

ThinkCentre neo 50s Gen 6

Designed for seamless multitasking and intelligent performance, this desktop leverages the power of the Intel® Core™ Ultra 7 Processor with up to 20 cores, delivering remarkable speed and efficiency. Integrated Intel® AI Boost with over 10 TOPS accelerates data-driven workflows, helping professionals tackle complex tasks like data analysis or content creation effortlessly. With up to 64GB DDR5 memory, heavy applications run smoothly without lag, while Wi-Fi® 7 ensures ultra-fast, reliable connectivity, perfect for collaborative projects and cloud-based tools that demand uninterrupted bandwidth.



Empowering the modern workforce with a streamlined desktop experience

ThinkCentre Neo series offers enhanced manageability and security features, along with additional configuration and expansion options.

Creative and design professionals benefit from NVIDIA® GeForce RTX™ 6GB graphics, which bring high-quality visuals and rendering to life. With support for up to two independent displays and versatile ports including USB-A, USB-C, DisplayPort, and HDMI, multitasking and presentations become effortless.

Secure and expandable, the desktop offers up to 2TB SSD storage for fast access, along with TPM 2.0 and Kensington® Security Slot™ protection. Optional Smart Cable Clip and chassis intrusion switch add practical safeguards for peace of mind.

With its compact SFF form factor of just 8.2L, the desktop maximizes workspace efficiency, fitting seamlessly into office environments while freeing up valuable desk space without sacrificing performance or functionality for professional tasks.

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Lenovo Services

Lenovo delivers tailored sustainability services, devices, and infrastructure solutions from our broad portfolio, working closely with you to support your target outcomes across the IT lifecycle..



Accessories

Lenovo Go Wired Speakerphone



- Microsoft Teams certified, omni-directional far-field 2x microphones array
- Portable plug-and-play capabilities and effortless PC UC support
- Comes with intuitive control with volume wheel, tactile keys, and readable LEDs

PN: 4XD1C82055, GXD1C82051

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Performance

Processor
Intel Core Ultra 3 / 5 / 7 Processor (Series 2)

Operating System*
Windows 11 Pro or Home
Windows 11 Home Single Language
Ubuntu Linux
No preload operating system

Graphics
Intel Arc A310 LP Graphics
NVIDIA GeForce RTX 3050
Intel UHD Graphics (integrated)

Chipset
Intel B860 chipset

Memory
Up to 64GB DDR5-5600, two SODIMM slots

Storage
Up to three drives, 1x 3.5" HDD + 2x M.2 SSD
· 3.5" HDD up to 2TB
· M.2 SSD up to 1TB each

Optical*
DVD-ROM or DVD±RW*

Audio*
High Definition (HD) Audio
Single speaker, 1W x1*

Power Supply*
200W 90% adapter
260W 90% adapter

Design

Form factor
SFF (8.2L)

Dimensions
92.5 x 291.7 x 339.5 mm (3.6 x 11.5 x 13.4 inches)

Weight
Around 4.33 kg (9.55 lbs)

Color
Raven Black

Bays
1x 3.5" disk bay

Expansion Slots
One PCIe 4.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
One PCIe 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
Three M.2 slots (one for WLAN, two for SSD)

Connectivity

Ethernet*
Gigabit onboard Ethernet

WLAN + Bluetooth*
802.11ax (Wi-Fi 6), 802.11ax (Wi-Fi 6E) or 802.11be (Wi-Fi 7), Bluetooth 5.2, 5.3 or 5.4
up to Realtek Wi-Fi 7 RTL8922AE, 802.11be, Bluetooth 5.4

Front ports
1x USB-C (USB 5Gbps / USB 3.2 Gen 1), with 15W charging
2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
1x headphone / microphone combo jack (3.5mm)
1x microphone (3.5mm)

Rear ports
2x USB-A (Hi-Speed USB / USB 2.0)
2x USB-A (USB 5Gbps / USB 3.2 Gen 1), one supports Smart Power On
1x HDMI 2.1 TMDS
1x DisplayPort 1.41
x Ethernet (RJ-45)
1x line-out (3.5mm)
1x USB-A (Hi-Speed USB / USB 2.0)
2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via 2-port USB expansion card, PCIe x1
1x parallel
1x serial
1x 2nd serial

Security & Privacy

Security
Discrete TPM 2.0
Smart Cable Clip*
Kensington Security Slot
Padlock Loop
Chassis Intrusion Switch*

Manageability

System Management*
Non-vPro

Environmental

Material
85% post-consumer content (PCC) recycled acrylonitrile butadiene styrene (ABS) used in the chassis
90% PIC recycled plastic EPE cushion
30% ocean-bound plastic (OBP) used in the device bag
Forest Stewardship Council (FSC) certified carton

Lenovo services

Base Warranty
Up to 1-year limited onsite service

Certifications

Green Certifications
ENERGY STAR 9.0*
EPEAT 1.0 Gold Registered*
RoHS / WEEE / REACH

Other Certifications
TÜV Rheinland Low Noise*
TÜV Rheinland Ultra Low Noise*

Items with * are optional and only available on selected models. Information presented here may represent the maximum possible configurations for this product, but it does not necessarily reflect what is available in your region. Please ask your rep or check the specifications for specific Part Numbers in your region. © 2026 Lenovo. Products are available while supplies last. Lenovo is not responsible for photographic or typographic errors. Lenovo, the Lenovo logo, ThinkPad, ThinkCentre, ThinkBook, ThinkStation and ThinkVision are trademarks or registered trademarks of Lenovo. 3rd party product and service names may be trademarks of others. Depending on factors such as the processing capability of peripheral devices, file attributes, system configuration and operating environments, the actual data transfer rate of USB connectors will vary and is typically slower than published standards.