# **OVERVIEW**



1. SD card reader	6. Headphone / microphone combo jack (3.5mm)
2. 2x USB-A (USB 5Gbps)	7. HDMI
3. Kensington Nano Security Slot	8. Power connector
4. USB-A (USB 10Gbps), Always On	9. Pogo pin connector *
5. 2x Thunderbolt 4	

Notes:

• Items with \* are only available on selected models

# ThinkBook 16p G5 IRX

# PERFORMANCE

## **Processor**

#### **Processor Family**

14th Generation Intel<sup>®</sup> Core<sup>™</sup> i5 / i7 / i9 Processor

#### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core™ i5- 14500HX	14 (6 P-core + 8 E- core)	20	P-core 2.6GHz / E-core 1.9GHz	P-core 4.9GHz / E-core 3.5GHz	24MB	Intel® UHD Graphics
Core™ i7- 14650HX	16 (8 P-core + 8 E- core)	24	P-core 2.2GHz / E-core 1.6GHz	P-core 5.2GHz / E-core 3.7GHz	30MB	Intel® UHD Graphics
Core™ i9- 14900HX	24 (8 P-core + 16 E-core)	32	P-core 2.2GHz / E-core 1.6GHz	P-core 5.8GHz / E-core 4.1GHz	36MB	Intel® UHD Graphics

# **Operating System**

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

- Windows<sup>®</sup> 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

## Graphics

#### Graphics\*\*

Graphics	Туре	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce RTX™ 4050 Laptop GPU	Discrete	6GB GDDR6	2370 MHz	95W	DLSS 3, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4060 Laptop GPU	Discrete	8GB GDDR6	2370 MHz	115W	Advanced Optimus, DLSS 3, Dynamic Boost 2.0, DirectX® 12 Ultimate

## **Monitor Support**

#### **Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via HDMI<sup>®</sup> and Thunderbolt<sup>™</sup>)

• HDMI<sup>®</sup> supports up to 8K@60Hz

• Thunderbolt<sup>™</sup> supports up to 5K@60Hz

## Chipset

#### Chipset

Intel<sup>®</sup> HM770 chipset

## Memory

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

Up to 32GB DDR5-5600 offering

#### **Memory Slots**

Two DDR5 SO-DIMM slots, dual-channel capable

#### Memory Type

DDR5-5600

Notes:

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

## Storage

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

Lenovo

Up to two drives, 2x M.2 SSD • M.2 2280 SSD up to 2TB

#### Storage Slot

Two M.2 2280 PCIe® 4.0 x4 slots

#### Storage Type\*\*

Disk Type	Interface	Offering	
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	512GB / 1TB	
M.2 2242 SSD	PCIe® NVMe®, PCIe® 4.0 x4	1TB	

Notes:

[1] The system supports dual SSD via two M.2 slots, but Lenovo® only offers one SSD configuration, another SSD slot for user self-extension.

The max storage capacity is only technical readiness and may be different with current Lenovo® storage offerings.

## **Removable Storage**

#### **Card Reader**

SD card reader

## **Multi-Media**

#### **Audio Chip**

High Definition (HD) Audio, Realtek® ALC3306-CG codec

#### Speakers

Stereo speakers, 2W x2 woofers and 2W x2 tweeters, Dolby Atmos®, sound by harman/kardon

#### Microphone

Dual-microphone array with smart noise-cancelling

#### Camera

FHD 1080p + IR hybrid, with privacy shutter, fixed focus

## Sensor

#### Sensors

Ambient light sensor (ALS)

## **Battery**

#### Battery

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

#### Max Battery Life<sup>[1]</sup>

MobileMark<sup>®</sup> 25: 6.2 hr

#### Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark<sup>®</sup> 2014, MobileMark<sup>®</sup> 2018, MobileMark<sup>®</sup> 25, JEITA 2.0, continuous 1080p video playback (with 150nits brightness and default volume level) or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending 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]

- 230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 300W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

## Notes:

[1] AC adapter offerings depend on the country.

## **Special Features**

## Special Features\*\*\*

Lenovo

- AI Chip: LA3
- Modern Standby

# DESIGN

# Display

### Display\*\*[1]

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16″	2.5K WQXGA (2560x1600)	None	IPS	400nits	Anti- glare	16:10	1200:1	100% sRGB	60Hz	89°/89°/89°/89°	smart sense panel, X- Rite® factory color calibration (average ΔE<1), Dolby Vision®, Eyesafe®
16″	3.2K (3200x2000)	None	IPS	430nits	Anti- glare	16:10	1200:1	100% DCI- P3	165Hz	89°/89°/85°/85°	Advanced Optimus, smart sense panel, X- Rite® factory color calibration (average ΔE<1), Dolby Vision®, Eyesafe®

## **Color Calibration**

X-Rite® factory color calibration

## Touchscreen

Non-touch

Notes:

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

## **Input Device**

#### Keyboard

6-row, spill-resistant, multimedia Fn keys, numeric keypad

#### Keyboard Backlight

LED backlight

#### Touchpad

Buttonless glass surface multi-touch touchpad, supports Precision TouchPad (PTP), 80 x 135 mm (3.15 x 5.31 inches)

## **Mechanical**

Dimensions (WxDxH)<sup>[1]</sup> 354.6 x 258.2 x 19.9 mm (13.96 x 10.17 x 0.78 inches) Weight<sup>[2]</sup> Starting at 2.2 kg (4.85 lbs) Case Color Storm grey, dual-tone design Surface Treatment Anodizing sandblasting Case Material Aluminium (top), aluminium (bottom)

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

Ethernet<sup>[1]</sup>

No onboard Ethernet

#### WLAN + Bluetooth®[2]

Wi-Fi<sup>®</sup> 6E, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.3, M.2 card

#### Notes:

[1] Wake-on-LAN needs the power adapter plugged in.

[2] Wi-Fi<sup>®</sup> 6E full features might be limited by country-level restrictions.

6GHz Wi-Fi<sup>®</sup> 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi<sup>®</sup> 6E, and the regional regulatory certifications & spectrum allocation.

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

#### Standard Ports

- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 2x USB-C<sup>®</sup> (Thunderbolt<sup>™</sup> 4 / USB4<sup>®</sup> 40Gbps), with USB PD 3.0 and DisplayPort<sup>™</sup> 1.4
- 1x HDMI<sup>®</sup> 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD card reader
- 1x Power connector

#### **Optional Ports**

1x Magic Bay (pogo pin connector)

#### 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<sup>®</sup> 40Gbps (USB 40Gbps): 40 Gbit/s; Thunderbolt<sup>™</sup> 3/4: 40 Gbit/s.

# Docking

## Docking

Various docking solutions supported via Thunderbolt™. For more compatible docking solutions, please visit <u>Docking for ThinkBook 16p G5 IRX</u>

# **SECURITY & PRIVACY**

# **Security**

Security Chip Firmware TPM 2.0 integrated in SoC Physical Locks

Kensington® Nano Security Slot™, 2.5 x 6 mm

#### **Fingerprint Reader**

Touch style fingerprint reader integrated in power button, match-on-chip

#### **BIOS Security**

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

#### **Other Security**

- IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

# SERVICE

### Warranty

#### Base Warranty\*\*

- 1-year courier or carry-in service
- 2-year (1-yr battery) courier or carry-in service

# ACCESSORIES

### **Bundled Accessories**

#### Bundled Accessories<sup>[1]</sup>

- Lenovo® Magic Bay Light
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkBook 16p G5 IRX

# **OPERATING REQUIREMENTS**

## **Operating Environment**

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

- 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)

#### **Relative 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).

# ENVIRONMENTAL

## **Sustainability**

## Material

50% recycled aluminum alloy on bottom cover 25% PCC recycled plastic used in the battery 50% PCC recycled plastic used in key caps 30% PCC recycled plastic used in speaker enclosure 90% recycled content in PIC cushion 90% recycled content in OBP bag 100% use of paper in screen film FSC certified content in carton box

# CERTIFICATIONS

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

#### Green Certifications<sup>[2]</sup>

- ENERGY STAR® 8.0
- EPEAT<sup>™</sup> Gold Registered<sup>[3]</sup>
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

#### 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<sup>™</sup> registration and ENERGY STAR<sup>®</sup> certification are dependent on system OS. Please visit <u>epeat.net</u> and <u>energystar.gov</u> for more information.

[3] EPEAT<sup>™</sup> is registered where applicable, please visit <u>epeat.net</u> for registration status by country.

# **Other Certifications**

#### Mil-Spec Test

MIL-STD-810H military test passed

#### Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland<sup>®</sup> Low Blue Light (Hardware Solution)
- Feature with \*\* means that only one offering listed under the feature is configured on selected models.
- Feature with \*\*\* means that one or more offerings listed under the feature could be configured on selected models.
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