# **OVERVIEW**



1. Power button	5. 2x USB 3.2 Gen 2				
2. Combo audio jack (on bottom)	6. Ethernet (RJ-45)				
3. Power connector	7. 2x USB 2.0				
4. HDMI-out	8. Optical drive *				

Notes:

• Items with \* are only available on selected models

# PERFORMANCE

### Processor

#### **Processor Family**

13th Generation Intel® H Series Core i5 Processor

#### Processor

Processor Name	Cores Threads		Base Frequency	Max Frequency	Cache	Processor Graphics
Core i5- 13420H	8 (4 P-core + 4 E- core)	12	P-core 2.1GHz / E-core 1.5GHz	P-core 4.6GHz / E-core 3.4GHz <sup>[1]</sup>	12MB	Intel® UHD Graphics

Notes:

[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see

http://www.intel.com/technology/turboboost/ for more information.

## **Operating System**

#### **Operating System**\*\*

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

# Graphics

#### Graphics

Graphics	Туре	Memory	Max Resolution	Connector	Key Features
Intel <sup>®</sup> UHD Graphics	Integrated	Shared	1920x1080@60Hz	1x HDMI® 1.4	DirectX® 12.1

# **Monitor Support**

#### **Monitor Support**

Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

## Chipset

#### Chipset

Intel<sup>®</sup> SoC (System on Chip) platform

## Memory

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

Up to 8GB DDR4-3200

#### Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

#### Memory Type

DDR4-3200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

## Storage

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

- Up to two drives, 1x 2.5" HDD + 1x M.2 SSD
  - 2.5" HDD up to 1TB
  - M.2 SSD up to 512GB
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

#### Storage Type\*\*

Disk Type	Interface	RPM	Security
2.5" SATA HDD	SATA 6Gb/s	5.4K	-
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	-	-
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	-	Opal 2.0

#### RAID

No support

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

### **Removable Storage**

#### Optical

- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

#### Card Reader

No card reader

# Multi-Media

#### Audio Chip

High Definition (HD) Audio, Realtek® ALC256 codec

#### Speakers

Stereo speakers, 3W x2, Audio by HARMAN

#### Microphone

- Dual-microphone array
- No microphone

#### Camera

• HD 720p 0° Pre-angle pull up camera, LED indicator

# No camera

## **Power Supply**

### **Power Supply**

Power	Туре	Efficiency	Key Features		
90W	Adapter	89%	Autosensing		

# DESIGN

# Display

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

Siz	e Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
21.	," FHD (1920x1080)	None	IPS	250nits	Anti- glare	16:9	1000:1	72% NTSC	60Hz	89° / 89° / 89° / 89°	14ms response Time, 16.7 million color depth, borderless design

## Touchscreen

Non-touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

# **Input Device**

#### Keyboard\*\*

- Lenovo<sup>®</sup> Calliope Keyboard (USB connector), black
- Lenovo $\ensuremath{^\circ}$  Calliope Wireless Keyboard, black
- No keyboard

#### Mouse\*\*

- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

### **Mechanical**

#### Form Factor

AIO (21.5 inches)

#### Dimensions (WxDxH)<sup>[1]</sup>

490.3 x 207.5 x 405.39 mm (19.3 x 8.17 x 15.96 inches)

#### Packaging Dimensions (WxDxH)

591 x 231 x 522 mm (23.27 x 9.09 x 20.55 inches)

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

Around 5.7 kg (12.6 lbs)

### Packaging Weight

Around 9.3 kg (20.5 lbs)

#### Case Color

Raven black

#### Bays

• 1x 2.5" disk bay

• For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

#### **Expansion Slots**

Two M.2 slots (one for WLAN, one for SSD)

#### EOU

No support

#### Stand

Monitor stand, supports -5° to +25° tilt, left & right 45° swivel

#### Mounting

None

Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo<sup>®</sup> 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**

#### **Onboard Ethernet**

Gigabit Ethernet, Realtek® RTL8111H, 1x RJ-45

#### WLAN + Bluetooth®\*\*

- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card<sup>[1]</sup>
- Intel<sup>®</sup> Wi-Fi<sup>®</sup> 6 AX201, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.2, M.2 Card<sup>[2]</sup>

#### Notes:

[1] Bluetooth<sup>®</sup> 5.3 requires Windows<sup>®</sup> 11.

[2] Bluetooth<sup>®</sup> 5.2 requires Windows<sup>®</sup> 11.

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

#### **Rear Ports**

- 2x USB 2.0
- 2x USB 3.2 Gen 2
- 1x HDMI®-out
- 1x Ethernet (RJ-45)
- 1x power connector

#### **Bottom Ports**

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; 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

Firmware TPM 2.0 integrated in SoC

#### **BIOS Security**

- Administrator password
- Power-on password
- Intel<sup>®</sup> BIOS guard

# SERVICE

## Warranty

#### Base Warranty\*\*

- 1-year courier or carry-in service
- 1-year limited onsite service

#### Notes:

[1] 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://support.lenovo.com/warrantylookup/warrantypolicy</u>.

# **OPERATING REQUIREMENTS**

## **Operating Environment**

#### Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

#### **Relative Humidity**

- Operating: 20% to 80%
- Storage: 10% to 90%

#### Altitude

• Operating: 0 m (0 ft) to 3048 m (10,000 ft)

• Storage: 0 m (0 it) to 12192 m (40,000 it)

# CERTIFICATIONS

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

### **Green Certifications**

- (Optional) ENERGY STAR<sup>®</sup> 8.0
- (Optional) EPEAT<sup>™</sup> Silver Registered<sup>[2]</sup>

#### 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 <u>https://compliance.lenovo.com</u>.
[2] EPEAT™ is registered where applicable, please visit <u>epeat.net</u> for registration status by country.

# **Other Certifications**

#### Other Certifications

- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Noise
- Feature with \*\* means that only one offering listed under the feature is configured on selected models.
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