# **OVERVIEW**



6. Ethernet (RJ-45)

# ThinkCentre neo 50a 27 Gen 5

# PERFORMANCE

### Processor

### **Processor Family**

13th Generation Intel<sup>®</sup> Core<sup>™</sup> i3 / i5 / i7 Processor

### Processor\*\*

| Processor<br>Name  | Cores                        | Threads | Base Frequency                   | Max Frequency                    | Cache | Processor<br>Graphics  |
|--------------------|------------------------------|---------|----------------------------------|----------------------------------|-------|------------------------|
| U300               | 500 16                       |         | P-core 1.2GHz / E-core<br>0.9GHz | re P-core 4.4GHz / E-core 3.3GHz |       | Intel® UHD<br>Graphics |
| Core i3-1315U      | 6 (2 P-core + 4 E-<br>core)  | 8       | P-core 1.2GHz / E-core<br>0.9GHz | P-core 4.5GHz / E-core<br>3.3GHz | 10MB  | Intel® UHD<br>Graphics |
| 13420H             | 8 (4 P-core + 4 E-<br>core)  |         | P-core 2.1GHz / E-core<br>1.5GHz | P-core 4.6GHz / E-core<br>3.4GHz | 12MB  | Intel® UHD<br>Graphics |
| Core i7-<br>13620H | 10 (6 P-core + 4 E-<br>core) | 16      | P-core 2.4GHz / E-core<br>1.8GHz | P-core 4.9GHz / E-core<br>3.6GHz | 24MB  | Intel® UHD<br>Graphics |

## **Operating System**

**Operating System**\*\*

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

# Graphics

**Graphics**<sup>[1]</sup>

| Graphics                        | Туре       | Memory | Max Resolution        | Connector         | Key Features  |
|---------------------------------|------------|--------|-----------------------|-------------------|---------------|
| Intel <sup>®</sup> UHD Graphics | Integrated | Shared | 4096x2160@60Hz(HDMI®) | 1x HDMI® 2.1 TMDS | DirectX® 12.1 |

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

# **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 32GB DDR5-5200

### **Memory Slots**

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type

DDR5-5200

Notes:

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

### Storage

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

One drive, up to 1TB M.2 2280 SSD

### Storage Type\*\*

| Disk Type    | Interface  | Security |
|--------------|--|----------|
| M.2 2280 SSD | PCIe® NVMe®, PCIe® 4.0 x4                                      | -        |
| M.2 2280 SSD | PCIe <sup>®</sup> NVMe <sup>®</sup> , PCIe <sup>®</sup> 4.0 x4 | Opal 2.0 |

Notes:

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

## **Removable Storage**

Optical

### None Card Reader

No card reader

### Multi-Media

### **Audio Chip**

High Definition (HD) Audio, Realtek® ALC233-CG codec

### Speakers

Stereo speakers, 3W x2, Audio by HARMAN

### Microphone

Dual-microphone array

### Camera\*\*

- 5.0-megapixel
- 5.0-megapixel IR camera

## **Power Supply**

## Power Supply\*\*

| Power       | Туре    | Efficiency | Key Features |  |  |
|-------------|---------|------------|--------------|--|--|
| 90W Adapter |         | 89%        | Autosensing  |  |  |
| 135W        | Adapter | 90%        | Autosensing  |  |  |

# DESIGN

# Display

### Display\*\*[1]

| Size | Resolution         | Touch           | Туре | Brightness | Surface        | Aspect<br>Ratio | Contrast<br>Ratio | Color<br>Gamut | Refresh<br>Rate | Viewing<br>Angle<br>(L/R/U/D) | Key Features   |
|------|--------------------|-----------------|------|------------|----------------|-----------------|-------------------|----------------|-----------------|-------------------------------|--|
| 27"  | FHD<br>(1920x1080) | None            | IPS  | 300nits    | Anti-<br>glare | 16:9            | 1300:1            | 99%<br>sRGB    | 100Hz           | 89° / 89° /<br>89° / 89°      | 14ms response<br>time, borderless<br>design, low blue<br>light, flicker free |
| 27"  | FHD<br>(1920x1080) | Multi-<br>touch | IPS  | 300nits    | Anti-<br>glare | 16:9            | 1300:1            | 99%<br>sRGB    | 100Hz           | 89° / 89° /<br>89° / 89°      | 14ms response<br>time, borderless<br>design, low blue<br>light, flicker free |

### Touchscreen

• (Optional) 10-point multi-touch

Non-touch

Notes:

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

## Input Device

### Keyboard\*\*

- Wireless EOS Keyboard, black
- Lenovo® Calliope Keyboard (USB connector), black
- No keyboard

### Mouse\*\*

- Wireless EOS Mouse, black
- Lenovo® Calliope Mouse (USB connector), black
- No mouse

## Mechanical

### Buttons

- Camera Shutter Latch
- Power button

### Form Factor

AIO (27 inches)

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

611.72 x 192 x 473.16 mm (24.08 x 7.55 x 18.62 inches)

### Packaging Dimensions (WxDxH)

766 x 229 x 570 mm (30.16 x 9.02 x 22.44 inches)

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

Around 7.1 kg (15.65 lbs)

### Packaging Weight

Around 10.9 kg (24.03 lbs)

### Case Color

Luna grey

Bays

### No bays

# Expansion Slots

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

### Stand

Monitor stand, supports -5° to +15° tilt.

### Mounting

None

### Others

(Optional) Wireless charger 15W

### 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>

• No WLAN and Bluetooth®

### 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

- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 2x USB-A (Hi-Speed USB / USB 2.0)
- 1x HDMI®-in 1.4
- 1x HDMI®-out 2.1 TMDS
- 1x Ethernet (RJ-45)
- 1x power connector

### Left Ports

- 1x USB-C<sup>®</sup> (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 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<sup>™</sup> 3/4: 40 Gbit/s.

# **SECURITY & PRIVACY**

## Security

### Security Chip

Firmware TPM 2.0 integrated in SoC

Physical Locks

No physical locks

### **Chassis Intrusion Switch**

No chassis intrusion switch

### **BIOS Security**

• Administrator password

Power-on password

# MANAGEABILITY

### System Management

System Management

None

# SERVICE

## **Warranty**<sup>[1]</sup>

### Base Warranty\*\*

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

Notes:

Lenovo

[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 ft) to 12192 m (40,000 ft)

# CERTIFICATIONS

## **Green Certifications**<sup>11</sup>

### **Green Certifications**

- (Optional) ENERGY STAR<sup>®</sup> 8.0
- (Optional) EPEAT™ Silver Registered
- ErP Lot 3 and Lot 7
- GREENGUARD®
- RoHS / WEEE / REACH

### 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>.

# **Other Certifications**

### Other Certifications

- TÜV Rheinland<sup>®</sup> Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Ultra Low Noise
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