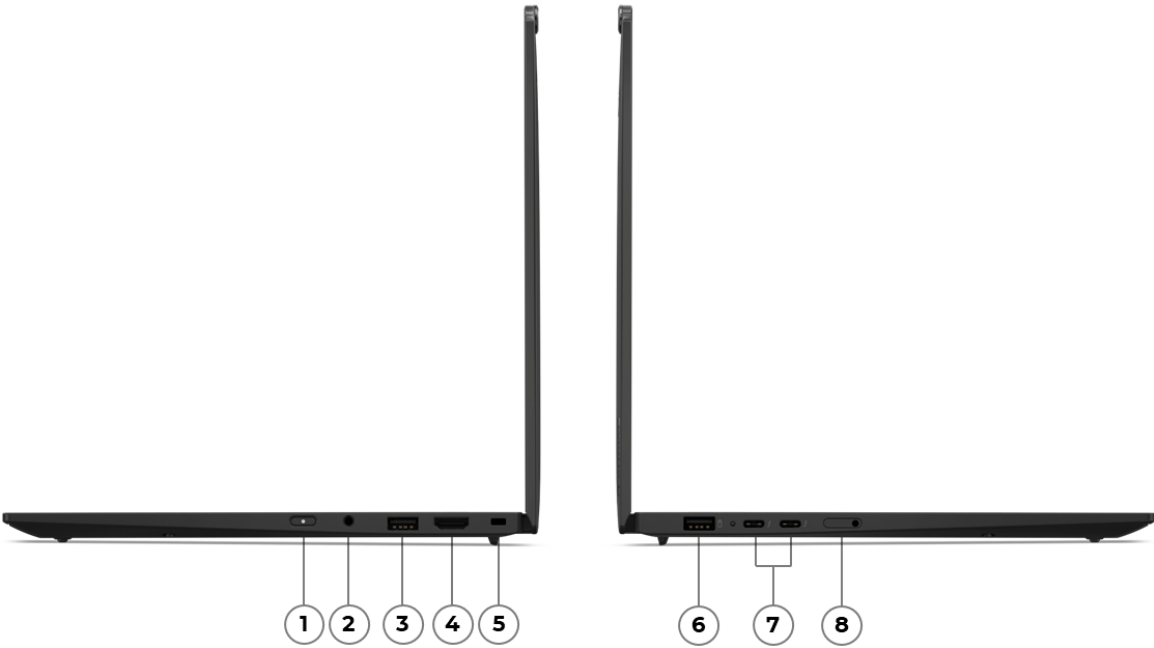


OVERVIEW



1. Power button	5. Kensington Nano Security Slot
2. Headphone / microphone combo jack (3.5mm)	6. USB-A (USB 5Gbps), Always On
3. USB-A (USB 5Gbps)	7. 2x Thunderbolt 4
4. HDMI	8. Nano-SIM card slot *

- Notes:
- Items with * are only available on selected models

PERFORMANCE

Processor

Processor Family

Intel® V, U or H Series Core Ultra 5 / 7 Processor (Series 2)

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU
Core Ultra 5 225H	14 (4 P-core + 8 E-core + 2 LPE-core)	14	P-core 1.7GHz / E-core 1.3GHz / LPE-core 700MHz	P-core 4.9GHz / E-core 4.3GHz / LPE-core 2.5GHz	18MB	Intel® Arc™ 130T GPU, up to 63 TOPS	Intel® AI Boost
Core Ultra 5 225U	12 (2 P-core + 8 E-core + 2 LPE-core)	14	P-core 1.5GHz / E-core 1.3GHz / LPE-core 700MHz	P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.4GHz	12MB	Intel® Graphics	Intel® AI Boost
Core Ultra 5 226V	8 (4 P-core + 4 LPE-core)	8	P-core 2.1GHz / LPE-core 2.1GHz	P-core 4.5GHz / LPE-core 3.5GHz	8MB	Intel® Arc™ Graphics 130V, up to 53 TOPS	Intel® AI Boost
Core Ultra 5 235H	14 (4 P-core + 8 E-core + 2 LPE-core)	14	P-core 2.4GHz / E-core 1.8GHz / LPE-core 700MHz	P-core 5.0GHz / E-core 4.4GHz / LPE-core 2.5GHz	18MB	Intel® Arc™ 140T GPU, up to 74 TOPS	Intel® AI Boost
Core Ultra 5 235U	12 (2 P-core + 8 E-core + 2 LPE-core)	14	P-core 2.0GHz / E-core 1.6GHz / LPE-core 700MHz	P-core 4.9GHz / E-core 4.1GHz / LPE-core 2.4GHz	12MB	Intel® Graphics	Intel® AI Boost
Core Ultra 7 255H	16 (6 P-core + 8 E-core + 2 LPE-core)	16	P-core 2GHz / E-core 1.5GHz / LPE-core 700MHz	P-core 5.1GHz / E-core 4.4GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ 140T GPU, up to 74 TOPS	Intel® AI Boost
Core Ultra 7 255U	12 (2 P-core + 8 E-core + 2 LPE-core)	14	P-core 2GHz / E-core 1.7GHz / LPE-core 700MHz	P-core 5.2GHz / E-core 4.2GHz / LPE-core 2.4GHz	12MB	Intel® Graphics	Intel® AI Boost
Core Ultra 7 256V	8 (4 P-core + 4 LPE-core)	8	P-core 2.2GHz / LPE-core 2.2GHz	P-core 4.8GHz / LPE-core 3.7GHz	12MB	Intel® Arc™ Graphics 140V, up to 64 TOPS	Intel® AI Boost
Core Ultra 7 258V	8 (4 P-core + 4 LPE-core)	8	P-core 2.2GHz / LPE-core 2.2GHz	P-core 4.8GHz / LPE-core 3.7GHz	12MB	Intel® Arc™ Graphics 140V, up to 64 TOPS	Intel® AI Boost
Core Ultra 7 265H	16 (6 P-core + 8 E-core + 2 LPE-core)	16	P-core 2.2GHz / E-core 1.7GHz / LPE-core 700MHz	P-core 5.3GHz / E-core 4.5GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ 140T GPU, up to 75 TOPS	Intel® AI Boost
Core Ultra 7 265U	12 (2 P-core + 8 E-core + 2 LPE-core)	14	P-core 2.1GHz / E-core 1.7GHz / LPE-core 700MHz	P-core 5.3GHz / E-core 4.2GHz / LPE-core 2.4GHz	12MB	Intel® Graphics	Intel® AI Boost
Core Ultra 7 266V	8 (4 P-core + 4 LPE-core)	8	P-core 2.2GHz / LPE-core 2.2GHz	P-core 5GHz / LPE-core 3.7GHz	12MB	Intel® Arc™ Graphics 140V, up to 66 TOPS	Intel® AI Boost
Core Ultra 7 268V	8 (4 P-core + 4 LPE-core)	8	P-core 2.2GHz / LPE-core 2.2GHz	P-core 5GHz / LPE-core 3.7GHz	12MB	Intel® Arc™ Graphics 140V, up to 66 TOPS	Intel® AI Boost

AI (Artificial Intelligence)

AI PC Category**

- AI PC (models with U or H series processor)^[1]
- Copilot+ PC (models with V series processor)^[2]

AI Performance

Up to 118 overall TOPS

NPU

Integrated Intel® AI Boost, up to 48 TOPS

Notes:

- [1] AI PCs have a NPU capable of 10+ TOPs to run the Copilot assistant by pressing the optional Microsoft® Copilot key or using Win + C.
- [2] 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
- Windows® 11 Home Single Language
- Fedora Linux^[1]
- Ubuntu Linux^[2]
- Linux^[3]
- No preload operating system

Notes:

- [1], [2], [3] 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	TGP	Key Features
Intel® Arc™ 130T GPU	Integrated	Shared	Share CPU TDP	DirectX® 12.2
Intel® Arc™ 140T GPU	Integrated	Shared	Share CPU TDP	DirectX® 12.2
Intel® Arc™ Graphics 130V	Integrated	Shared	Share CPU TDP	DirectX® 12.2
Intel® Arc™ Graphics 140V	Integrated	Shared	Share CPU TDP	DirectX® 12.2
Intel® Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12.2

Monitor Support

Monitor Support^[1]

- Models with U or H series processor: supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
- Models with V series processor: 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
- 64GB soldered memory, not upgradable^[1]

Memory Slots

Memory soldered to systemboard, no slots, dual-channel

Memory Type**

- Models with V series processor: LPDDR5x-8533, MoP (Memory on Package) memory
- Models with U or H series processor: LPDDR5x-8400^[2]

Notes:

- ^[1] 64GB memory is only available for the models with U or H series processor.
- ^[2] Installed memory is actually LPDDR5x-8533 but run as LPDDR5x-8400 due to platform limitation.

Storage

Max Storage Support^[1]

One drive, up to 2TB M.2 2280 SSD

Storage Slot

- Models with U series processor: one M.2 2280 PCIe® 4.0 x4 slot
- Models with V or H series processor: one M.2 2280 PCIe® 5.0 x4 slot

Storage Type**

Disk Type	Interface	Offering	Security
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	256GB / 512GB / 1TB ^[2]	Opal 2.0
M.2 2280 SSD	PCIe® NVMe®, PCIe® 5.0 x4 Performance ^[3]	512GB / 1TB / 2TB	Opal 2.0

Notes:

- ^[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
- ^[2] 256GB storage is only available for the models with U or H series processor.
- ^[3] PCIe® 5.0 x4 SSD is downgraded to PCIe® 4.0 x4 performance on the models with U series processor.

Removable Storage

Card Reader

No card reader

Multi-Media

Audio Chip**

- Models with U or H series processor: High Definition (HD) Audio, Realtek® ALC3306 codec
- Models with V series processor: High Definition (HD) Audio, Realtek® ALC713 codec

Speakers

Stereo speakers, 2W x2, Dolby Atmos®

Microphone

Dual-microphone array, 360° far-field, Dolby Voice®

Camera**

- FHD 1080p + IR discrete, with privacy shutter, fixed focus, temporal noise reduction
- UHD 8.0MP + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision, temporal noise reduction

Battery

Battery

57Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr)^[1]

Battery Life^[2]

Configuration 1
MobileMark® 25: up to 17.11 hr with 549 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 15.5 hr / 35.6 hr @200nits
Local video playback: up to 30.6 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 16.8 hr with 729 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 13.9 hr / 35.2 hr @200nits
Local video playback: up to 28 hr @150nits

Notes:

[1] Rapid charge is only guaranteed when the computer is turned off or in standby mode or in hibernation mode. When the computer is powered on, the Charge Time will vary depending on system power consumption and AC adapter power.

[2] Configuration 1: WUXGA (non-touch), Intel® Core™ Ultra 5 225U, 16GB LPDDR5x-8400, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA (non-touch), Intel® Core™ Ultra 5 225H, 16GB LPDDR5x-8400, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using [MobileMark® 25](#), 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 depending 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® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 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 (3-pin) 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[2]

Notes:

[1] AC adapter offerings depend on the country.

[2] No power adapter is for special bid only.

DESIGN

Display

Display**[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
14"	WUXGA (1920x1200)	None	IPS[2]	500nits	Anti-glare	16:10	1000:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	Low power, Eyesafe® Certified 2.0, 89.2% screen to body ratio
14"	WUXGA (1920x1200)	On-cell touch	IPS[3]	500nits	Anti-glare	16:10	1000:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	Low power, Eyesafe® Certified 2.0, 89.2% screen to body ratio
14"	WUXGA (1920x1200)	None	IPS[4]	500nits	Anti-glare	16:10	1500:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	ThinkPad® Privacy Guard, Eyesafe® Certified 2.0, 89.2% screen to body ratio
14"	2.8K (2880x1800)	None	OLED	400nits	Anti-glare, anti-reflection, anti-smudge	16:10	100,000:1	100% DCI-P3	120Hz	85° / 85° / 85° / 85°	DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0,

											89.2% screen to body ratio
14"	2.8K (2880x1800)	None	OLED	500nits	Anti-glare, anti-reflection, anti-smudge	16:10	100,000:1	100% DCI-P3	120Hz VRR	85° / 85° / 85° / 85°	DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0, 89.2% screen to body ratio
14"	2.8K (2880x1800)	Add-on Film touch	OLED	500nits	Anti-glare, anti-reflection, anti-smudge	16:10	100,000:1	100% DCI-P3	120Hz VRR	85° / 85° / 85° / 85°	DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0, 89.2% screen to body ratio

Touchscreen**

- Add-on Film Touch, supports 10-point touch
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:

[1] Models with U or H series processor: 2.8K OLED 500nits non-touch, 2.8K OLED 500nits touch, WUXGA touch, WUXGA non-touch, WUXGA ThinkPad® Privacy Guard;
Models with V series processor: 2.8K OLED 400nits, 2.8K OLED 500nits non-touch, WUXGA touch.
[2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Pen

No support

Keyboard

6-row, spill-resistant, air intake design, multimedia Fn keys, Copilot key

Keyboard Backlight

LED backlight

UltraNav™**

- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Glass surface multi-touch Haptic Touchpad, 70.5 x 120 mm (2.78 x 4.72 inches)
- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Glass surface multi-touch 3-button Trackpad, 56.2 x 120 mm (2.21 x 4.72 inches)

Mechanical

Dimensions (WxDxH)^[1]

Models	Dimensions
Models with OLED display	312.80 x 214.75 x 8.08/14.37 (front/rear), 16.95 (maximum) mm; 12.31 x 8.45 x 0.32/0.56 (front/rear), 0.67 (maximum)inches
Models with WUXGA display	312.80 x 214.75 x 8.38/14.77 (front/rear), 17.95 (maximum) mm; 12.31 x 8.45 x 0.33/0.58 (front/rear), 0.71 (maximum)inches

Weight^[2]

Models	Weight
Models with U or H series processor	Starting at 1006 g (2.22 lbs)
Models with V series processor	Starting at 986 g (2.17 lbs)

Case Color**

- Black, paint

- Black, weave

Case Material

Carbon fiber (top), magnesium or 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][2]**

- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3^[3]
- Intel® Wi-Fi® 7 BE201, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4^[4]

WWAN**

- Wireless WAN upgradable to 4G or 5G (with antenna ready)^[5]
- Wireless WAN upgradable to 5G (with antenna ready)^[6]
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- Quectel RM520N-GL, 5G Sub-6 GHz, M.2 card, with embedded eSIM functionality
- No support

SIM Card

- KDDI eSIM Program (Japan)^[7]
- No physical SIM card inbox

Ethernet

No onboard Ethernet^[8]

NFC

- Near Field Communication
- No support

Notes:

[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] Wi-Fi® 6E is only available for the models with U or H series processor.

[3] Wi-Fi® 6E operation is subject to the regulation rules in each country.

[4] Wi-Fi® 7 operation is subject to the regulation rules in each country.

[5] For the models with U or H series processor only.

[6] For the models with V series processor only.

[7] KDDI eSIM Program is for special bid only.

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

Ports^[1]

Standard Ports

- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports

1x Nano-SIM card slot (WWAN support models)

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™ / USB-C®.

For more compatible docking solutions, please visit [Docking for ThinkPad® X1 Carbon Gen 13](#)

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified, FIPS 140-3 certified

Physical Locks

Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader

No smart card reader

Fingerprint Reader

Touch style fingerprint reader in keyboard key, 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

- Camera privacy shutter
- (Optional) Computer Vision-based User Presence Sensing including lock on leave
- (Optional) Ultrasonic Human Presence Detection
- IR camera for Windows® Hello (facial recognition)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)

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

- Intel® vPro® Enterprise^[1]
- Non-vPro®

Notes:

[1] 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® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for ThinkPad® X1 Carbon Gen 13](#).

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]

Recycled carbon fiber contained in plastic frame on top cover
90% recycled magnesium on keyboard frame
90% recycled magnesium or 45% hydro aluminum on bottom cover
85% PCC recycled plastic used in keycaps of backlit keyboard
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the 57Wh battery pack enclosure
90% PCC recycled plastic used in 65W adapters
35% PCC recycled plastic used in cable / antenna holders
25% PCC recycled plastic used in hall sensor magnet
Plastic free packaging with FSC certified paper

Notes:

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

CERTIFICATIONS

Green Certifications^[1]

Green Certifications^[2]

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered^[3]
- ErP Lot 6/26
- RoHS compliant

- TCO Certified 10.0

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

- Eyesafe® Certified 2.0
 - (Optional) Intel® Evo™ Platform
 - (Optional) SGS High Performance AI PC Certification
 - TÜV Rheinland® Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)
-
- 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.
 - Feature with *** means that one or more options listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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