Recommended Hardware

Compass AI hardware shopping list. Take this to your Dell, HP, or Lenovo rep. Compass is a local model. It runs on hardware your district already buys. These are the three sizes, with the CPU models we have tested and the RAM you actually need.

Tier	Compass Lite	Compass Standard	Compass Pro
Model	Phi-3 Mini (Microsoft, 3.8B)	Mistral Small 3 24B (Mistral AI)	Llama 3.3 70B (Meta)
Best for	Pilots, single schools, small districts	US districts up to 7,500 students	Large districts (7,500+) and central servers
RAM	16 GB minimum, 32 GB comfortable	48 GB minimum, 64 GB comfortable	96 GB minimum, 128 GB comfortable
CPU class	Any 6-core Intel or AMD from the last 5 years	Workstation-class: 8+ cores, fast single-thread	Server-class Xeon or EPYC, many cores and high TDP
CPU examples	Core i5-12400, Ryzen 5 7600, Core i5-13400	Core i7-14700K, Ryzen 7 7700X, Xeon W-2275	Xeon Gold 6338, EPYC 7443P, Threadripper Pro 5965WX
GPU (optional)	Not required	Helpful: RTX 4060 or 4070	Strongly recommended: RTX 4090 or A6000
Disk	60 GB SSD for model and app	80 GB SSD, NVMe preferred	120 GB NVMe SSD, dedicated for models

RAM IS THE GATING FACTOR

If Compass will not load, it is almost always RAM, not CPU. Size for the RAM row above first, then pick a CPU from the same row. GPU is optional on Lite and Standard; only Pro benefits from a dedicated GPU at scale. Any one machine on this list handles hundreds of concurrent district users.

BUYING NOTES

- **Used server hardware is fine.** A 3-year-old Dell PowerEdge or HP ProLiant with the RAM upgraded to the target tier is a valid Compass Standard host.
- **One machine, district-wide.** All users across all buildings log into the same Atlas K-12 install. You are not sizing per school, you are sizing for one server.
- **Start on Lite, upgrade later.** The model is one config line. You can start on Compass Lite on an existing machine and upgrade to Standard or Pro when you are ready.

Hardware sizing help: atlasoa@outlook.com. Atlas K-12 installs happen on Dell, HP, Lenovo, Supermicro, or existing district hardware.