LG

LG Gram Pro AI 2-in-1 16T90TP-G.AA78A1

Brand : LG

Product family: Gram Pro

Product code: 16T90TP-G.AA78A1

Product name : LG gram Pro AI 2-in-1 16T90TP-G.AA78A1

- 16" 16:10 WQXGA (2560x1600) Anti-glare IPS touch display / Stylus pen
- AI assistant Copilot in Windows 11
- AI optimized Intel® Core™ Ultra Processor / 16GB LPDDR5x RAM / 1TB NVMe Gen4 SSD
- gram Hybrid AI / LG gram Link
- 1,399g Ultra-light & superslim / 77Wh smart battery
- 31-144Hz Variable Refresh Rate (VRR)

LG gram Pro AI 2-in-1 16T90TP 16" WQXGA 16:10, Ultra-Lightweight Laptop, Intel Core Ultra7 255H Processor, 16GB RAM, 1TB SSD, gram Hybrid AI, Copilot, Windows 11 Home (Obsidian Black)
LG Gram Pro AI 2-in-1 16T90TP-G.AA78A1. Product type: Hybrid (2-in-1), Form factor: Convertible (Folder). Processor family: Intel Core Ultra 7, Processor model: 255H. Display diagonal: 40.6 cm (16"), HD type: WQXGA, Display resolution: 2560 x 1600 pixels, Touchscreen. Internal memory: 16 GB, Internal memory type: LPDDR5x-SDRAM. Total storage capacity: 1 TB, Storage media: SSD. On-board graphics card model: Intel Arc 140T. Operating system installed: Windows 11 Home. Product colour: Black

Design

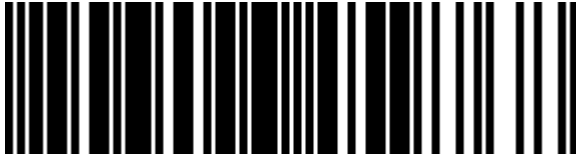|	
Colour name	Obsidian Black
Product type *	Hybrid (2-in-1)
Product colour *	Black
Form factor *	Convertible (Folder)
Housing material	Magnesium
Market positioning	Premium
Introduction year	2025
Country of origin	China
Original brand name	LG
Stylus pen support	✔

Display

Display diagonal *	40.6 cm (16")
Display resolution *	2560 x 1600 pixels
Touchscreen *	✔
HD type	WQXGA
Panel type	IPS-Pro
Native aspect ratio	16:10
Display surface	Matt
Anti-glare screen	✔
Screen shape	Flat
Display glass type	Gorilla Glass
Display brightness	400 cd/m²
Display diagonal (metric)	40.6 cm
RGB colour space	DCI-P3
Colour gamut	99%
Maximum refresh rate	144 Hz
Contrast ratio (typical)	1500:1

Audio

Audio system	Dolby Atmos
Spatial audio	✔
Number of built-in speakers	2
Speaker power	3 W
Built-in subwoofer	✔
Built-in microphone	✔
Number of microphones	2

Camera

Front camera	✔
Front camera resolution	1920 x 1080 pixels
Front camera HD type	Full HD
Infrared (IR) camera	✔

Network

Top Wi-Fi standard *	Wi-Fi 7 (802.11be)
Wi-Fi standards	Wi-Fi 7 (802.11be)
Mobile network connection *	✘
Antenna type	2x2
WLAN controller model	Intel Wi-Fi 7 BE200
WLAN controller manufacturer	Intel
Bluetooth	✔
Bluetooth version	5.4

Ports & interfaces

USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	2
Thunderbolt technology	✔
Thunderbolt version	4
USB4 Gen 3x2 ports quantity	2

Processor

Processor manufacturer *	Intel
Processor family *	Intel Core Ultra 7
Processor generation	Intel Core Ultra (Series 2)
Processor model *	255H
Processor cores	16
Processor threads	16
Processor boost frequency	5.1 GHz
Performance cores	6
Efficient cores	8
Low Power Efficient-cores	2
Performance-core Max Turbo Frequency	5.1 GHz
Efficient-core Max Turbo Frequency	4.4 GHz
Low Power Efficient-core Max Turbo Frequency	2.5 GHz
Performance-core base frequency	2 GHz
Efficient-core base frequency	1.5 GHz
Low Power Efficient-core Base Frequency	700 MHz
Processor cache	24 MB
Processor cache type	Smart Cache
Processor codename	Arrow Lake
Processor base power	28 W
Maximum turbo power	115 W

Neural processor unit (NPU)

Neural processor unit (NPU)	Intel AI Boost
Sparsity support	✔
Windows Studio effects support	✔
AI datatype support on NPU	Int8
AI software frameworks supported by NPU	DirectML, ONNX RT, OpenVINO, Windows ML
Total processor performance up to	96 TOPs
NPU performance up to	13 TOPs
GPU performance up to	74 TOPs

Memory

Internal memory *	16 GB
Internal memory type	LPDDR5x-SDRAM
Memory clock speed	8400 MHz
Memory form factor	On-board
Maximum internal memory *	16 GB
Memory channels	Dual-channel

Storage

Total storage capacity *	1 TB
Storage media *	SSD
Total SSDs capacity	1 TB
Number of SSDs installed	1
SSD capacity	1 TB
SSD interface	PCI Express 4.0
NVMe	✔
SSD form factor	M.2
Optical drive type *	✘

Graphics

Discrete graphics card model *	Not available
On-board graphics card *	✔
On-board GPU manufacturer	Intel
Discrete graphics card *	✘
On-board graphics card family	Intel Arc Graphics
On-board graphics card model *	Intel Arc 140T
On-board graphics card cores	8

Ports & interfaces

HDMI ports quantity *	1
HDMI version	2.1
Thunderbolt 4 ports quantity	2
Intel® Thunderbolt 4	✔
Headphone outputs	1
Combo headphone/mic port	✔
Headphone connectivity	3.5mm / Bluetooth
USB Type-C DisplayPort Alternate Mode	✔
USB Type-C functions	Charging, Data transfer, Video output

Performance

Text-to-speech technology	✔

Keyboard

Pointing device	Touchpad + Stylus
Numeric keypad *	✔
Keyboard backlit	✔
Full-size keyboard	✔
Keyboard number of keys	98
Windows keys	✔
Keyboard layout	QWERTY
Built-in touchpad	✔

Software

Operating system architecture	64-bit
Pre-installed software	gram Chat, LG Smart Assistant, LG gram Link, LG Security Guard, LG Lively Theme, LG Glance by Mirametrix®, Dolby Atmos, Intel® Connectivity Performance Suite, Bamboo Paper, LG xboom buds
Trial software	McAfee Live Safe (30 Days Trial), Microsoft 365 (30 Days Trial)
Operating system installed *	Windows 11 Home
Windows Ink	✔
Microsoft Copilot	✔

Battery

Battery technology	Lithium-Ion (Li-Ion)
Battery capacity *	77 Wh
Battery life (max)	22 h
Continuous video playback time	12 h

Power

Battery life power on	21 h
AC adapter power	65 W
USB Type-C charging port *	✔
USB Type-C required charging power (min) *	45 W
USB Type-C required charging power (max) *	65 W
USB Power Delivery (USB PD)	✔

Security

Face recognition	✔
Windows Hello	✔
Security management description	LG Security

Operational conditions

Drop proof	122 cm

Certificates

Certification	MIL-STD-810H

Graphics

On-board graphics card 4K support	✔
On-board graphics card 6K support	✔
Graphics card Open GL support	✔
Ray tracing acceleration	✔

Weight & dimensions

Width	357.3 mm
Depth	253.8 mm
Height (front)	1.24 cm
Height (rear)	1.29 cm
Weight *	1.4 kg

Packaging data

Package width	477 mm
Package depth	298 mm
Package height	62 mm
Package weight	2.2 kg

Packaging content

AC adapter included *	✔
Stylus pen	✔
Stylus pen type	Active
Manual	✔
Warranty card	✔
Power cord included	✔

Other features

Multi-touch	✔
Noise-canceling	✔
Warranty period	1 year(s)

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