



SENTINEL.AI

Intelligence for Critical Infrastructure

IPN Incubation · Coimbra, Portugal

One Pager



**Startup
Capital
Summit
2026**

We predict failure before it happens — Without touching the critical systems.

€1.5T

lost/year in EU
critical infrastructure

70%

failures had
detectable signals

€1.2M

average cost per
failure event

3 – 8x

more expensive to fix
than to prevent

THE PROBLEM

Critical infrastructure operators (energy, rail, health, industry) collect enormous volumes of data. But **80% of that intelligence is never used**: modern AI cannot enter critical systems. Regulators demand deterministic behaviour. *Black-box* models block certification. AI failures represent real human risk.

THE SOLUTION

Sentinel Insight monitors critical assets in real time, detects early degradation signals weeks before failure, and generates fully traceable alerts, without interfering with certification. AI operates with strict segregation between safety and non-safety domains. Every alert is explainable, auditable, and accepted by regulators. Compatible with IEC 61508, EN 50128, and ISO 26262.

MARKET OPPORTUNITY

- **TAM €80B–€100B**
Global critical infrastructure AI
- **SAM €12B–€18B**
EU · regulated sectors
- **SOM €15M–€50M**
3 – 5 year initial target

DIFFERENTIATORS

- **Explain ability & auditability**
Every decision traceable and verifiable
- **V&V-by-design**
Embedded from architecture
- **Sector-agnostic**
Energy, rail, health or industry

CLIENT ROI — YEAR 1

Cost of one avoided failure:	€1.2M
Sentinel Insight annual license:	€80K
Net client savings:	€1.12M

Client ROI: 14x in Year 1

BUSINESS MODEL — LAND & EXPAND

Paid POC — 1 asset, 3 months	€15–30K
Sentinel Insight SaaS License	€30–120K/yr
+ Engineering Services	€50–300K
+ Support & Maintenance SLA	15–20% of license/yr

€25M ARR Year 5	163% CAGR	>80% Gross Margin	Yr 3 Break-even
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SEED ROUND

- **€1.2M**
- **20% equity**
- **Pre-money €4M – €5M**
- **In 18 months:**
Product launched
Series A

TEAM & INCUBATION

- **3 founders**
Engineering · AI systems · Functional safety
- **IPN Incubation**
Instituto Pedro Nunes · Coimbra · Portugal
- **Technology Readiness**
TRL 3–4 · MVP in development · Active POC