

INDUSTRIAL INTELLIGENCE FOR PROCESS SENSOR DATA

REFINING • CHEMICALS • OIL & GAS

Your AI is Only as Good as Your Sensor Data.

VALID8A.AI delivers **real-time validation and contextualization** of process sensor data — so advisory, optimization, and AI applications in Oil & Gas, Refining, and Chemicals run on inputs you can actually trust.



EVERY VALUE CARRIES ITS FLAG

● VALIDATED

● QUESTIONABLE

● BAD

FIELD-OBSERVED ACROSS DEPLOYMENTS

5–20%

of process sensors found faulty on first deployment to an operating unit

< 1 min

to detect a sensor fault with deterministic, explainable rules and models

< 2 wks

typical integration to the first validated data stream

THE PROBLEM

A data-quality gap that **nobody** owns.

Across decades of operating and optimizing process units, our founders kept hitting the same failure mode — the sensor data was uncertain before the model ever saw it.

EVERYONE ASSUMES SOMEONE ELSE OWNS IT

● OT Teams

Assure the historian app stays available — and never look at the quality of the data inside it.

● I&C Technicians

Assume instruments are healthy until a work order is raised against them.

● Process Engineers

Assume the historian data feeding their models is already clean.

● Data Scientists

Assume both — and reconcile errors away so models keep running on faulty inputs.

FIELD-OBSERVED,
EVERY DEPLOYMENT

5–20%

of process sensors flagged faulty when first deployed on an operating unit.

< 1 min

to detect a sensor fault using signal-characterization rules and models.

Not on unusual units. Not on neglected sites — on operating units everyone believed were adequately instrumented and maintained.

WHAT IS VALID8A.AI

The validation layer between your historian and your **AI**.

Plant Sensors

DCS • SCADA • EDGE



VALID8A

VALIDATE • CONTEXTUALIZE • CERTIFY



Trusted AI Inputs

AI • APC • OPS • RELIABILITY



Validate

Score every value against statistical, physical, and contextual rules — a real-time integrity verdict per tag.



Contextualize

Enrich each tag with equipment class, process unit, operating mode, and alarm state via ISO 14224.

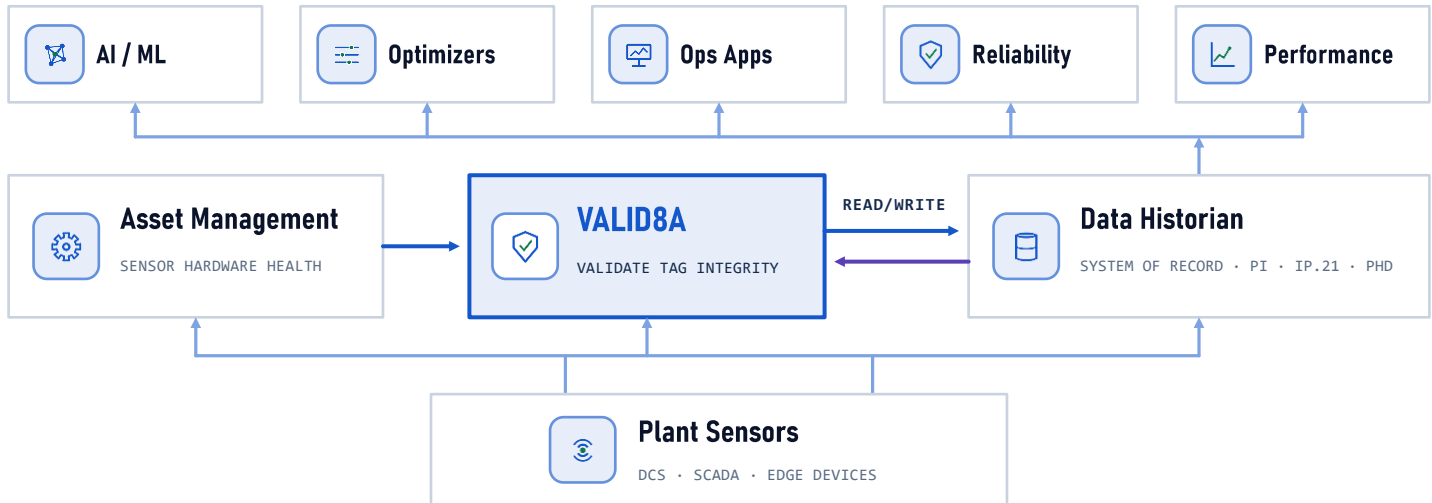


Certify

Write the verdict back into the historian with an immutable, audit-ready trail behind every decision.

VALID8A writes integrity status back into your system of record.

Validation results don't stay siloed in a side tool — they are written into the data historian itself, using its native quality-flag mechanism, so every downstream consumer reads each tag with its quality verdict already attached.



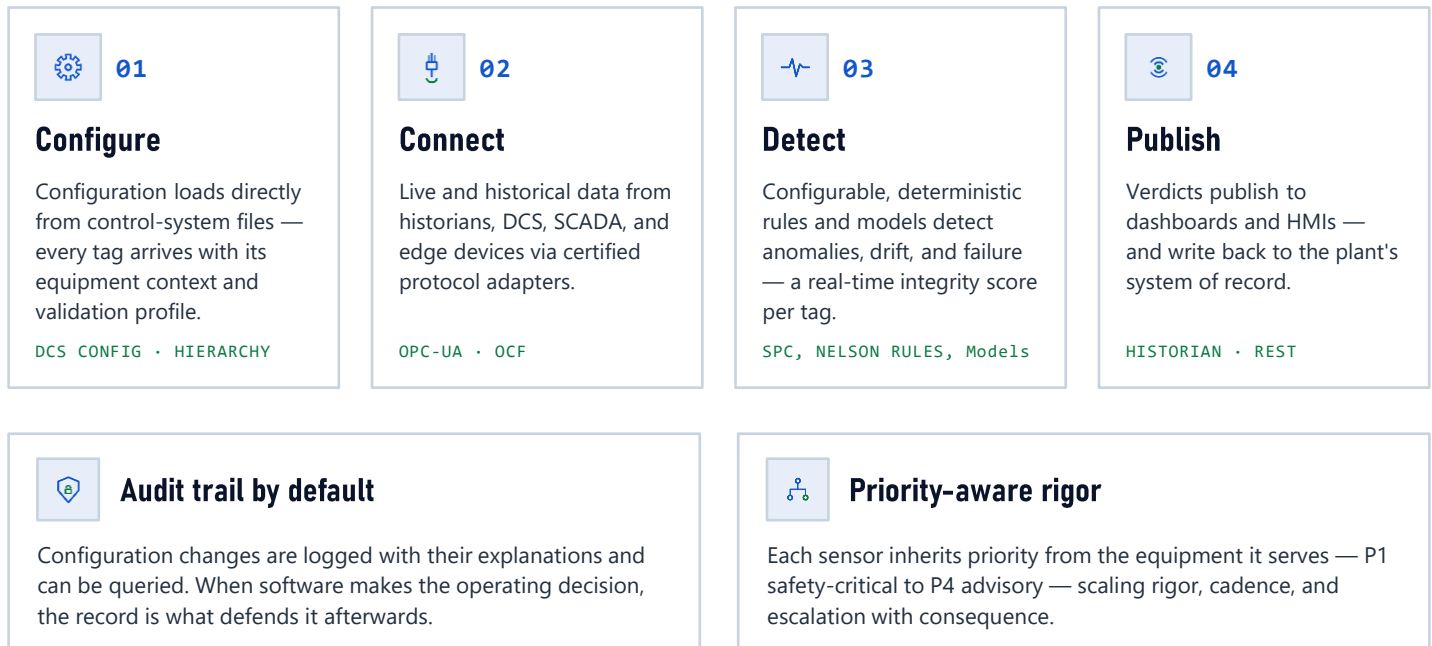
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THE WORKFLOW — RAW TAGS TO TRUSTED AI INPUTS



INTEGRATES WITH PI • IP.21 • PHD • EXPERION • DELTAV • CENTUM • PCS 7 • SAP PM • AMS • PRM

STANDARDS ISA-95 • OPC-UA • OCF • ISO 14224

DEPLOYMENT ON-PREM • EDGE • PRIVATE CLOUD • AIR-GAPPED

Built for the most critical **process operations.**

Designed alongside process and automation engineers who know that bad sensor data kills industrial automation and AI projects before they start.



Oil & Gas

Production operations for FPSOs, Platforms, Intermediate fractionation and Upgrading facilities.



Refining

Continuous validation of asset and unit-level instrumentation across integrated facilities and plant sites.



Chemicals & Petrochem

Continuous data integrity for Ethylene units, reactors, polymer trains, and utilities.

MEASURABLE IMPACT

< 1 min

sensor-fault detection for operations and early event response

−63%

false alerts on rotating assets feeding PdM models

+4.2%

APC on-control uptime from validated controller inputs

+3.1%

performance-benchmark accuracy across KPI calculations

APPLICATION-LEVEL OUTCOMES ARE DIRECTIONALLY REPRESENTATIVE AND ESTABLISHED PER SITE DURING A BASELINE ASSESSMENT.

ABOUT VALID8A.AI

A Houston, Texas industrial-AI software company delivering real-time validation and contextualization of process sensor data for Oil & Gas, Refining, and Chemicals. Founded in 2025 by engineers with decades of process-engineering and digital-technology experience across refineries, gas plants, and chemical facilities — built to address the failure mode that derails real-time advisory, optimization, and AI initiatives: the sensor data was uncertain before the model ever saw it. The use of signal-characterization rules and models now enables VALID8A to detect faulty process data in less than a minute. It enables the next generation of industrial AI to run on inputs an operator, a process engineer, and a manager can all stand behind.

VALID8A SCD — SENSOR & CONTROLLER DIAGNOSTICS

ISA-95 • OPC-UA • OCF • ISO 14224

GET IN TOUCH

See what your sensors are really telling you.

Start with a baseline validation assessment on one operating unit — and put a number on your data quality.

INFO@VALID8A.AI

VALID8A.AI • HOUSTON, TX
ANSWERED WITHIN ONE BUSINESS DAY

“The faster sensor data validation function enables the development of AI project scopes impacting the plant operations — while also addressing the data quality for enterprise-level apps.”

— DIGITAL INDUSTRY ANALYST