Informacije o proizvodu (EN)
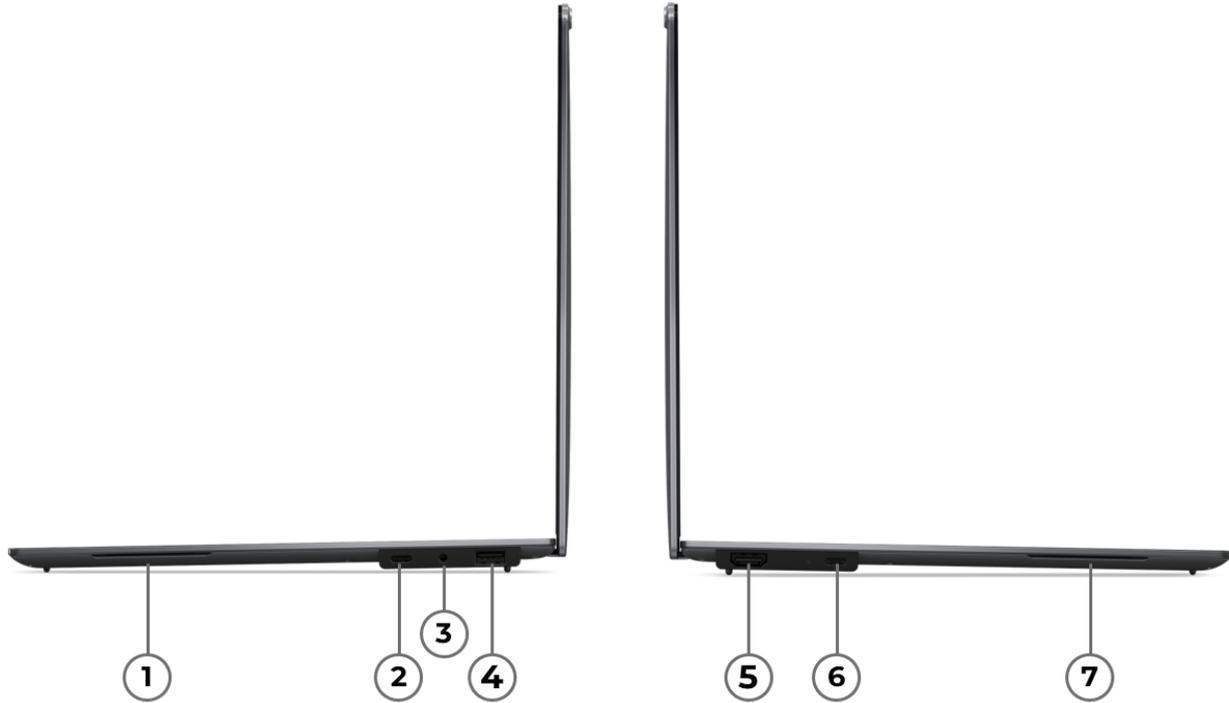
LENOVO laptop ThinkPad X9-15 G1 Aura U7/32/1TB/W11P

Tehnoteka je online destinacija za upoređivanje cena i karakteristika bele tehnike, potrošačke elektronike i IT uređaja kod trgovinskih lanaca i internet prodavnica u Srbiji. Naša stranica vam omogućava da istražite najnovije informacije, detaljne karakteristike i konkurentne cene proizvoda.

Posetite nas i uživajte u ekskluzivnom iskustvu pametne kupovine klikom na link:

https://tehnoteka.rs/p/lenovo-laptop-thinkpad-x9-15-g1-aura-u7321tbw11p-akcija-cena/

OVERVIEW

1. Speaker	5. HDMI
2. Thunderbolt 4	6. Thunderbolt 4
3. Headphone / microphone combo jack (3.5mm)	7. Speaker
4. USB-A (USB 10Gbps), Always On	

PERFORMANCE

Processor

Processor Family

Intel® V Series Core Ultra 5 / 7 Processor (Series 2)

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU	Overall TOPS
Core Ultra 5 226V	8 (4 P-core + 4 LP E-core)	8	P-core 2.1GHz / LP E-core 2.1GHz	P-core 4.5GHz / LP E-core 3.5GHz	8MB Intel® Smart Cache	Intel® Arc™ Graphics 130V, up to 53 TOPS	Intel® AI Boost, up to 40 TOPS	Up to 97 TOPS
Core Ultra 5 228V	8 (4 P-core + 4 LP E-core)	8	P-core 2.1GHz / LP E-core 2.1GHz	P-core 4.5GHz / LP E-core 3.5GHz	8MB Intel® Smart Cache	Intel® Arc™ Graphics 130V, up to 53 TOPS	Intel® AI Boost, up to 40 TOPS	Up to 97 TOPS
Core Ultra 5 238V	8 (4 P-core + 4 LP E-core)	8	P-core 2.1GHz / LP E-core 2.1GHz	P-core 4.7GHz / LP E-core 3.5GHz	8MB Intel® Smart Cache	Intel® Arc™ Graphics 130V, up to 53 TOPS	Intel® AI Boost, up to 40 TOPS	Up to 97 TOPS
Core Ultra 7 258V	8 (4 P-core + 4 LP E-core)	8	P-core 2.2GHz / LP E-core 2.2GHz	P-core 4.8GHz / LP E-core 3.7GHz	12MB Intel® Smart Cache	Intel® Arc™ Graphics 140V, up to 64 TOPS	Intel® AI Boost, up to 47 TOPS	Up to 115 TOPS
Core Ultra 7 268V	8 (4 P-core + 4 LP E-core)	8	P-core 2.2GHz / LP E-core 2.2GHz	P-core 5.0GHz / LP E-core 3.7GHz	12MB Intel® Smart Cache	Intel® Arc™ Graphics 140V, up to 66 TOPS	Intel® AI Boost, up to 48 TOPS	Up to 118 TOPS

AI (Artificial Intelligence)

AI PC Category

Copilot+ PC[1]

NPU

Integrated Intel® AI Boost, up to 48 TOPS

Notes:

[1] Copilot+ PCs have at least 16GB RAM, 256GB storage, and a NPU that runs 40+ TOPs to run the latest AI tools build-in latest Windows® 11 to accelerate productivity and creativity.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Ubuntu Linux[1]
- Linux[2]
- No preload operating system

Notes:

[1], [2] 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	Key Features
Intel® Arc™ Graphics 130V	Integrated	Shared	DirectX® 12.2
Intel® Arc™ Graphics 140V	Integrated	Shared	DirectX® 12.2

Monitor Support

Monitor Support[1]

Supports up to 3 independent displays (native display and 2 external monitors via HDMI® and Thunderbolt™)
• HDMI® supports up to 4K@60Hz
• Thunderbolt™ supports up to 8K@60Hz[2]

Notes:

[1] Refresh rates >60hz also supported, however max resolution will be limited.

[2] 8K resolution support needs 2 display pipes. That is, simultaneous display number will "-1" when 8K resolution displayed.

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory

• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable

Memory Slots

Memory soldered to systemboard, no slots, dual-channel

Memory Type

LPDDR5x-8533, MoP (Memory on Package) memory

Storage

Max Storage Support[1]

One drive, up to 2TB M.2 2242 SSD

Storage Slot[2]

One M.2 2242 PCIe® 4.0 x4 slot

Storage Type

Disk Type	Interface	Offering	Security
M.2 2242 SSD	PCIe® NVMe®, PCIe® 4.0 x4	256GB / 512GB / 1TB / 2TB	Opal 2.0

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

[2] The actual data transfer rate of the following PCIe® interface also depends on the capabilities of the connected PCIe® device. The listed values represent theoretical maximums.
PCIe® 3.0 (x2 / x4): 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps);
PCIe® 4.0 (x2 / x4): 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps);
PCIe® 5.0 (x2 / x4): 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps).

Removable Storage

Card Reader

No card reader

Multi-Media

Audio Chip

SoundWire®, Cirrus Logic® CS42L43 codec

Speakers

Stereo speakers, 2W x2 woofers and 2W x2 tweeters, Dolby Atmos®

Microphone

Dual-microphone array with smart noise-cancelling

Camera

UHD 8.0MP with large sensor + IR discrete, with E-shutter, ToF sensor, MIPI, fixed focus

Sensor

Sensors

- Color sensor
- ToF sensor

Battery

Battery

80Wh Rechargeable Li-ion Battery

Battery Life[1]

Configuration 1
MobileMark® 30: up to 21.18 hr @250nits
JEITA-BAT 3.0 (Video/Idle): up to 26.85 hr / 26.88 hr @200nits
Local video playback: up to 29.55 hr @150nits

Configuration 2
MobileMark® 30: up to 21 hr @250nits
JEITA-BAT 3.0 (Video/Idle): up to 24.58 hr / 27.42 hr @200nits
Local video playback: up to 29.72 hr @150nits

Configuration 3
MobileMark® 30: up to 20.11 hr @250nits
JEITA-BAT 3.0 (Video/Idle): up to 22.01 hr / 23.81 hr @200nits
Local video playback: up to 28.42 hr @150nits

Notes:

[1] Configuration 1: WQXGA+ (non-touch), Intel® Ultra 5 226V, 16GB LPDDR5x, Win 11, 80Wh battery, best power efficiency power mode
Configuration 2: WQXGA+ (touch), Intel® Ultra 7 258V, 32GB LPDDR5x, Win 11, 80Wh battery, best power efficiency power mode
Configuration 3: WQXGA+ (touch), Intel® Ultra 7 268V, 32GB LPDDR5x, Win 11, 80Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 30, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode 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, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]

- 65W USB-C® nano GaN (2-pin, wall-mount) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® nano GaN (3-pin, wall-mount) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim GaN (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim GaN (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:

[1] AC adapter offerings depend on the country.

DESIGN

Display

Display**

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
15.3″	2.8K WQXGA+	Multi-touch	OLED	500nits	Anti-reflection,	16:10	100,000:1	100% DCI-	30-120Hz	85° / 85° / 85° / 85°	Eye Comfort Certification

	(2880x1800)				anti-fingerprint			P3	VRR		(5-star), Dolby Vision®, DisplayHDR™ True Black 600, X-Rite®
15.3″	2.8K WQXGA+ (2880x1800)	Non-touch	OLED	500nits	Anti-reflection, anti-fingerprint	16:10	100,000:1	100% DCI-P3	30-120Hz VRR	85° / 85° / 85° / 85°	Eye Comfort Certification (5-star), Dolby Vision®, DisplayHDR™ True Black 600, X-Rite®

Touchscreen

- Add-on Film Touch, supports 10-point touch
- Non-touch

Screen-to-Body Ratio

91%

Color Calibration

X-Rite® factory color calibration

Input Device

Pen

No support

Keyboard

6-row, spill-resistant, multimedia Fn keys, key travel 1.35mm / 1.2mm (Fn row), Copilot key

Keyboard Backlight

LED backlight

Touchpad**

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

Mechanical

Dimensions (WxDxH)[1]

339.55 x 228.5 x 12.9 mm (13.37 x 9.0 x 0.51 inches)

Weight[2]

Starting at 1.4 kg (3.08 lbs)

Case Color**

- Grey
- Grey, FIFA® Edition
- White

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® 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

WLAN + Bluetooth®**[1]

- Intel® Wi-Fi® 7 BE201, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4

- Intel® Wi-Fi® 7 BE201, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4, Intel® vPro® technology support[2]

WWAN

No support

SIM Card

No physical SIM card inbox

Ethernet

No onboard Ethernet[3]

NFC

No support

Notes:

[1] Wi-Fi® operation (including Wi-Fi® 6, Wi-Fi® 6E, Wi-Fi® 7, etc.) is subject to the regulatory requirements of each country. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] Intel® vPro® platform requires the hardware and software necessary to deliver the manageability use cases, security features, system performance, and stability that define the platform. For detailed vPro® support information, please refer to the System Management section.

[3] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

Ports[1]

Standard Ports

- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 15-65W and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

Notes:

[1] The transfer speed of the 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.

Docking

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® X9-15 Gen 1 Aura Edition](#)

SECURITY & PRIVACY

Security

ThinkShield

ThinkShield is a comprehensive security solution that encompasses hardware, software, and supply chain components. For more detials, visit [here](#)

Security Chip

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Smart Card Reader

No smart card reader

Fingerprint Reader

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

BIOS Security

- NVMe® password
- Power-on password
- Supervisor password
- System management password
- Certificate-based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

- More BIOS security features, please visit BIOS Simulator[1]

Other Security

- ToF Human Presence Detection
- E-shutter
- IR camera for Windows® Hello (facial recognition)

Notes:

[1] The BIOS simulator is just for reference. Default settings and some options may vary depending on the hardware, operating system and BIOS version.

MANAGEABILITY

System Management

System Management[1]

- Intel® vPro® Enterprise[2]
- Non-vPro®

Notes:

[1] Intel® vPro® platform require an eligible Intel® processor, a supported operating system, Intel® LAN and/or WLAN silicon, firmware enhancements, and other hardware and software necessary to deliver the manageability use cases, security features, system performance, and stability that define the platform. See Intel® vPro® Platform for details.
[2] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories[1]

- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X9-15 Gen 1 Aura Edition.

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 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[1]

50% recycled aluminium on top cover
50% recycled aluminium on keyboard frame
50% recycled aluminium on bottom cover
90% PCC recycled plastic used in the battery pack enclosure
100% recycled cobalt used in the 80Wh battery
85% PCC recycled plastic used in key caps
90% PCC recycled plastic used in speaker enclosure
30% recycled REE (Rare Earth) in speaker magnet
90% PCC recycled plastic used in standard 65W adapter
FSC certified plastic-free packaging (except for Japan models with white case)
Bamboo+sugarcane fiber standard/retail packaging (except for Japan models with white case)
Paper Based Giftbox (Japan models with white case)

Notes:

[1] PCC: Post Consumer Content, recycled materials from customers.

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]

- ENERGY STAR® 9.0
- EPEAT™ Gold Registered[3]
- ErP Lot 6/26
- RoHS compliant
- TCO Certified, generation 10

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 https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are optional and only available on the models with preloaded OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

Other Certifications

- (Optional) Intel® Evo™ Platform
- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification (5-star)

- Feature with ** means that only one option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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