

# SenseAI — Hardware & Infrastructure Requirements

Pre-installation checklist for school IT administrators

SSQUARE AI SOLUTIONS PRIVATE  
LIMITED

ssquareit.co.in

senseai-support@ssquareit.co.in

## Server / Dedicated Machine Requirements

Component	Minimum Requirement	Recommended	Notes
<b>Processor (CPU)</b>	Intel Core i7 (10th Gen+) or AMD Ryzen 7 5000+	Intel Core i9 / Xeon or AMD Ryzen 9	Minimum 8 cores, 16 threads for AI inference speed
<b>RAM (Memory)</b>	32 GB DDR4	64 GB DDR4/DDR5	AI model (Llama3.1:8b) alone needs ~8 GB. With Live Quiz + 40 concurrent student sessions, 32 GB provides comfortable headroom. 64 GB recommended for schools with 100+ simultaneous users
<b>Storage (OS + Software)</b>	512 GB SSD (NVMe preferred)	1 TB NVMe SSD	SSD mandatory — HDD causes severe AI loading delays (5–10 min per query)
<b>Storage (AI Models)</b>	100 GB free space	200 GB free space	Software package: ~32 GB. AI models included in package. Document storage: varies by school usage
<b>GPU (Optional)</b>	Not required	NVIDIA RTX 3060 / A2000 (8 GB VRAM)	GPU reduces AI response time from ~15s to ~3s. CPU-only mode works fully
<b>Operating System</b>	Windows 10/11 (64-bit, Pro recommended)	Windows 11 Pro / Windows Server 2019	WSL2 must be enabled. Pro

Component	Minimum Requirement	Recommended	Notes
			edition recommended. Home edition works if WSL2 is enabled
<b>Network Interface</b>	1 Gbps Ethernet (LAN)	<b>1 Gbps Ethernet + Wi-Fi backup</b>	Server must have a static/reserved IP on school LAN (e.g., 192.168.1.100)

**⚠ Critical: Do NOT use these configurations**

- Laptop as server — thermal throttling kills AI performance; no uptime guarantee
- HDD (spinning disk) storage — AI model loading takes 5–10 minutes, unusable
- Less than 32 GB RAM — AI models will crash with out-of-memory errors during answer generation
- Windows Home Edition — Docker Desktop requires WSL2 to be enabled; Pro edition recommended for stability
- Shared internet PC — AI inference is CPU-heavy; sharing with teacher workstation causes slowdowns

**🌐 Network Requirements**

**📶 LAN Setup (Required)**

- Switch with minimum 100 Mbps ports
- Server must have a **fixed / reserved IP**
- All teacher / student devices on same LAN
- Router must allow local traffic (no inter-VLAN blocking)
- **Live Quiz:** stable LAN essential — students answer in real-time; network drops cause missed responses
- Router/switch must not block WebSocket connections (port 80 upgrade) — all standard routers support this by default

**⚡ Power & UPS**

- Server must be on a **dedicated UPS**
- UPS capacity: minimum 1 kVA for server alone
- Power fluctuations cause database corruption
- Sudden shutdown during AI generation = job failure
- Recommended: APC / Luminous online UPS

**💻 Computer Lab / Client Device Requirements**



**Desktop / Lab PC**

Any desktop or laptop with 4 GB RAM+. No software installation needed — students open a browser and access the system directly from the school server.



**LAN / Network**

All lab PCs must be connected to the same local network as the server (wired LAN recommended). No internet required — SenseAI runs fully offline on the school server.



**Browser Requirement**

Chrome 90+ or Firefox 88+ required. Edge Chromium supported. Internet Explorer not supported. No plugins or extensions needed.

**✅ What You Do NOT Need**

- Internet connection — SenseAI is fully offline after installation
- Cloud subscription or external server — everything runs on your school server
- Client software on student/teacher PCs — just a web browser is sufficient

- IT team for daily operation — designed for non-technical school staff

**SSQUARE AI SOLUTIONS PRIVATE LIMITED**

[senseai-support@ssquareit.co.in](mailto:senseai-support@ssquareit.co.in) | [ssquareit.co.in](https://ssquareit.co.in)

Hardware Requirements — SenseAI v1.0

Please share this with your IT administrator before purchase

## ✓ Server Readiness Checklist

Please tick each item and share this completed checklist with SSQUARE AI SOLUTIONS before your installation date.

- Dedicated server machine ready** — not a shared workstation or laptop (i7, 32 GB RAM, 512 GB SSD minimum)
- Windows 10/11 Pro installed** — fresh installation preferred, OS updated to latest patches
- UPS connected to server** — minimum 1 kVA, server should survive 30-minute power cut
- Static IP assigned to server** — e.g., 192.168.1.100 (coordinate with your network admin)
- 100 GB free disk space confirmed** — AI models, Docker images, and document storage
- Server accessible from classroom PCs** — ping test successful from at least one teacher PC
- Administrator account credentials ready** — needed during installation for software setup
- Antivirus / Windows Defender exclusions set** — exclude SenseAI installation folder from real-time scanning
- USB 3.0 port available on server** — installation is done via USB drive (minimum 64 GB, USB 3.0 required for speed)

## 🌐 Network Readiness Checklist

- LAN switch with available ports** — server connected via Ethernet (not Wi-Fi)
- All classrooms reachable on same LAN** — or at minimum teacher room + computer lab
- Port 80 not blocked** — this is the port used by SenseAI (standard web port, same as any website)
- Firewall allows internal traffic** — no firewall rule blocking 192.168.x.x to server IP
- Wi-Fi available in classrooms/exam hall (optional)** — any device (laptop, tablet, smartphone) connected to the same Wi-Fi can access SenseAI through a browser — no software installation needed on the device

## 👤 Administrative Readiness Checklist

- List of teachers with names and email IDs** — to create teacher accounts during setup
- Subject structure decided** — e.g., Physics, Chemistry, Biology, Maths for Class 11
- Student list ready (optional)** — roll number, name, class. Note: students can also join sessions using a PIN shared by the teacher — no individual student accounts required
- Documents to upload identified** — syllabus PDFs, NCERT chapters, school policies
- IT person designated as Tenant Admin** — one person responsible for ongoing user management

## 📄 Server Details to Share with SSQUARE AI SOLUTIONS

School Name \_\_\_\_\_

<b>Server IP Address</b>	_____ (e.g., 192.168.1.100)		
<b>Processor</b>	_____	<b>RAM</b>	_____
<b>OS Version</b>	_____	<b>Storage Free</b>	_____
<b>TeamViewer ID</b>	_____	<b>TeamViewer Pass</b>	_____
<b>Contact Person</b>	_____	<b>Phone</b>	_____
<b>Preferred Install Date</b>	_____		

 **Ready to Install? Contact Us**

Once you've completed this checklist, share it with us via email or WhatsApp. We'll schedule an installation slot (remote via TeamViewer or on-site for TN/nearby states) within 2–3 working days of receiving payment confirmation.

**Email:** [senseai-support@ssquareit.co.in](mailto:senseai-support@ssquareit.co.in) | **Website:** [ssquareit.co.in](http://ssquareit.co.in)

**SSQUARE AI SOLUTIONS PRIVATE LIMITED**

[senseai-support@ssquareit.co.in](mailto:senseai-support@ssquareit.co.in) | [ssquareit.co.in](http://ssquareit.co.in)

Hardware Requirements — SenseAI v1.0

Please complete and return before installation appointment