------	------------------	--------------



14.0"	FHD (1920x1080)	Multi- touch	IPS	400 nits	Anti- reflection Anti- smudge	16:9	700:1	72% NTSC	170°	Low power
14.0"	FHD (1920x1080)	Multi- touch	IPS	500 nits	Anti- reflection Anti- smudge	16:9	1000:1	72% NTSC	170°	ThinkPad® Privacy Guard
14.0"	WQHD (2560x1440)	Multi- touch	IPS	300 nits	Anti- reflection Anti- smudge	16:9	1000:1	72% NTSC	170°	-
14.0"	UHD (3840x2160)	Multi- touch	IPS	500 nits	Anti- reflection Anti- smudge	16:9	1500:1	90% DCI-P3	170°	Dolby Vision™, HDR 400

### **Touchscreen**

Capacitive-type multi-touch, supports 10-point touch

### Multi-mode

Laptop, tent, stand and tablet modes supported by 360° hinge

#### 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

2. WQHD is not available in EMEA

# **Input Device**

#### Pen

ThinkPad Pen Pro, on-board garaged and rechargeable

## Keyboard

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

### **Keyboard Backlight**

LED backlight

## UltraNav™

TrackPoint® pointing device and glass surface multi-touch touchpad

### Mechanical

### **Dimensions (WxDxH)**

Models	Dimensions
Privacy Guard models	323 x 218 x 15.95 mm (12.71 x 8.58 x 0.63 inches)
Non-Privacy Guard models	323 x 218 x 15.5 mm (12.71 x 8.58 x 0.61 inches)

## Weight[1]

Models	Weight			
Non-Privacy Guard models	1.36 kg (2.99 lbs)			
Privacy Guard models	1.47 kg (3.24 lbs)			

## Case Color

Iron grey

### **Case Material**

Aluminium (top), magnesium (bottom)

### Notes:

1. The system weight varies depending on configurations



## CONNECTIVITY

### **Network**

### **Onboard Ethernet**

- Gigabit Ethernet, Intel Ethernet Connection I219-V (non-vPro models), RJ45 via optional ThinkPad Ethernet Extension Adapter Gen 2
- Gigabit Ethernet, Intel Ethernet Connection I219-LM (vPro models), RJ45 via optional ThinkPad Ethernet Extension Adapter Gen 2

#### WLAN + Bluetooth™[1]

Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2

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

- Integrated Mobile Broadband 4G LTE-A, CAT9, Fibocom L850-GL, M.2 card
- Integrated Mobile Broadband 4G LTE-A, Fibocom L860-GL, MIMO 2x2, M.2 card
- No support

#### SIM Card

- Gemalto eSIM
- Nano SIM card, Lenovo Connect 4 months, 4G LTE
- No SIM card inbox

#### **NFC**

- · Near Field Communication
- No support

#### Notes:

- 1. Intel WiFi 6 full features might be limited by country level restrictions Bluetooth 5.2 is supported with driver version 22.30 and later
- 2. For non-WWAN model, it means the model is NOT WWAN upgradable

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

### Standard Ports[2]

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x USB-C 3.2 Gen 2 / Thunderbolt 3 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.2)
- 1x HDMI 1.4b
- 1x Ethernet extension connector
- 1x headphone / microphone combo jack (3.5mm)
- 1x side docking connector

### **Optional Ports**

1x Nano-SIM card slot (WWAN model)

### 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, formely USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;

USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formely 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

### **Monitor Cable**

### **Monitor Cable**

- · Lenovo HDMI to VGA Monitor Adapter
- No monitor cable

## SECURITY & PRIVACY

# Security



### **Security Chip**

- · Discrete TPM 2.0, TCG certified
- · Firmware TPM 2.0 integrated in chipset
- Disabled (in some regions)

### **Physical Locks**

Kensington® Security Slot

#### **Smart Card Reader**

No smart card reader

#### **Fingerprint Reader**

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

### **BIOS Security**

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

### **Other Security**

- ThinkShutter camera cover
- (Optional) IR camera for Windows Hello
- (Optional) Privacy Guard with Privacy Alert

## **MANAGEABILITY**

## **System Management**

### **System Management**

- · Intel vPro Technology, DASH
- None

## **SERVICE**

# Warranty

# Base Warranty

- 1-year depot service
- 1-year depot with 2-year system board service
- 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

## **ENVIRONMENTAL**

# **Operating Environment**

#### Temperature[1]

- 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)
- Operating: 5°C (41°F) to 35°C (95°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  $10^{\circ}\text{C}$  ( $50^{\circ}\text{F}$ )

## **ACCESSORIES**

### **Bundled Accessories**

### **Bundled Accessories**

- ThinkPad Ethernet Extension Adapter Gen 2
- None

# **CERTIFICATIONS**

## **Green Certifications**

### **Green Certifications**

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

### **Other Certifications**

### Mil-Spec Test

MIL-STD-810G military test passed

### **Other Certifications**

Athena certified

Laptop VAMC com











Laptop VAMG.co







