

# Minimum System Requirements

Atlas K-12 runs on a single Windows server. Three Compass AI tiers share the same codebase: only the local model changes. RAM is the gating factor.

Component	Compass Lite	Compass Standard	Compass Pro
Best for	Single school pilot	Small-to-mid district	Large district 7,500+
Local model	Phi-3 Mini 3.8B	Mistral Small 3 24B	Llama 3.3 70B
RAM	16 GB / 32 GB rec	64 GB / 96 GB rec	128 GB / 192 GB rec
CPU class	Ryzen 5 / i5 6+ cores	Ryzen 7 / i7 8+ cores	Ryzen 9 / Threadripper / Xeon
GPU	Not required	Optional RTX 4060 Ti 16GB	Recommended RTX 4090 / A6000
Disk	500 GB SSD	1 TB NVMe	2 TB NVMe + backup volume
OS	Windows 10 / 11 (64-bit)	Windows Server 2019 or 2022 (64-bit)	Windows Server 2019 or 2022 (64-bit)
Network	1 Gbps internal	1 Gbps internal	10 Gbps internal recommended

## NOT REQUIRED

- Active Directory (SAML or OIDC is sufficient)
- Kubernetes or container orchestration (the Windows Service wrapper is all you need)
- External database (SQLite is bundled; Postgres is supported but optional)
- Public internet exposure

**Right-size RAM first.** Undersized RAM means slower tokens-per-second, not feature loss. Pick the tier that matches your district size, then match the hardware to the tier.

## NETWORK PORTS

- TCP 443 inbound from staff subnets to the Atlas server (HTTPS)
- TCP 5432 localhost-only (Postgres, not exposed) if you enable the optional Postgres backend
- Outbound TCP 443 to SIS vendor IPs if SIS is SaaS
- No inbound from public internet required

**Questions:** ashleyreddick@atlasoa.com | Direct reply from Ashley Reddick, founder.