

Lead the pack with the ultra-lightweight HP EliteBook X G2a

In performance and real-world usability comparisons of three premium 14-inch business PCs, the AMD processor-based HP EliteBook X G2a came out on top

Principled Technologies tested



HP EliteBook X G2a
AMD Ryzen™ AI 7 PRO 450



Dell™ Pro 14 Premium
Intel® Core™ Ultra 7 365 vPro®



Lenovo® ThinkPad™ X1 Carbon Gen 14 Aura Edition
Intel Core Ultra 7 365 vPro

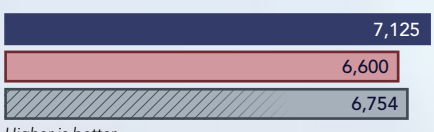
with matched memory and storage

Stronger performance on everyday apps, heavy multitasking, and on-device AI

Power through the workday with better performance on the EliteBook X G2a.

Up to 7.9% higher
overall system performance

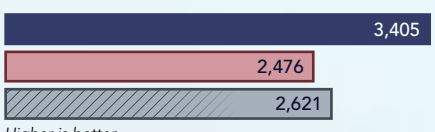
PassMark® PerformanceTest



Higher is better

Up to 37.5% faster
multi-threaded CPU performance to render 3D graphics

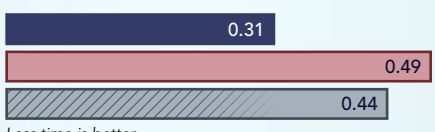
Cinebench® 2026



Higher is better

Up to 36.7% faster
AI assistant response times

LM Studio time to first token



Less time is better

HP EliteBook X G2a · Dell Pro 14 Premium · Lenovo ThinkPad X1 Carbon Gen 14

Sustained performance that doesn't break a sweat

Over a 30-minute heavy workload, EliteBook X G2a stayed cool and quiet for a more comfortable user experience.

Up to 25.2% better
sustained performance

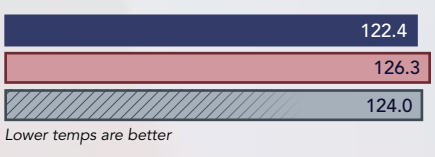
Cinebench 2026 after 30 minutes



Higher is better

Up to 3.9°F cooler
chassis underside under sustained load

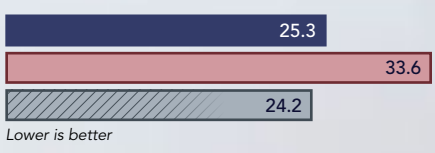
Underside surface temp (°F)



Lower temps are better

Up to 8.3 dBA quieter
than the Dell, and on par with the Lenovo

Noise level (dBA)



Lower is better

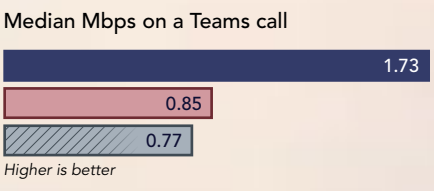
HP EliteBook X G2a · Dell Pro 14 Premium · Lenovo ThinkPad X1 Carbon Gen 14

Stay connected where it matters

During a Microsoft Teams video call over 4G/5G, stationary and on a commute, EliteBook X G2a offered stronger connections.

Up to 2.24x the uplink
throughput while stationary, for smoother file and screen sharing

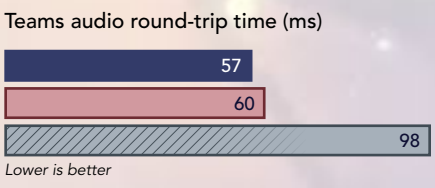
Median Mbps on a Teams call



Higher is better

Up to 41% lower
average round-trip time during the commute

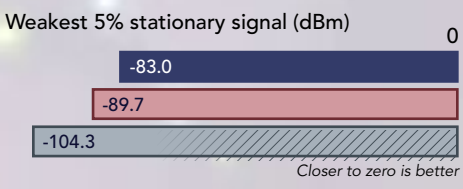
Teams audio round-trip time (ms)



Lower is better

Up to 21.3 dB more signal
in the weakest stationary spots

Weakest 5% stationary signal (dBm)



Closer to zero is better

HP EliteBook X G2a · Dell Pro 14 Premium · Lenovo ThinkPad X1 Carbon Gen 14

More convenient features, less daily friction

Lightweight for a mobile workforce, and meeting-ready out of the box

Nearly a pound lighter
Just 3.04 lbs. vs. the 3.94-lb. Dell, on par with the 3.08-lb. Lenovo

4 vs. 3 USB connections
vs. the Dell, plus larger keys (0.75 in.) and trackpad (19.0 sq. in.)

Up to 56% less distortion
from speakers while on a lap, with minimal tonal shift from desk to lap

Strong security from a single vendor

According to documentation, HP Wolf Security builds in threat isolation and malware protection
while Dell and Lenovo rely on separately licensed partner software[1]

Battery life that lasts the full workday

Nearly 6% longer battery life
than the Dell in MobileMark® 30, and matched the Dell in Procyon®[2]

Read the report at https://facts.pt/wMfFrxz

1 Security features researched from each vendor's published documentation; PT did not measure security outcomes.
2 Battery life efficiency in Balanced mode (minutes per Wh). MobileMark® 30: HP 12.6; Dell 11.1; Lenovo 15.3. Procyon® Office Productivity: HP 14.0; Dell 13.1; Lenovo 16.7. The Lenovo achieved the highest normalized efficiency.

Based on Principled Technologies hands-on testing, concluded September 1, 2026, of the HP EliteBook X G2a (AMD® Ryzen™ AI 7 PRO 450, 32 GB, 512 GB), Dell Pro 14 Premium, and Lenovo ThinkPad® X1 Carbon Gen 14 Aura Edition (both Intel® Core™ Ultra 7 365 vPro®, 32 GB, 512 GB). Results will vary. For complete details, see the report at https://facts.pt/wMfFrxz and the science behind the report at https://facts.pt/ZNvcE56.

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