OVERVIEW

1. Power connector	5. SD card reader
2. HDMI	6. USB 3.2 Gen 1
3. USB4 / USB-C 3.2 Gen 2	7. USB 3.2 Gen 1 (Always On)
4. Headphone / microphone combo jack (3.5mm)	8. Kensington Nano Security Slot

PERFORMANCE

Processor

Processor Family

AMD Ryzen™ 5 / 7 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
AMD Ryzen 7 6800H	8	16	3.2GHz	4.7GHz	4MB L2 / 16MB L3	LPDDR5-6400	AMD Radeon™ 680M Graphics

Operating System

Operating System[**]

- Windows® 11 Pro 64
- Windows 11 Home 64
- Windows 11 Home 64 Single Language
- No operating system

Graphics

Graphics[**]

Graphics	Type	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce RTX™ 3050 Laptop GPU	Discrete	4GB GDDR6	1410 MHz	65W	Advanced Optimus, Dynamic Boost 2.0, Resizable BAR, DirectX® 12 Ultimate
NVIDIA GeForce RTX 3050 Ti Laptop GPU	Discrete	4GB GDDR6	1455 MHz	65W	Advanced Optimus, Dynamic Boost 2.0, Resizable BAR, DirectX 12 Ultimate

Monitor Support

Monitor Support

Supports up to 3 independent displays (native display and 2 external monitors via HDMI®, and USB-C®)
• HDMI supports up to 3840x2160@60Hz
• USB-C supports up to 5120x3200@60Hz

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory[1]

16GB soldered memory, not upgradable

Memory Slots

Memory soldered to systemboard, no slots, dual-channel

Memory Type

LPDDR5-6400

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[1]

One drive, up to 512GB M.2 2242 SSD or 1TB M.2 2280 SSD

Storage Slot

One M.2 2280 PCIe® 4.0 x4 slot

Storage Type**

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

Notes:
1. The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.

Removable Storage

Optical

None

Card Reader

4-in-1 card reader (SD, SDHC, SDXC, MMC)

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers

Stereo speakers, 2W x2, Dolby® Atmos®

Microphone

Dual array microphone with AI-based noise-cancelling, near-field

Camera**

- FHD 1080p, with privacy shutter, fixed focus
- FHD 1080p & IR, with privacy shutter, fixed focus

Sensor

Sensors

Ambient light sensor (ALS)

Battery

Battery

Integrated Li-Polymer 75Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)

Max Battery Life[1]

MobileMark® 2018: up to 10.6 hr
Local video (1080p) playback@150nits: up to 16.7 hr

Notes:
1. All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, 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 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[1]

135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:
1. AC adapter offerings depend on the country.

DESIGN

Display

Display

**[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
16″	2.5K WQXGA (2560x1600)	None	IPS	350 nits	Anti-glare	16:10	1200:1	100% sRGB	170°	Refresh rate 60Hz, Smart sense panel, DC dimming
16″	2.5K WQXGA (2560x1600)	None	IPS	350 nits	Anti-glare	16:10	1200:1	100% sRGB	170°	Refresh rate 120Hz, Smart sense panel , Factory Color Calibration (ΔE<1.5), DC dimming

Color Calibration

- T-CON (Timer Control Register) color calibration
- No color calibration

Touchscreen

Non-touch

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

Input Device

Keyboard

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

Keyboard Backlight

Smart sense keyboard backlight

Touchpad

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

Mechanical[1]

Dimensions (WxDxH)

356.4 x 251.8 x 17.7 mm (14.03 x 9.91 x 0.7 inches)

Weight

Starting at 1.9 kg (4.19 lbs)

Case Color

Arctic grey, dual-tone design

Surface Treatment

Anodizing sandblasting

Case Material

Aluminium (top), aluminium (bottom)

Notes:

1. The system dimensions and weight vary depending on configurations.

CONNECTIVITY

Network

Ethernet

No Ethernet

WLAN + Bluetooth®[1]

Wi-Fi® 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card

Notes:

   1. Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitation

Ports[1]

Standard Ports[1][2]

  * 2x USB 3.2 Gen 1 (one Always On)
  * 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
  * 1x HDMI, up to 4K/60Hz
  * 1x SD card reader
  * 1x Headphone / microphone combo jack (3.5mm)
  * 1x Power 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;
   USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
   Thunderbolt™ 3/4: 40 Gbit/s
   2. USB-C 3.2 Gen 2 can be upgraded to USB4® 40Gbps via BIOS update after June 2022.

Docking

Docking

Various docking solutions supported via USB-C.
For more compatible docking solutions, please visit [Docking for ThinkBook 16p NX ARH](#)

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 on 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

SERVICE

Warranty

Base Warranty**[1]

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

Notes:

   1. More information of warranty policy, please access https://pcsupport.lenovo.com/warranty

ENVIRONMENTAL

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).

CERTIFICATIONS

Green Certifications

Green Certifications

- EPEAT™ Gold
- ENERGY STAR® 8.0
- ErP Lot 3
- FSC certified carton
- RoHS compliant
- Low-VOC

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

Other Certifications

- Eyesafe® Certified
- TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.

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