

P·I·M·S

EPSILON

OPERATIONS INTELLIGENCE

EXECUTIVE SUMMARY • PIMS

EPSILON PIMS; Modern Intelligent Plant Management

EPSILON PIMS — Plant Information Management System — is the digital twin platform powered by AI Brain (an LLM-based predictive warning system) that is the industrial-plant-focused tool in the EPSILON Suite. It ingests every signal once through ChronoCore, keeping secure records, and feeds sophisticated data streams into a set of versatile analysis tools continuously, all centrally accessible in one cloud-based application.

ChronoCore

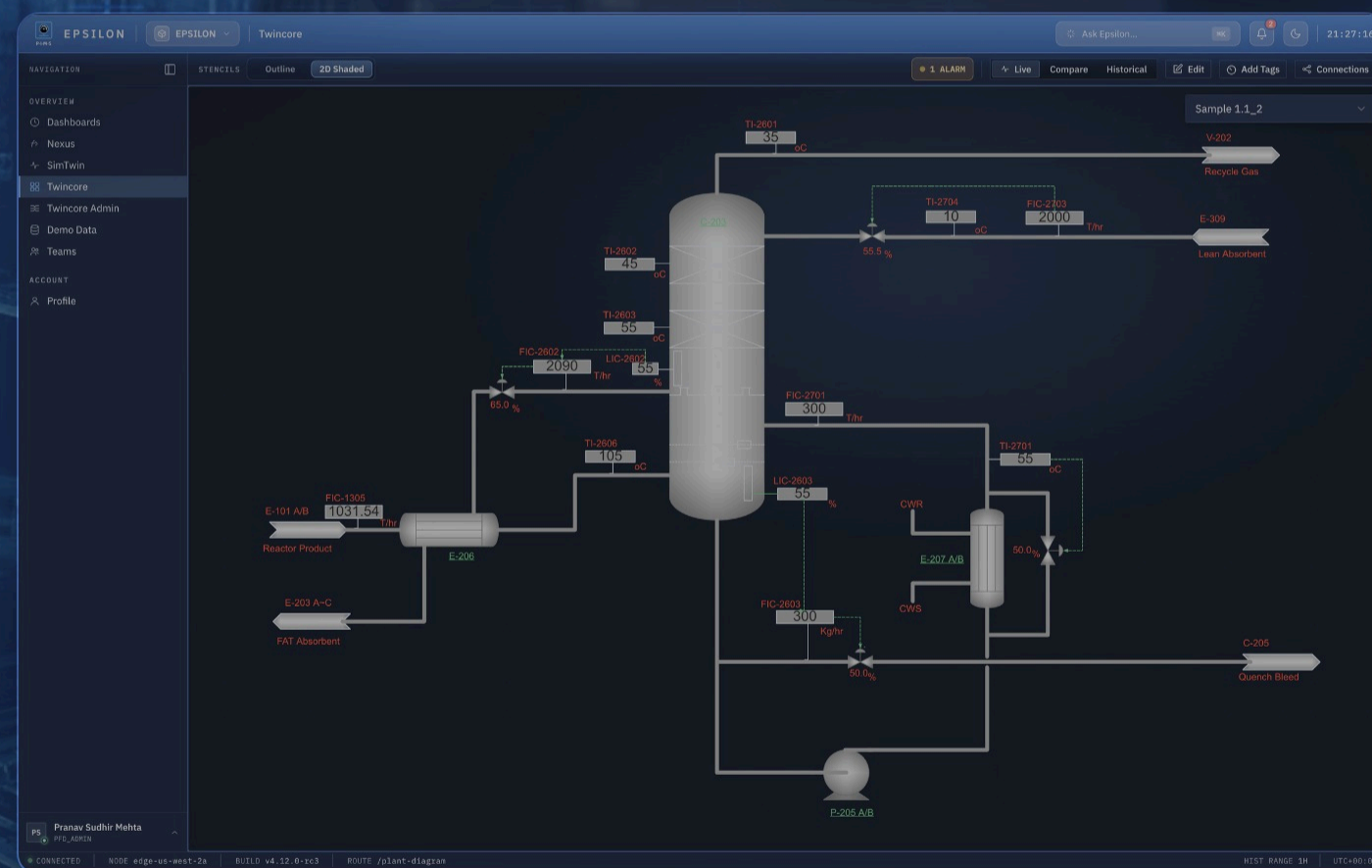
TwinCore

Nexus™

SimTwin™

AI BRAIN

DASHBOARDS



1M pts/s

Collection rate · unlimited tags · OPC UA/DA, SCADA, SQL, CSV

6

Modules on one data backbone — one login, one asset model, one truth

<1 click

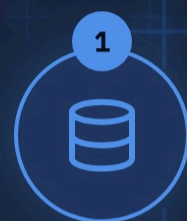
From any live value on the plant diagram to its full history

ISO 27001

& SOC 2 Type II certified infrastructure — Cloudflare and AWS

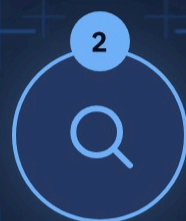
One data backbone. Six modules. Every stakeholder.

Process data already exists — in the DCS, the historian, the spreadsheets and the heads of experienced engineers. PIMS ingests it once, keeps it as a single trusted record, and feeds that record to every module below, continuously and in real time.



COLLECT

Every DCS, SCADA, PLC and IoT signal into one historian — ChronoCore.



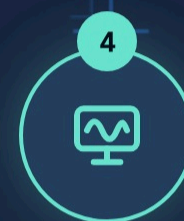
EVALUATE

Live plant diagrams in TwinCore; view and compare trends in TrendVision.



COMPUTE

Virtual tags, KPIs and soft sensors with Nexus™ — no code required.



SIMULATE

Decisions validated against SimTwin™'s live-reconciled digital twin.



PREDICT & ACT

AI Brain early warnings on role-based dashboards, wherever you are.

THE SIX MODULES



ChronoCore

MODULE 01 · HISTORIAN

Ingests, compresses and stores high-fidelity time-series from every source with store-and-forward buffering, lossless compression and built-in resilience.

DCS SCADA OPC UA/DA MQTT



TwinCore

MODULE 02 · LIVE PLANT DIAGRAMS

Live tag values on PFD-style diagrams with alarm states; one click opens any value's history, and TrendVision overlays, stacks and compares tags with pattern search.

LIVE TREND TRENDVISION PATTERN SEARCH



Nexus™

MODULE 03 · VIRTUAL TAGS

No-code calculation engine: compose formulas in a text or visual editor, preview live, publish — the new tag is trendable, alarmable and dashboard-ready, backfilled on request.

SOFT SENSORS KPI BUILDER TEMPLATES



SimTwin™

MODULE 04 · DIGITAL TWIN

First-principles models — imported from DWSIM, Excel or equations — bound to live tags and reconciled continuously, so what-if studies run against today's plant.

STEADY-STATE WHAT-IF



AI Brain

MODULE 05 · PREDICTIVE INTELLIGENCE

LLM-based predictive warning system on the full asset history, virtual tags included: early warnings, ranked root causes and predictive maintenance, delivered where operators already work.

EARLY WARNING ROOT CAUSE MODEL-FREE ML



Dashboards

MODULE 06 · EVERY STAKEHOLDER

Role-based, mobile-ready cockpits from the control room to the boardroom — every gauge, trend and KPI backed by the same numbers. Ask EPSILON answers in plain language.

PERSONALISED MOBILE SHIFT HANDOVER

Cloud-native, plant-grounded

Data is collected and stored on site, then synchronised through your firewall to the EPSILON AI Cloud — evergreen subscription software on Cloudflare and AWS, providers independently certified to ISO/IEC 27001 and audited under SOC 2 Type II.



Why EPSILON PIMS

Measurable impact across the plant lifecycle

- Fewer engineering hours** — one platform across the lifecycle; no duplicate tools or rework.
- Fewer unplanned shutdowns** — early warnings and predictive maintenance cut downtime risk.
- Lower energy & emissions** — optimised operations reduce utility cost and carbon footprint.
- Faster root cause** — answers in minutes, not days, with pattern-based search.
- One source of truth** — a single contextualised backbone connects every discipline.

VALUE CREATION

\$100k++

manpower,
downtime, energy
& production cost

EVERGREEN

SaaS

always the latest
release, no
upgrade projects

TALK TO US

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EPSILON PIMS

Let's build your Operations Intelligence platform together.