

ON-PREMISE ALARM MANAGEMENT AND NOTIFICATION

Industrial alarm management that escalates until someone acts

Connect any OPC UA source, evaluate alarms against your rules, and deliver escalating notifications on the channels your team already watches. Built for industrial plants and the integrators who deploy them.

WHAT ALARMNX IS

AlarmNX is an on-premise alarm management and notification platform. It acquires live data from your PLC and SCADA systems over OPC UA, evaluates that data against alarm rules you define, and delivers escalating notifications until someone acknowledges, with every action recorded by name. Because it runs on your own hardware, core alarming stays on your network with no cloud required.

HOW ALARMNX WORKS

Four stages carry an alarm from a raw signal to the person who can act on it.

1 · CONNECT

A data driver subscribes to your OPC UA sources and streams live tag values into the platform.

2 · DETECT

A real-time alarm engine checks values against your rules, severities, and shift schedules.

3 · DELIVER

A dispatcher routes each alarm across your channels and escalates until it is acknowledged.

4 · PRESENT

Browser access, live dashboards, and the mobile app give every user the full picture.

SIX REASONS PLANTS AND INTEGRATORS CHOOSE ALARMNX**Escalates until someone acts**

Escalation chains with levels and timers keep raising an alarm until it is acknowledged, with shift-aware routing so the right crew is called.

Delivery you can trust

When one channel fails, the next one fires: SMS redundancy across multiple modems backs up delivery over SMS, email, webhook, and mobile push.

On-premise. No cloud required.

AlarmNX runs on your own hardware with HTTPS and role-based access, and core alarming works fully offline.

From one pump station to the whole plant

An OPC UA subscription architecture built for large tag counts evaluates alarms in near-real-time, with hot-standby data source failover.

Mobile, included

A native iOS and Android app is included for unlimited users, with acknowledgment from the field and no per-device fees.

Built for integrators

A setup wizard, guided in-app hints, built-in Demo Mode, and configuration export and import make AlarmNX fast to deploy and repeat across customer sites.

RUNS WHERE YOU RUN

Install AlarmNX on the hardware you already have. Core alarming runs on your own network, with no cloud required.

- Windows
- Linux
- Raspberry Pi (ARM64)
- Physical or virtual machine

Everything AlarmNX ships today

Sourced from the shipping product; capabilities marked coming soon are in development.

Connectivity & data acquisition

- Connect to any modern OPC UA server exposed by your PLC or SCADA system
- Browse the address space and pick the tags to monitor
- Subscription-based acquisition built for large tag counts
- Hot-standby source failover and watchdog-supervised reconnection

Escalation & shift-aware routing

- Escalation chains with per-level recipients and delays
- Acknowledge from web or mobile to halt the chain at once
- First acknowledgment wins, with the actor recorded by name
- Recipients matched to the shift on duty, with site time zone and DST handled correctly

Delivery reliability

- SMS redundancy: failover, duplicate, and load-balanced modes across multiple modems or carriers
- Priority alarm channel: alarms at or above a priority threshold deliver over a dedicated channel with its own rate limit
- Per-channel rate limiting queues messages rather than dropping them
- Deduplication windows, and retry with backoff
- Per-attempt notification log, delivery statistics, and health-check heartbeats, so silence itself is detected

Dashboards & visualization

- Real-time dashboards from drag-and-drop widgets
- Live tag values that update in place
- Multiple dashboards on per-user tabs
- Value monitor with time-series history and downsampled charting over long ranges

Security & administration

- Three-role role-based access control
- All access encrypted in transit (HTTPS); signed session credentials
- Passwords stored as salted one-way hashes, never plain text
- Full audit log of actions and configuration changes; account recovery tooling

Alarm rules & evaluation

- Conditions on any variable: thresholds, ranges, rates, and states
- Severity levels so the urgent stands out from the routine
- Operator-aware validation flags impossible conditions as you build
- Bulk import from Excel for standing up large sites quickly
- Near-real-time evaluation; suppression windows for planned maintenance, recurring and evaluated in site time

Notification channels

- Available today: SMS via cellular modem, SMS via Twilio, email, webhook, DotDotPlus, and native app push
- Coming soon: WhatsApp, Microsoft Teams, and Telegram
- Charts of the offending tag attached where the channel supports it
- Site identity block on every message and report

Mobile app & web portal

- Native iOS and Android app for unlimited users, with no per-device fees
- Acknowledge, comment, and react from the field; actions sync back to the plant system
- Per-tenant mute, quiet hours, minimum-severity filters, biometric login
- MTTA, MTTR, and top alarms on the phone
- Web portal: registered users and devices, per-push delivery log with resend, connection health, admin audit log

Analytics & reporting

- Pareto of the alarms demanding the most attention; heatmaps of when they cluster
- KPI cards, with MTTA and MTTR response metrics
- XLSX export at full fidelity
- Scheduled PDF reports on site letterhead, delivered over the same channels as alarms

Deployment & platform

- Windows, Linux, and Raspberry Pi ARM64, on a physical server or virtual machine
- Self-contained install; runs as system services that start and recover with the host
- Embedded database for small sites; dedicated database tier with optional time-series storage for large sites, with a guided migration path
- Core alarming works fully offline, with no external dependency to detect and raise an alarm

THE CLOUD BOUNDARY, STATED PLAINLY

Only the channels you turn on can reach out. Enable nothing, and alarm traffic never leaves your plant network.

STAYS ON YOUR NETWORK

- Core alarm evaluation and escalation
- The OPC UA connection to your PLC and SCADA
- SMS through a local cellular modem
- Email through your own mail relay
- The screens your team signs in to

REACHES THE INTERNET, ONLY WHEN YOU TURN IT ON

- Mobile push relay, when you use the mobile app
- Twilio SMS, when you enable it as a channel
- DotDotPlus, when you enable it as a channel
- Webhooks, which go wherever you point them, on or off your network

PLANS

Tiered by capacity, priced by quotation

Every plan is a perpetual license for one site. All plans include escalation chains, shift-aware routing, suppression windows, real-time dashboards, the analytics workbench, scheduled PDF reports, the native mobile app for unlimited users, and the full audit log.

	Basic	Standard	Professional	Enterprise
Users	Unlimited**	Unlimited**	Unlimited**	Unlimited**
OPC UA data sources	1	5	10	Sized to projects§
Alarm configurations	100	Unlimited**	Unlimited**	Sized to projects§
Rules per alarm	1	5	10	10
Stored variables (total)	10	500	1,000	Sized to projects§
Mobile tag monitoring (live tags in app)‡	3	5	10	20
Time-series retention	30 days embedded, up to 180 days dedicated	Up to 180 days	Up to 180 days	Up to 180 days
Notification groups	Unlimited**	Unlimited**	Unlimited**	Unlimited**
App Push notifications (per month)¶	15,000 (burst 20,000)	15,000 (burst 20,000)	15,000 (burst 20,000)	15,000 (burst 20,000)
Core channels: modem SMS, email, DotDotPlus, app push	•	•	•	•
Extended channels: Twilio SMS, webhook, WhatsApp*, MS Teams*, Telegram*	-	-	•	•
SMS delivery redundancy (multi-modem)	-	•	•	•
Hot-standby data source failover	-	•	•	•
Configuration export / import	•	•	•	•
Priority alarm delivery channel	•	•	•	•
Database tier	Embedded or dedicated	Dedicated	Dedicated	Dedicated

* WhatsApp, MS Teams, and Telegram are coming soon. ** No limit enforced by the license. § Sized to the project; confirmed during quotation. ‡ Monitored tag values are retained for 2 days on the mobile server. ¶ App Push delivery complies with APNs and FCM platform policies. • = included - = not available on this plan. Capacities are written into the signed license file; upgrades regenerate the license.

LICENSING, SUPPORT & EVALUATION

Perpetual, per site	AlarmNX uses a perpetual license per site, tiered by capacity. There is no subscription: you buy the license once and it is yours to keep.
Mobile included	The native mobile app is included in every plan for unlimited users, with no per-device fees.
Support	Year-one support is included with every license. Ongoing support and updates continue after the first year, arranged through Ener Tech Solutions Sdn.Bhd.
Evaluation	Evaluate through a guided demo on a live system with simulated plant data. Built-in Demo Mode runs a full demonstration without a live PLC. Sales can arrange trial access after a conversation.
Quotes	Pricing is quoted through Ener Tech Solutions Sdn.Bhd., scoped to your site and capacity. Capacity limits are written into the signed license file and upgraded by regenerating the license.

REFERENCE HARDWARE

Small site	Raspberry Pi 5 with 8 GB RAM, SSD storage, and the embedded database. Suits a machine or a single line: a handful of OPC UA sources with light alarm activity.
Standard site	Entry Xeon tower server (e.g. Xeon E-2314) with 12 GB ECC RAM, SATA SSD, and the dedicated database tier. Suits plant-wide monitoring with full reporting and longer retention.
Large site	Six-core Xeon server (e.g. Xeon E-2336) with 16 GB ECC RAM, 500 GB NVMe SSD, and the dedicated database tier. Suits very large monitored tag counts spread across multiple OPC UA sources.
Minimum OS	Windows 10 or Windows Server 2019 (64-bit), Ubuntu 22.04 LTS, or Raspberry Pi OS 64-bit (Bookworm). Later versions are supported.

Reference configurations, not minimums. AlarmNX runs equally well as a virtual machine on the same guidance. Exact sizing for your tag counts, alarm rules, and retention is confirmed during the guided demo.

See AlarmNX running on your plant data

Request a demo, or talk to us about a quote for your site or project.

Ener Tech Solutions Sdn.Bhd.

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