

## LG Gram Pro 17Z90TR-E 17" Hybrid Al Laptop - Intel® Core™ Ultra 7 255H, NVIDIA GeForce RTX5050 GPU, 1TB SSD, 32 GB RAM -Black - [2025]

**Brand**: LG **Product family:** Gram Pro Product code: 17Z90TR-

E.AD88A1

LG grame



Product name: 17Z90TR-E 17" Hybrid Al Laptop - Intel® Core™ Ultra 7 255H, NVIDIA GeForce RTX5050 GPU, 1TB SSD, 32 GB RAM - Black - [2025]

- 2.5K IPS screen with VRR Smooth & Crips image with vivid
- Intel® Core™ Ultra 7 255H Processor/ Evo™ Edition
- NVIDIA GeForce RTX5050 with GDDR7 8GB Laptop GPU
- 32GB of RAM Ideal for multitasking and demanding jobs
- 1TB SSD Tons of storage and super-fast loading
- gram Hybrid AI cloud and on-device AI productivity
- 1,479g Ultra-light & superslim / 90Wh smart battery

LG gram Pro 17Z90TR-E, 17" Hybrid Al Laptop - Intel® Core™ Ultra 7 255H, NVIDIA GeForce RTX5050 with GDDR7 8GB Laptop GPU, 1TB SSD, 32 GB RAM, - Black - [2025]

Design		Graphics	
Colour name Obsidian Black Product type * Ultrabook Product colour * Black		On-board graphics card model * CUDA CUDA cores	Intel Arc 140T  ✓ 2560
Form factor *	Clamshell	Audio	2300
Housing material Market positioning Introduction year Country of origin Original brand name	high performance year 2025 igin China d name LG graim Pro  anal * 43.2 cm (17") ution * 2560 x 1600 pixels	Audio system Spatial audio Number of built-in speakers Speaker power	Dolby Atmos  ✓ 2 6 W
Display Display diagonal * Display resolution * Touchscreen *		Built-in subwoofer Built-in microphone Number of microphones Microphone modes	2 Voice Isolation
HD type	2.5K	Camera	
Panel type Native aspect ratio Display surface Anti-glare screen Display brightness RGB colour space Colour gamut	e IPS-Pro pect ratio 16:10  urface Matt e screen  rightness 400 cd/m²  ur space DCI-P3  mut 99% n refresh rate 144 Hz	Front camera Front camera resolution Front camera HD type Infrared (IR) camera Privacy camera  Network	1920 x 1080 pixels Full HD
Maximum refresh rate Contrast ratio (typical)		Top Wi-Fi standard * Wi-Fi standards Mobile network connection *	Wi-Fi 7 (802.11be) Wi-Fi 7 (802.11be)
Processor			X
Processor manufacturer * Processor family * Processor generation Processor model * Processor cores Processor threads Processor boost frequency Processor frequency * Performance cores Efficient cores	Intel Intel Core Ultra 7 Intel Core Ultra (Series 2) 255H 16 16 5.1 GHz 5.1 GHz 6	Ports & interfaces  USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *  USB4 Gen 3x2 ports quantity  HDMI ports quantity *  HDMI version  Thunderbolt 4 ports quantity  Intel® Thunderbolt 4  Headphone outputs  Microphone in	2 2 1 2.1 2 • 1

Processor		Ports & interfaces	
Low Power Efficient-cores	2	Combo headphone/mic port	✓
Performance-core Max Turbo Frequency	5.1 GHz	USB Type-C DisplayPort Alternate Mode	✓
Efficient-core Max Turbo Frequency	4.4 GHz	Keyboard	
Low Power Efficient-core Max Turbo Frequency	2.5 GHz	Pointing device	Touchpad
Performance-core base frequency	2 GHz	Numeric keypad *	✓
Efficient-core base frequency	1.5 GHz	Keyboard backlit	✓
Low Power Efficient-core Base	700 MHz	Full-size keyboard	✓
Frequency Processor cache	24 MB	Keyboard number of keys	101
Processor cache type	Smart Cache	Keyboard layout	QWERTY
Processor base power	28 W	Copilot key	<b>✓</b>
Maximum turbo power	115 W	Software	
Neural processor unit (NPU)		Operating system architecture	64-bit
Neural processor unit (NPU)	Intel Al Boost	Microsoft Copilot	✓
Sparsity support	<b>✓</b>		gram Chat, LG Smart Assistant, LG gram Link, LG Security Guard, LG
Windows Studio effects support	<b>✓</b>	Pre-installed software	Lively Theme, LG Glance by
Al datatype support on NPU	Int8	Tre-instance software	Mirametrix®, Dolby Atmos, Intel® Connectivity Performance Suite, LG
AI software frameworks supported by NPU	DirectML, ONNX RT, OpenVINO, WebNN		xboom buds
Total processor performance up to	96 TOPs	Trial software	McAfee Live Safe (30 Days Trial),
NPU performance up to	13 TOPs	Operating system installed *	Microsoft 365 (30 Days Trial) Windows 11 Home
GPU performance up to	74 TOPs	Processor special features	Tillidon's 11 Home
Memory		Video decode engine	<b>✓</b>
Internal memory *	32 GB	Video encode engine Video encode engine	<b>*</b>
Internal memory type	LPDDR5x-SDRAM		•
Memory clock speed	8400 MHz	Brand-specific features	
Memory channels	Dual-channel	Brand specific technologies	Intelligent Privacy, Wide color (P3)
Storage		Battery	
Total storage capacity *	1 TB	Battery technology	Lithium-lon (Li-lon)
Chamana mandia *	CCD		
Storage media *	SSD 1 TR	Battery capacity *	90 Wh
Storage media * Total SSDs capacity Number of SSDs installed	SSD 1 TB 1	Continuous video playback time	90 Wh 27 h
Total SSDs capacity	1 TB	Continuous video playback time  Power	27 h
Total SSDs capacity Number of SSDs installed	1 TB 1	Continuous video playback time  Power  AC adapter power	27 h 100 W
Total SSDs capacity Number of SSDs installed SSD capacity	1 TB 1 1 TB	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *	27 h
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface	1 TB 1 1 TB PCI Express 4.0	Continuous video playback time  Power  AC adapter power	27 h 100 W
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe	1 TB 1 1 TB PCI Express 4.0 ✓	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging	27 h 100 W
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor	1 TB  1 1 TB  PCI Express 4.0  ✓  M.2	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)	27 h  100 W  45 W
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics Discrete GPU manufacturer	1 TB  1 1 TB PCI Express 4.0  M.2  X	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security	27 h  100 W  45 W
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics Discrete GPU manufacturer Discrete graphics card model *	1 TB  1 1 TB PCI Express 4.0  M.2  X  NVIDIA NVIDIA GeForce RTX 5050	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot	27 h  100 W  45 W
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory	1 TB  1 1 TB PCI Express 4.0  M.2  X  NVIDIA NVIDIA GeForce RTX 5050 8 GB	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security	27 h  100 W  45 W
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics memory type	1 TB  1 TB  PCI Express 4.0  M.2  X  NVIDIA  NVIDIA GeForce RTX 5050  8 GB  GDDR7	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot  Cable lock slot type	27 h  100 W  45 W  Kensington
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics memory type On-board graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X  NVIDIA NVIDIA GeForce RTX 5050 8 GB GDDR7  ✓	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot  Cable lock slot type  Face recognition  Windows Hello	27 h  100 W  45 W  Kensington
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics card memory type On-board graphics card * On-board GPU manufacturer	1 TB  1 TB  PCI Express 4.0  M.2  X  NVIDIA  NVIDIA GeForce RTX 5050  8 GB  GDDR7	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot  Cable lock slot type  Face recognition  Windows Hello  Operational conditions	27 h  100 W  45 W  Kensington
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics memory type On-board graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X   NVIDIA NVIDIA GeForce RTX 5050 8 GB GDDR7  Intel	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot  Cable lock slot type  Face recognition  Windows Hello  Operational conditions  Drop proof	27 h  100 W  45 W  Kensington
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics  Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics card memory type On-board graphics card * On-board GPU manufacturer Discrete graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X   NVIDIA NVIDIA GEForce RTX 5050 8 GB GDDR7  Intel  Intel	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot  Cable lock slot type  Face recognition  Windows Hello  Operational conditions  Drop proof  Certificates	27 h  100 W  45 W  Kensington  122 cm
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics  Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics card memory type On-board graphics card * On-board GPU manufacturer Discrete graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X   NVIDIA NVIDIA GEForce RTX 5050 8 GB GDDR7  Intel  Intel	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot  Cable lock slot type  Face recognition  Windows Hello  Operational conditions  Drop proof  Certificates  Certification	27 h  100 W  45 W  Kensington
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics  Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics card memory type On-board graphics card * On-board GPU manufacturer Discrete graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X   NVIDIA NVIDIA GEForce RTX 5050 8 GB GDDR7  Intel  Intel	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot  Cable lock slot type  Face recognition  Windows Hello  Operational conditions  Drop proof  Certificates  Certification  Weight & dimensions	27 h  100 W  45 W  Kensington  MIL-STD-810H
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics  Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics card memory type On-board graphics card * On-board GPU manufacturer Discrete graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X   NVIDIA NVIDIA GEForce RTX 5050 8 GB GDDR7  Intel  Intel	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot Cable lock slot type Face recognition  Windows Hello  Operational conditions  Drop proof  Certificates  Certification  Weight & dimensions  Width	27 h  100 W  45 W  Kensington  122 cm  MIL-STD-810H
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics  Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics card memory type On-board graphics card * On-board GPU manufacturer Discrete graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X   NVIDIA NVIDIA GEForce RTX 5050 8 GB GDDR7  Intel  Intel	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot Cable lock slot type Face recognition  Windows Hello  Operational conditions  Drop proof  Certificates  Certification  Weight & dimensions  Width Depth	27 h  100 W  45 W  Kensington  122 cm  MIL-STD-810H  379 mm 265.4 mm
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics  Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics card memory type On-board graphics card * On-board GPU manufacturer Discrete graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X   NVIDIA NVIDIA GEForce RTX 5050 8 GB GDDR7  Intel  Intel	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot Cable lock slot type Face recognition  Windows Hello  Operational conditions  Drop proof  Certificates  Certification  Weight & dimensions  Width	27 h  100 W  45 W  Kensington  MIL-STD-810H  379 mm
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics  Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics card memory type On-board graphics card * On-board GPU manufacturer Discrete graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X   NVIDIA NVIDIA GEForce RTX 5050 8 GB GDDR7  Intel  Intel	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot Cable lock slot type Face recognition  Windows Hello  Operational conditions  Drop proof  Certificates  Certification  Weight & dimensions  Width  Depth  Height (front)	27 h  100 W  45 W  Kensington  MIL-STD-810H  379 mm 265.4 mm 1.45 cm
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics  Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics card memory type On-board graphics card * On-board GPU manufacturer Discrete graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X   NVIDIA NVIDIA GEForce RTX 5050 8 GB GDDR7  Intel  Intel	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot Cable lock slot type Face recognition  Windows Hello  Operational conditions  Drop proof  Certificates  Certification  Weight & dimensions  Width  Depth  Height (front)  Height (rear)	27 h  100 W  45 W  Kensington  MIL-STD-810H  379 mm 265.4 mm 1.45 cm 1.59 cm
Total SSDs capacity Number of SSDs installed SSD capacity SSD interface NVMe SSD form factor Optical drive type *  Graphics  Discrete GPU manufacturer Discrete graphics card model * Discrete graphics card memory Discrete graphics card memory type On-board graphics card * On-board GPU manufacturer Discrete graphics card *	1 TB  1 1 TB PCI Express 4.0  M.2  X   NVIDIA NVIDIA GEForce RTX 5050 8 GB GDDR7  Intel  Intel	Continuous video playback time  Power  AC adapter power  USB Type-C charging port *  USB Type-C required charging power (min) *  USB Power Delivery (USB PD)  Security  Cable lock slot Cable lock slot type Face recognition  Windows Hello  Operational conditions  Drop proof  Certificates  Certification  Weight & dimensions  Width Depth Height (front) Height (rear) Weight *	27 h  100 W  45 W  Kensington  MIL-STD-810H  379 mm 265.4 mm 1.45 cm 1.59 cm

Packaging data		
Package depth	307 mm	
Package height	60 mm	
Package weight	2.5 kg	
Packaging content		
AC adapter included *	✓	
Other features		
Warranty period	1 year(s)	

