

Lenovo ThinkPad P1 Gen 8 (21Q8003KUK)

Lenovo ThinkPad P1 Gen 8 21Q8 - AI Workstation - Intel Core Ultra 7 - 255H / up to 5.1 GHz - Evo - Win 11 Pro - RTX PRO 1000 Blackwell - 32 GB RAM - 1 TB SSD TCG Opal Encryption 2, NVMe, Performance - 16" IPS 1920 x 1200 - Wi-Fi 7, Bluetooth - black - kbd: UK - with 3 Years Lenovo Premier Support, CO2 Offset 0.5 ton (2nd Gen)



The Lenovo ThinkPad P1 Gen 8 is a robust and versatile notebook designed for creators and professionals who demand reliability in their work. Featuring a 16-inch widescreen display with an anti-glare finish, this notebook offers stunning visuals enhanced by Low Blue Light technology and X-Rite factory color calibration. The advanced audio capabilities include stereo speakers that comply with Dolby Atmos standards and a dual-array microphone, ensuring clear sound quality for communication and media playback. With a built-in privacy shutter for the IR camera, users can trust that their privacy is protected even when not in use. This notebook is powered by the Intel Core Ultra 7 processor, offering impressive performance with 16 cores, including 6 performance cores and 10 efficient cores. The system is equipped with 24 MB of cache memory and LPDDR5X SDRAM, providing a smooth and responsive experience. With a fast SSD for storage and the added benefits of Intel AI Boost, users can execute tasks efficiently. Connectivity is robust, featuring USB 3.2 Gen 2 ports, HDMI with 8K support, and Wi-Fi 7 technology for high-speed wireless networking, making it a great choice for a variety of professional needs.

Key Selling Points

- 16-inch anti-glare widescreen display for enhanced viewing
- Powerful Intel Core Ultra 7 processor with 16 cores
- Advanced voice and audio features with Dolby Atmos support
- Highly portable with robust connectivity options
- Integrated security features including TPM 2.0 and fingerprint reader

Product Features

- Vivid display quality**
The 16-inch widescreen display features Low Blue Light technology and X-Rite factory color calibration, ensuring sharper images and better color accuracy while minimizing eye strain.
- Powerful performance capabilities**
Equipped with an Intel Core Ultra 7 processor, this notebook features 16 cores that allow for efficient multitasking and handling of demanding applications, making it ideal for professionals.
- Enhanced audio experience**
The stereo speakers and dual-array microphone enhance video calls and media playback, providing a rich audiovisual experience compliant with Dolby Atmos standards.
- Exceptional connectivity options**
Offering multiple USB 3.2 Gen 2 ports, HDMI with 8K support, and Wi-Fi 7 technology, this notebook ensures fast data transfer and seamless connectivity.
- Robust security features**
The system includes a discrete Trusted Platform Module (TPM 2.0) security chip and a fingerprint reader for secure access, enhancing data protection and user privacy.

Main specifications

Product Description	Lenovo ThinkPad P1 Gen 8 - AI Workstation - 16" - Intel Core Ultra 7 - 255H - Evo - 32 GB RAM - 1 TB SSD - UK
Product Type	Mobile workstation - AI Workstation
Operating System	Win 11 Pro - English
Platform Technology	Intel Evo
Processor	Intel Core Ultra 7 (Series 2) - 255H up to 5.1 GHz / 24 MB Cache
Neural Processor Unit (NPU)	Intel AI Boost - up to 13 TOPS
Memory	32 GB LPDDR5X SDRAM (1 x 32 GB)
Storage	1 TB SSD - TCG Opal Encryption 2, NVMe, Performance
Display	16" 1920 x 1200 / WUXGA @ 60 Hz
Graphics	NVIDIA RTX PRO 1000 Blackwell / Intel Arc 140T - up to 440 TOPS
Video Memory	8 GB GDDR7 SDRAM
Input Device	Keyboard
Keyboard	UK
Keyboard Backlight	Yes
Integrated Webcam	Yes
Networking	802.11a/b/g/n/ac/ax/be, Bluetooth 5.4

Security	Discrete Trusted Platform Module (TPM 2.0) Security Chip, fingerprint reader
Colour	Black
Dimensions (WxDxH)	35.43 cm x 24.1 cm x 0.99 cm
Weight	1.84 kg
Localisation	Language: English / region: United Kingdom
Manufacturer Selling Program	Lenovo TopSeller
Environmental Standards	ENERGY STAR Qualified EPEAT Gold
Manufacturer Warranty	Base warranty - 3 years - pick-up and return ¦ Base warranty - battery - 1 year ¦ Extended warranty - 3 years - on-site - response time: next business day ¦ Extended warranty - battery - 1 year
Bundled Services	3 Years Lenovo Premier Support, CO2 Offset 0.5 ton (2nd Gen)

Extended specification

Memory

RAM	32 GB (1 x 32 GB)
Max RAM Supported	64 GB
Technology	LPDDR5X SDRAM
Rated Speed	7467 MT/s
Form Factor	LPCAMM2
Slots Qty	1
Empty Slots	0

Processor / Chipset

CPU	Intel Core Ultra 7 (Series 2) 255H
Max Turbo Speed	5.1 GHz
Number of Cores	16-core
Performance Cores	6
Efficient Cores	10
Cache	24 MB
Platform Technology	Intel Evo
Features	Integrated memory controller

Miscellaneous

Colour	Black
Case Material	Aluminium (top), aluminium (bottom)
Security	Discrete Trusted Platform Module (TPM 2.0) Security Chip, fingerprint reader
Features	Intel Active Management Technology (iAMT), MIL-STD-810H tested, bottom cover tamper detection
Theft/Intrusion Protection	Security lock slot (cable lock sold separately)
Security Slot Type	Kensington nano security slot
Included Accessories	USB-C GaN power adapter
Compliant Standards	RoHS, TUV Rheinland Low Blue Light Certification, Eyesafe Certified 2.0
Localization	Language: English / region: United Kingdom
Manufacturer Selling Program	Lenovo TopSeller

Input

Type	Keyboard
Keyboard Backlight	Yes
Keyboard Layout	UK

Display

Type	16" - IPS
Resolution	1920 x 1200 (WUXGA)
V-Sync Rate at Max Res.	60 Hz
Widescreen	Yes
Image Aspect Ratio	16:10
Image Brightness	500 cd/m²
Colour Gamut	100% sRGB
Features	Anti-glare, Low Blue Light technology, Low Power, Eyesafe technology, X-Rite factory colour calibration, 90.9% screen-to-body ratio

Audio & Video

Multi-GPU Configuration	1 single GPU card / integrated GPU
Graphics Processor	NVIDIA RTX PRO 1000 Blackwell / Intel Arc 140T - up to 440 TOPS
Video Memory	8 GB GDDR7 SDRAM
Camera	Yes
Resolution	5 Megapixel (front)
Camera Features	Privacy shutter, IR camera, Windows Hello, fixed focus, Computer Vision Human Presence Detection on ISP, Computer Vision-based User Presence Sensing on Image Signal Processor (ISP)
Sound	Stereo speakers, dual array microphone
Codec	CS42L43
Compliant Standards	Dolby Atmos, SoundWire

Neural Processor Unit (NPU)

Neural Processor Unit (NPU)	Intel AI Boost
NPU Performance Up To (TOPS)	13 TOPS
Total Processor Performance Up To (TOPS)	96 TOPS
AI Datatype Support on NPU	INT8
Sparsity Support	Yes
AI Software Frameworks Supported by NPU	DirectML, OpenVINO, WebNN, WindowsML, ONNX RT
Windows Studio Effects Support	Yes

Sustainability Information

EPEAT Compliant	EPEAT Gold
ENERGY STAR Certified	Yes

Battery

Technology	Lithium polymer
Capacity	90 Wh

Dimensions & Weight

Dimensions (WxDxH)	35.43 cm x 24.1 cm x 0.99 cm
Weight	1.84 kg

Communications

Wireless	802.11a/b/g/n/ac/ax/be, Bluetooth 5.4
Wireless Controller	Intel WI-FI 7 BE201
Features	Dual stream (2x2)

AC Adapter

Input	AC 100-240 V (50/60 Hz)
Output	140 watt

General

Product Type	Mobile workstation
AI Level	AI Workstation
Operating System	Windows 11 Pro - English

Connections & Expansion

Slots	2 x M.2 (PCI Express 4.0 x4) (1 available)
Interfaces Details	USB 3.2 Gen 2 (Always On) ¦ 2 x Thunderbolt 5/DisplayPort 2.1 (Power Delivery 3.1, 140 W input / 15 W output) ¦ Thunderbolt 4/DisplayPort 2.1 (Power Delivery 3.1, 140 W input / 15 W output) ¦ HDMI (8K support) ¦ Headphone/microphone combo jack (mini-phone 3.5 mm)
Memory Card Reader	Yes (SD Express Card)

Manufacturer Warranty

Service & Support	Base warranty - 3 years - pick-up and return ¦ Base warranty - battery - 1 year ¦ Extended warranty - 3 years - on-site - response time: next business day ¦ Extended warranty - battery - 1 year
Bundled Services	3 Years Lenovo Premier Support, CO2 Offset 0.5 ton (2nd Gen)

Storage

Main Storage	1 TB SSD M.2 2280 PCIe 5.0 x4 - TCG Opal Encryption 2, NVM Express (NVMe), Performance
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Software

Software Included	Intel Connectivity Performance Suite, Lenovo AI Now
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