HPE ProLiant DL145 Gen11 & AMD EPYC™ 8004 Series:
Edge-Optimized AI Performance Under Real-World Thermal and Acoustic Constraints

Purpose-built Single-Socket Efficiency based on the 5nm zen 4C Architecture

Delivering up to 64 cores and 128 threads.

TDPs as low as ~70W and broad thermal range support.

AMD Infinity Guard delivers silicon-level security protections.

GD-183A: AMD Infinity Guard features vary by EPYC™ Processor generations and/or series. Infinity Guard security features must be enabled by server OEMs and/or Cloud Service Providers to operate. Check with your OEM or provider to confirm support of these features. Learn more about Infinity Guard at http://www.amd.com/en/products/processors/server/epyc/infinity-guard.html

Independently Validated by Signal65 Using Sustained AI Workloads

Predictable and reliable performance, even when deployed in thermally challenging environments.

Edge AI Capability

- **61 FPS** - YOLO11n image classification
- **11 FPS** - YOLO11n image detection

Thermal Stability

- **<2% AI inference latency increase from 75°F to 105°F ambient**

Acoustic Control

- **<50 dB under sustained thermal stress** (~7 dBA increase at 105°F ambient)

Operational Intelligence Built In

HPE iLO

Faster firmware & boot workflows
Compared to Dell iDRAC10 in Signal65 testing

Deep platform telemetry and predictive analytics

Comprehensive remote-management and security stack

HPE Compute Ops Management

Cloud-native, fleet-level operations

Policy-based server grouping

Predictive insights for energy, cost & CO_2

Hands-on tested by Signal65.
For more, see the full report at Signal65.com.