

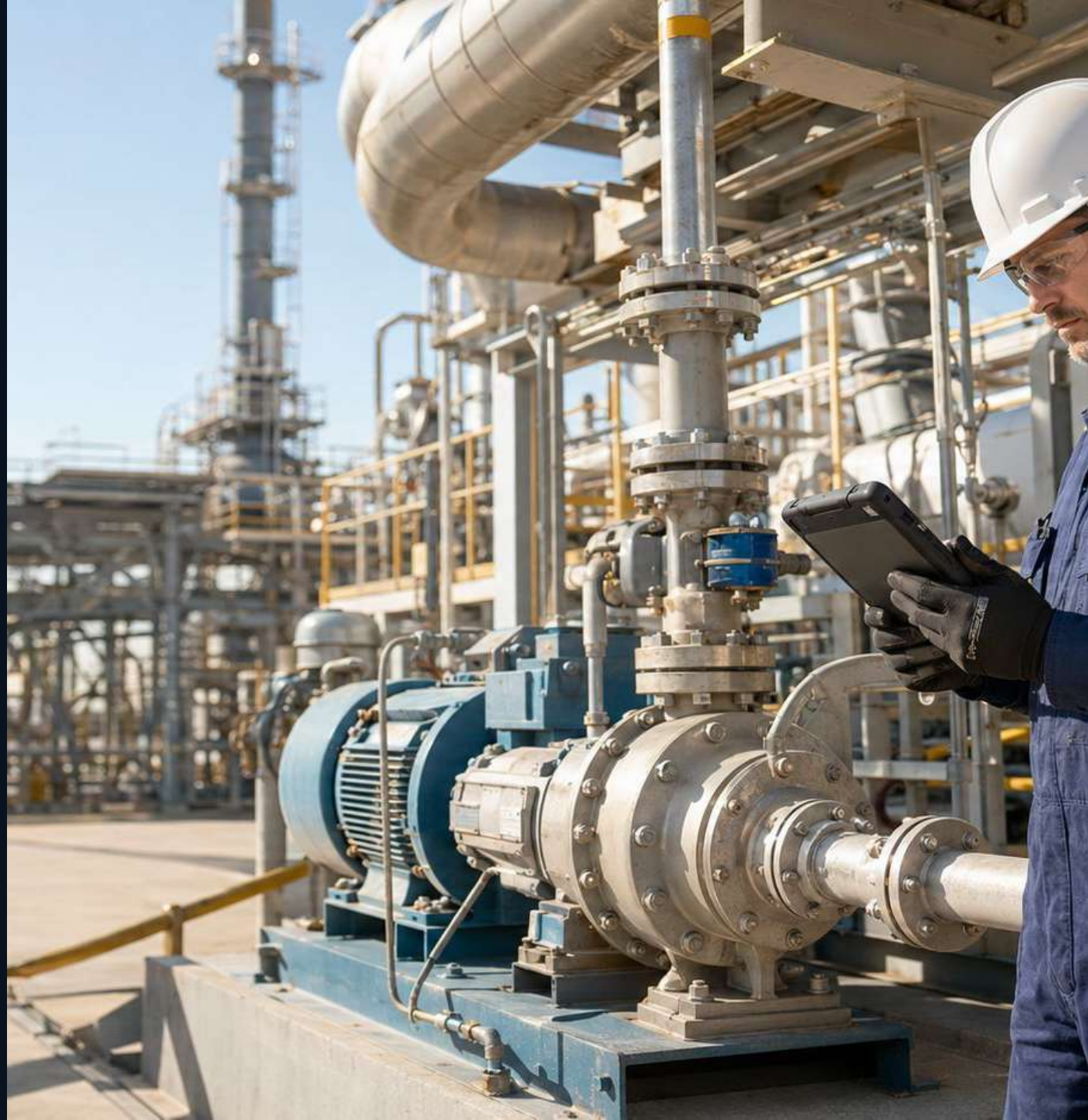
FIELD IQ EDGE

Intrinsically safe solution in Hazardous Industrial Environments

Product direction combines mission-scoped AI, deterministic safety controls and deployment on appropriately certified field hardware.

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 EON AI Ventures



The hardest jobs face two boundaries at once

O

bars

A dead zone, outage or air-gapped workflow removes the cloud precisely when the task still has to move.

Ex

classified

The exact device, configuration and accessories must be approved for the specific hazardous location.

The answer is not “put the cloud in a box.” It is a bounded, governed package that runs on fit-for-purpose certified hardware.

Intrinsic safety is a hardware-system fit — not a software feature

FIELD IQ EDGE SOFTWARE

runs within

AN EXACT CERTIFIED DEVICE CONFIGURATION

- **Location** Zone or Division classification
- **Hazard** Gas, vapor or dust group
- **Temperature** T-class and ambient limits
- **Configuration** Model, battery and accessories
- **Authority** Certificate, marking and site approval

Core rule

Do not infer approval from a family name, an “Ex” label or a similar-looking device.

Verify the exact SKU and current certificate.



REPRESENTATIVE DEVICE LANDSCAPE

Certified field computing already exists

Illustrative public examples; approvals vary by region and exact configuration.

DEVICE	FORM	PUBLIC MARKETING
i.safe MOBILE IS540.1	Smartphone	Zone 1/21
i.safe MOBILE IS940.1	10.1-inch tablet	Zone 1/21
RealWear Navigator Z1	Hands-free wearable	Zone 1 / C1D1
BARTEC SP9EX1	Smartphone	Ex ia / C1D1
BARTEC ET60/65EX2	Rugged tablet	Zone 2/22

The platform choice is therefore an engineering and governance decision — not a reason to abandon field AI.

Field IQ Edge carries the mission — not the entire cloud

A signed, versioned Mission Intelligence Package delivers only what the task requires.

01	Perception	Asset recognition, OCR and tag reading
02	Approved knowledge	Procedures, manuals and known exceptions
03	Twin subset	Mission-relevant asset identity and state
04	Deterministic controls	Sequence, role, prerequisites and stop rules
05	Evidence + sync	Local audit trail and controlled reconciliation

Work Intelligence Distillery
manufactures, validates and updates the package

One mission spans three connectivity states

CONNECTED

Enterprise search, remote collaboration, larger models and live analytics

DEGRADED / SITE-LOCAL

Mission package plus approved on-premises models, sensors and experts

OFFLINE

Signed local package, cached sources, deterministic controls and evidence queue



The capability gradient is visible. If a source, model or service is unavailable, the interface says so.

Recognize, confirm, guide, verify, capture — then sync

- **Recognize** Camera, OCR and tags propose identity
- **Confirm** Worker verifies the asset and context
- **Guide** Approved procedure appears step by step
- **Verify** Stops, prerequisites and evidence are enforced
- **Capture** Observations and proof enter a local queue
- **Sync** Signed evidence reconciles when policy allows



Airplane-mode testing is a product requirement, not a demo trick.

Generative AI assists; deterministic controls authorize

ASSIST

- Recognize and retrieve
- Summarize approved content
- Explain current state
- Ask clarifying questions
- Estimate confidence
- Recommend escalation

AUTHORIZE

- Confirm asset identity
- Enforce sequence and prerequisites
- Apply safety stops
- Check role and certification
- Require evidence
- Record the audit trail

When identity is uncertain, signals conflict or evidence is missing: clarify, stop or escalate — never guess.

Start with the site classification, then qualify the mission

1

Classify the work area

Authoritative Zone / Division, material group, T-class, ambient range and jurisdiction

2

Verify the exact device

Certificate, marking, model number, battery, case, scanner, audio and charging method

3

Define the mission boundary

Role, asset set, procedure, offline duration, abnormal conditions, evidence and stop rules

4

Benchmark on that hardware

Identity quality, source fidelity, latency, battery, thermal behavior, camera, speech and ergonomics

5

Validate under site governance

Controlled tests first; then intended work area under management-of-change and safety processes

Procurement rule: the exact certified configuration is the unit of approval.

A bounded 90-day pilot proves both intelligence and operational fit

DAYS 0–30

QUALIFY

One classified area
One exact device configuration
20–50 known assets
One inspection + one maintenance workflow

Certificate fit + baseline

DAYS 31–60

BUILD

Train recognition
Compile signed workflows and controls
Test airplane mode, PPE, noise and difficult lighting

Benchmark + failure tests

DAYS 61–90

VALIDATE

Run controlled field shifts
Exercise refusal, recovery and sync
Review evidence with site safety and operations

Acceptance evidence + decision

No pilot claim should be converted into production use without the site's formal authorization process.

EON builds the package system; the customer governs operating truth

EON

- Package tooling
- Field experience
- Recognition and retrieval
- Deterministic control patterns
- Evidence + sync architecture
- Lifecycle telemetry

CUSTOMER

- Site classification
- Approved equipment
- Procedures and content
- Role authority
- Acceptance criteria
- Management of change

JOINT

- Hardware benchmark
- Mission scoping
- Failure-mode testing
- Field validation
- Training and rollout
- Evidence review

The Work Intelligence Distillery turns governed field evidence into the next signed package — without silently changing the task in use.

The Digital Twin should not end at the network boundary.

Field IQ Edge carries a governed portion into the work itself — and brings verified evidence back.

Next decision

Select one classified area, one exact certified device configuration and one bounded mission for qualification.