

From 6-Month Hardware Struggle to Production-Ready PoC in 3 Weeks

Hardware Partnership for an Industrial IoT Platform Startup | Chennai, Tamil Nadu, India

3 wks From Call to Working PoC	6 mo Hardware Effort Saved	4 Enterprise Pilots Launched	Zero In-House Hardware Team Needed
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01 Project Overview

Field	Details
Client Type	Industrial IoT Platform Startup — Series A, B2B SaaS
Sector	Industrial IoT — Factory Performance & Energy Management Platform
Location	Chennai, Tamil Nadu (clients in Chennai, Coimbatore, Pune)
Challenge	6 months of failed in-house hardware — enterprise pilots waiting
Solution	CloudBridge Partnership — off-shelf gateways pre-configured for their API
Timeline	First Call to PoC: 3 Weeks 4 Enterprise Pilots Live: 8 Weeks

02 Background & Challenge

Problem Summary

- 6 months of in-house hardware R&D — INR 18 lakhs spent, no working device to show.
- 4 enterprise pilot clients waiting — each week of delay risked losing them to a competitor.
- Platform needed RS-485 Modbus connectivity — complex firmware requirement with no expertise.
- Enterprise clients expected branded hardware — not a dev board in a project enclosure.
- No manufacturing path — even if one device worked, producing 50+ units was a new problem.

03 Deployment Architecture

HashStudioz reviewed the startup's platform API in the first meeting. Off-shelf Smart IoT Gateways were firmware-configured in 5 days for their MQTT topic structure, REST heartbeat, and device ID format. Week 3: working PoC live. Week 8: 4 branded pilot devices shipped to enterprise clients.



04 Results Achieved

3 wks To Working PoC	INR 18L Hardware Spend Capped	4 Pilots Live in 8 Weeks	Zero Integration Issues at Pilots
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- ✓ Working PoC — hardware live on their platform — achieved in 3 weeks from the first call.
- ✓ In-house hardware R&D halted — 2 engineers fully redirected to platform and UX development.
- ✓ All 4 enterprise pilot clients onboarded in 8 weeks — none dropped out, 1 expanded to 3 sites.
- ✓ Pre-configured firmware meant pilot devices connected to platform in under 10 minutes at each site.
- ✓ Enterprise clients received branded, professional hardware — consistent with platform positioning.
- ✓ Scale roadmap defined — 200-unit OEM production path with custom enclosure and OTA updates.

“We had wasted 6 months and nearly 20 lakhs trying to build hardware ourselves. HashStudioz had a device talking to our platform in 3 weeks. Our enterprise clients got professional branded hardware, our engineers got their time back, and we finally launched. It was not even a difficult decision in hindsight.”

Co-Founder & CTO, Industrial IoT Platform Startup, Chennai

05 Technology Stack

Layer	Technology / Component
Edge Device	HashStudioz Smart IoT Gateway — custom firmware for client’s API structure
Connectivity	MQTT (primary) + REST heartbeat 4G-LTE + WiFi AWS cloud endpoint
Inputs	RS-485 Modbus (PLCs, energy meters) 4-20mA Digital I/O
Custom Firmware	MQTT topic structure, device ID format, REST heartbeat, OTA update capability
OEM Branding	Custom label + branded packaging — enterprise clients received client’s branded product
Platform	Client’s Industrial IoT SaaS — OEE tracking, energy analytics, predictive maintenance
Integration	REST API + MQTT — gateway pre-configured to connect to client cloud automatically

Scale Path	200-unit OEM production — custom enclosure, full white-label, OTA firmware management
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Could This Work For You?

This solution may fit if:

- You have a cloud platform but no working hardware — or in-house development has stalled.
- You have enterprise clients waiting for pilot hardware and cannot afford more delays.
- You need RS-485 / Modbus connectivity pre-configured for your API without building it from scratch.

Get your platform hardware-ready in weeks, not months

Talk to our team — from PoC to branded production, we handle everything.

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