

ThinkBook 16 G6 IRL

OVERVIEW



1. SD card reader	6. HDMI
2. USB 3.2 Gen 1	7. USB 3.2 Gen 1 (Always On)
3. Ethernet (RJ-45)	8. Thunderbolt 4
4. Kensington Nano Security Slot	9. Headphone / microphone combo jack (3.5mm)
5. USB-C 3.2 Gen 2	

PERFORMANCE

Processor

Processor Family

13th Generation Intel® U, P or H Series Core™ i3 / i5 / i7 Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core i3-1315U	6 (2 P-core + 4 E-core)	8	P-core 1.2GHz / E-core 0.9GHz	P-core 4.5GHz / E-core 3.3GHz	10MB	Intel UHD Graphics
Core i5-1335U	10 (2 P-core + 8 E-core)	12	P-core 1.3GHz / E-core 0.9GHz	P-core 4.6GHz / E-core 3.4GHz	12MB	Intel Iris® Xe Graphics ^[1]
Core i5-1340P	12 (4 P-core + 8 E-core)	16	P-core 1.9GHz / E-core 1.4GHz	P-core 4.6GHz / E-core 3.4GHz	12MB	Intel Iris Xe Graphics ^[2]
Core i5-13500H	12 (4 P-core + 8 E-core)	16	P-core 2.6GHz / E-core 1.9GHz	P-core 4.7GHz / E-core 3.5GHz	18MB	Intel Iris Xe Graphics ^[3]
Core i7-1355U	10 (2 P-core + 8 E-core)	12	P-core 1.7GHz / E-core 1.2GHz	P-core 5.0GHz / E-core 3.7GHz	12MB	Intel Iris Xe Graphics ^[4]
Core i7-1360P	12 (4 P-core + 8 E-core)	16	P-core 2.2GHz / E-core 1.6GHz	P-core 5.0GHz / E-core 3.7GHz	18MB	Intel Iris Xe Graphics ^[5]
Core i7-13700H	14 (6 P-core + 8 E-core)	20	P-core 2.4GHz / E-core 1.8GHz	P-core 5.0GHz / E-core 3.7GHz	24MB	Intel Iris Xe Graphics ^[6]

Notes:

[1], [2], [3], [4], [5], [6] Intel Iris Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel Iris Xe Graphics will function as Intel UHD Graphics.

Operating System

Operating System**

- Ubuntu Linux^[1]
- Windows® 11 Home
- Windows 11 Home Single Language
- Windows 11 Pro
- No operating system

Notes:

[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

Graphics	Type	Memory	TGP	Key Features
Intel UHD Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12.1
Intel Iris Xe Graphics ^[1]	Integrated	Shared	Share CPU TDP	DirectX 12.1

Notes:

[1] Intel Iris Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel Iris Xe Graphics will function as Intel UHD Graphics.

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)

- HDMI supports up to 3840x2160@60Hz
- USB-C supports up to 5120x3200@60Hz

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- Thunderbolt supports up to 5120x3200@60Hz

Chipset

Chipset

Intel SoC (System on Chip) platform

Memory

Max Memory^[1]

Up to 64GB DDR5-5200

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type

DDR5-5200

Notes:

- [1] Maximum memory is only to test technical readiness of notebook. Available memory to sell would vary.

Storage

Storage Support^[1]

Up to two drives, 2x M.2 SSD

- M.2 2242 SSD up to 1TB
- 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 2242 SSD	PCIe NVMe [®] , PCIe 4.0 x4	256GB / 512GB / 1TB
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4	512GB / 1TB

Notes:

- [1] 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[®] ALC3287 codec

Speakers

Stereo speakers, 2W x2, Dolby[®] Audio™

Microphone

Dual-microphone array with smart noise-cancelling

Camera^{**}

- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

Battery

Battery^{**}

- Integrated Li-Polymer 45Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- Integrated Li-Polymer 71Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 100W AC adapter

Max Battery Life^[1]

- Models with 45Wh battery:

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- MobileMark® 2018: 9.15 hr
- MobileMark 25: 8.0 hr
- Local video (1080p) playback@150nits: 14.43 hr
- Models with 71Wh battery:
 - MobileMark 2018: 13.48 hr
 - MobileMark 25: 11.82 hr
 - Local video (1080p) playback@150nits: 17.72 hr

Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark 2018, MobileMark 25, 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]

- 65W USB-C (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (wall-mount) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

[1] AC adapter offerings depend on the country.

Special Features

Special Features

Modern Standby

DESIGN

Display

Display**[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16"	WUXGA (1920x1200)	None	IPS	300nits	Anti-glare	16:10	1000:1	45% NTSC	60Hz	89°/89°/89°/89°	TÜV Low Blue Light (Software)
16"	WUXGA (1920x1200)	None	IPS	300nits	Anti-glare	16:10	1200:1	100% sRGB	60Hz	89°/89°/89°/89°	Eyesafe® Certified 2.0
16"	WUXGA (1920x1200)	Multi-touch	IPS	300nits	Anti-glare	16:10	1000:1	45% NTSC	60Hz	89°/89°/89°/89°	TÜV Low Blue Light (Software)
16"	WQXGA (2560x1600)	None	IPS	350nits	Anti-glare	16:10	1200:1	100% sRGB	60Hz	89°/89°/89°/89°	Eyesafe Certified 2.0
16"	WQXGA (2560x1600)	None	IPS	350nits	Anti-glare	16:10	1200:1	100% sRGB	120Hz	89°/89°/89°/89°	Eyesafe Certified 2.0

Touchscreen

- On-cell multi-touch, supports 10-point touch
- 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
- Non-backlight

Touchpad

Buttonless Mylar® surface multi-touch touchpad, supports Precision TouchPad (PTP), 75 x 120 mm (2.95 x 4.72 inches)

Mechanical**Dimensions (WxDxH)^[1]**

356 x 253.5 x 17.5 mm (14.01 x 9.98 x 0.69 inches)

Weight^[2]

Starting at 1.7 kg (3.75 lbs)

Case Color

Arctic grey, dual-tone design

Surface Treatment

Anodizing sandblasting

Case Material

Aluminium (top), PC-ABS (bottom)

Notes:

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

[2] The system weight is approximate and based on results in Lenovo 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^{**[1]}**

- Gigabit Ethernet, Intel Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel Ethernet Connection I219-V (non-vPro models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth^{®[2]}**

- Wi-Fi[®] 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card^[3]
- Wi-Fi 6E, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card^[4]

Notes:

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

[2] Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitations.

[3] Wi-Fi 6 full features might be limited by country-level restrictions.

[4] Wi-Fi 6E full features might be limited by country-level restrictions.

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

Ports^[1]**Standard Ports**

- 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 2.1, up to 4K/60Hz
- 1x SD 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;

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.

Docking

Docking

Various docking solutions supported via Thunderbolt or USB-C.

For more compatible docking solutions, please visit [Docking for ThinkBook 16 G6 IRL](#)

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 smart power button

BIOS Security

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

Other Security

- Camera privacy shutter
- (Optional) IR camera for Windows Hello

MANAGEABILITY

System Management

System Management

- Intel vPro Essentials^[1]
- Non-vPro

Notes:

[1] Intel vPro offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**

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

ENVIRONMENTAL

Sustainability

Material

- 25% PCC recycled plastic used in the battery
- 50% PCC recycled plastic used in key caps
- 90% PCC recycled plastic used in standard 65W and 100W adapter
- 95% recycled content in PIC cushion
- 30% recycled content in OBP bag
- FSC certified content in carton box

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]

- Lenovo 15.6" laptop casual toplayer, polyester
- None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for ThinkBook 16 G6 IRL](#).

CERTIFICATIONS

Green Certifications^[1]

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered^[2]
- ErP Lot 6
- ErP Lot 26
- FSC certified package
- RoHS compliant
- TCO Certified 9.0^[3]

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration.

[2] EPEAT is registered where applicable, please see <https://www.epeat.net> for registration status by country.

[3] TCO certification is NOT available in India and Brazil.

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

Other Certifications

- (Optional) Intel Evo™ Platform
- (Optional) Eyesafe Certified 2.0

- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- (Optional) TÜV Rheinland Low Blue Light (Software 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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