FreeFalcon

AI video analytics for the cameras you already have

Real-time detection, face and plate recognition, and automated response — on your own server.

Turn existing cameras into real-time sensors

FreeFalcon reads standard RTSP streams, runs AI on an NVIDIA GPU in your own data centre and turns what the cameras see into alarms, records and automated actions.

8

built-in analysis types, from PPE to plate recognition

5

slots for your own AI models (ONNX)

23

countries' licence plates read

5

console languages, incl. right-to-left Arabic

No cloud, no new cameras: video and data stay on your premises.

How it works



Cameras

Any camera or encoder with an RTSP stream. One camera can run several analyses at once.



AI engine

Decoding and inference on the GPU. Engines are built on site for the exact card in the server.



Alarms

Each event is stored with its evidence image and shown live to operators within seconds.



Response

Dashboards, VMS events, e-mail, speakers, webhooks and the REST API — driven by visual flows.

One server, containerised, installed with a guided installer and updated from the web console.

One platform, a full analytics portfolio

PPE
Missing helmet or high-visibility vest

Traffic
Counting and wrong-way detection across a line

Object Detection
Intrusion, crowding, occupancy, abandoned objects

Helmetless Biker
Two-wheeler riders without a helmet

Fire & Smoke
Early visual detection of flames and smoke

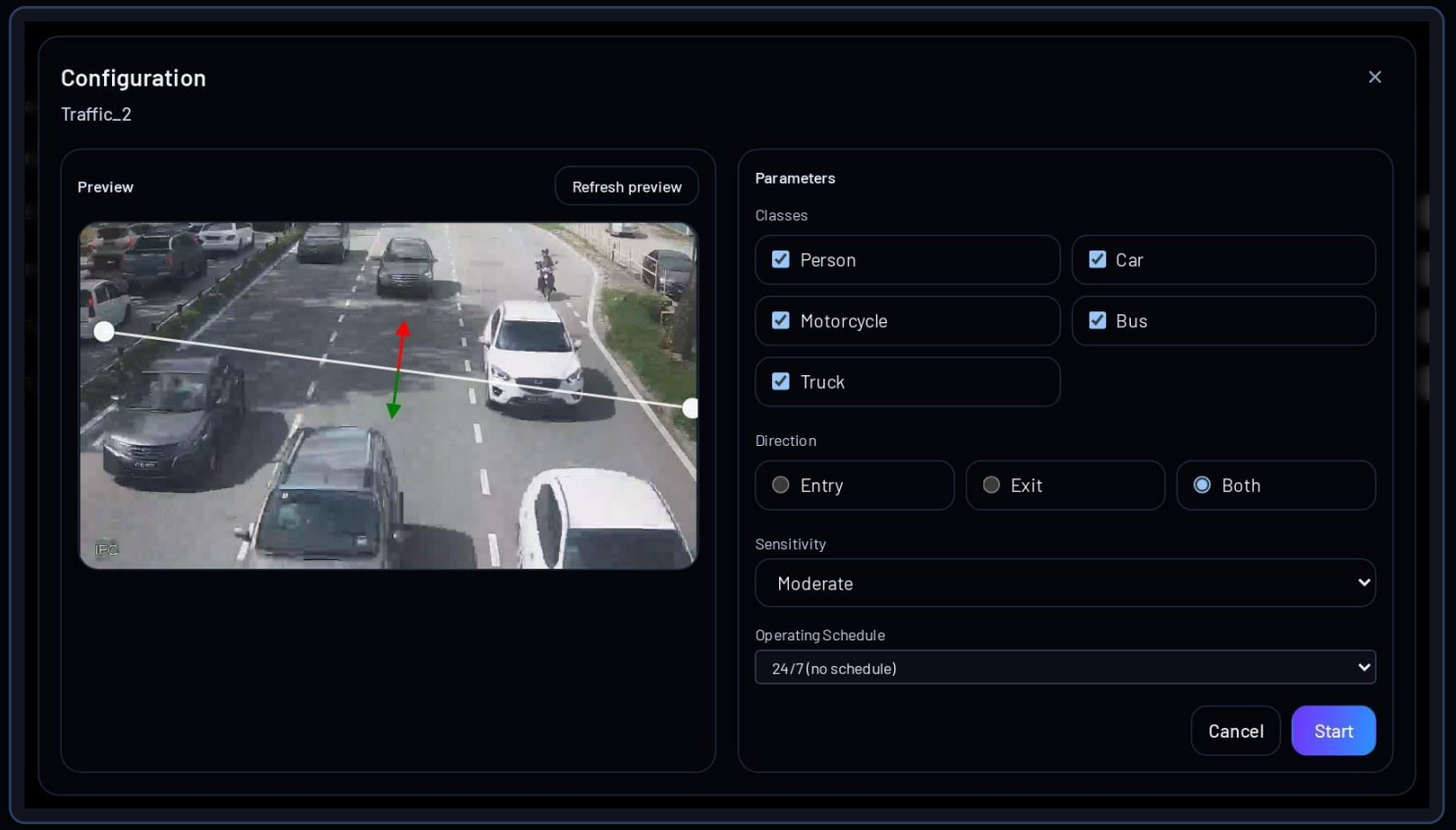
Heatmap
Where people move, hour by hour

Face Recognition
Watchlists, access records, anonymous demographics

Plate Recognition
Plate lists, alert lists, car-park sessions

Custom models
Bring your own YOLO-family model in ONNX

Configured in minutes, per camera



Draw on the live picture

Regions and counting lines are drawn on the camera's current image and stay correct if the resolution changes.

Five sensitivity levels

From fewest false alarms to most sensitive — no tuning of raw thresholds.

Weekly schedules

Run an analysis only when it matters; it catches up by itself after a restart.

Self-healing

An analysis that cannot start is flagged with the reason and starts itself when capacity frees up.

Dashboards built for the control room

Live alarm panel

Every alarm with camera, class, direction or scenario and the evidence image.

Charts and heatmaps

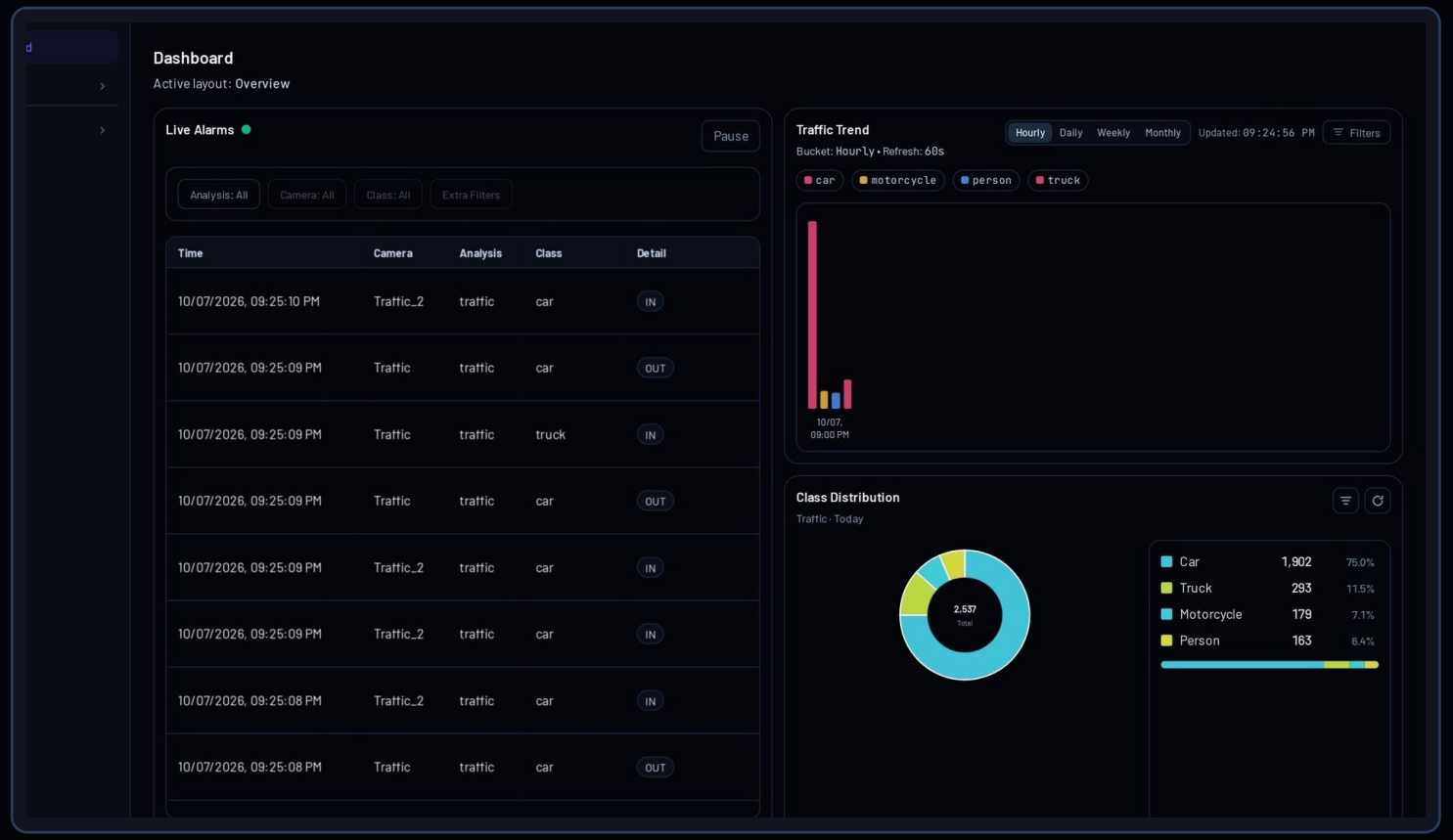
Trends, class distribution, occupancy and server health in one view.

Shared per role

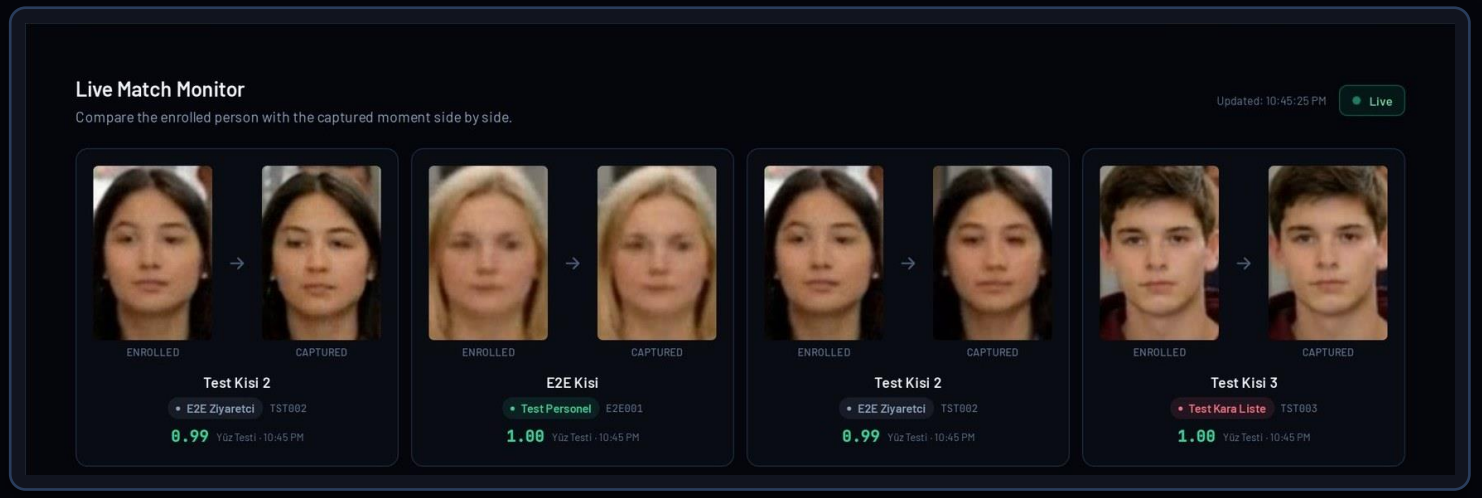
A layout can be shared with a role so every operator sees the same screen.

Search and export

Filter by camera, analysis, class and time; export CSV or an executive PDF.



Face recognition with privacy built in



Watchlists that mean something

Deny lists raise alarms, allow lists write access records, neutral lists only archive.

Live match monitor

Enrolled photo and captured moment side by side, with score and camera.

Archive and photo search

Find past sightings by time, camera or a photo — only if you switch it on.

Off by default

Biometric functions are opt-in per camera, every face view is audited, consent is recorded.

Plate recognition and parking

One record per vehicle

Plate text, plate crop, vehicle picture and colour — no duplicate passes.

Alert and standard lists

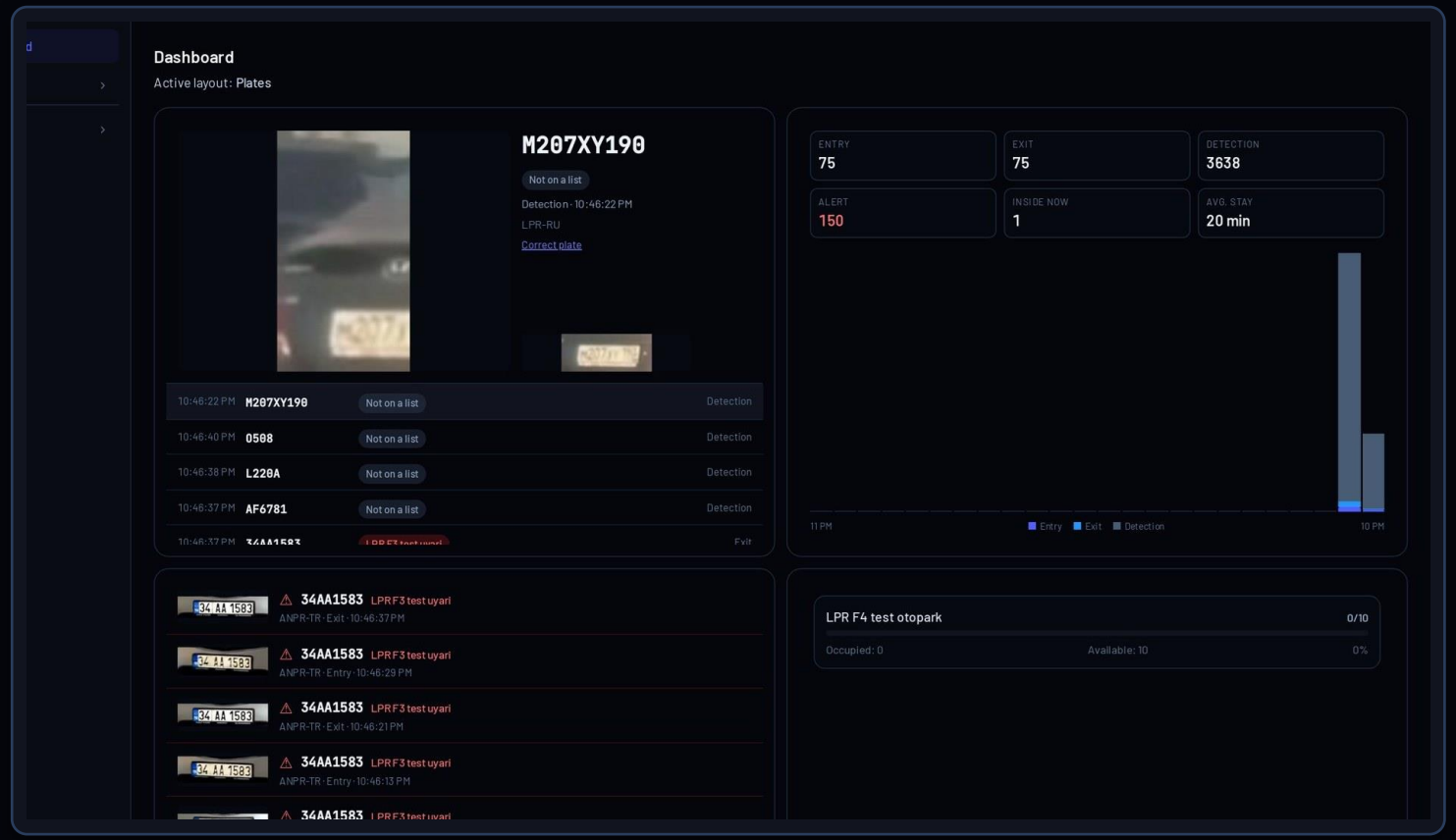
Only alert-list plates raise alarms; tolerant matching handles spaces and O/0 mix-ups.

Car-park sessions

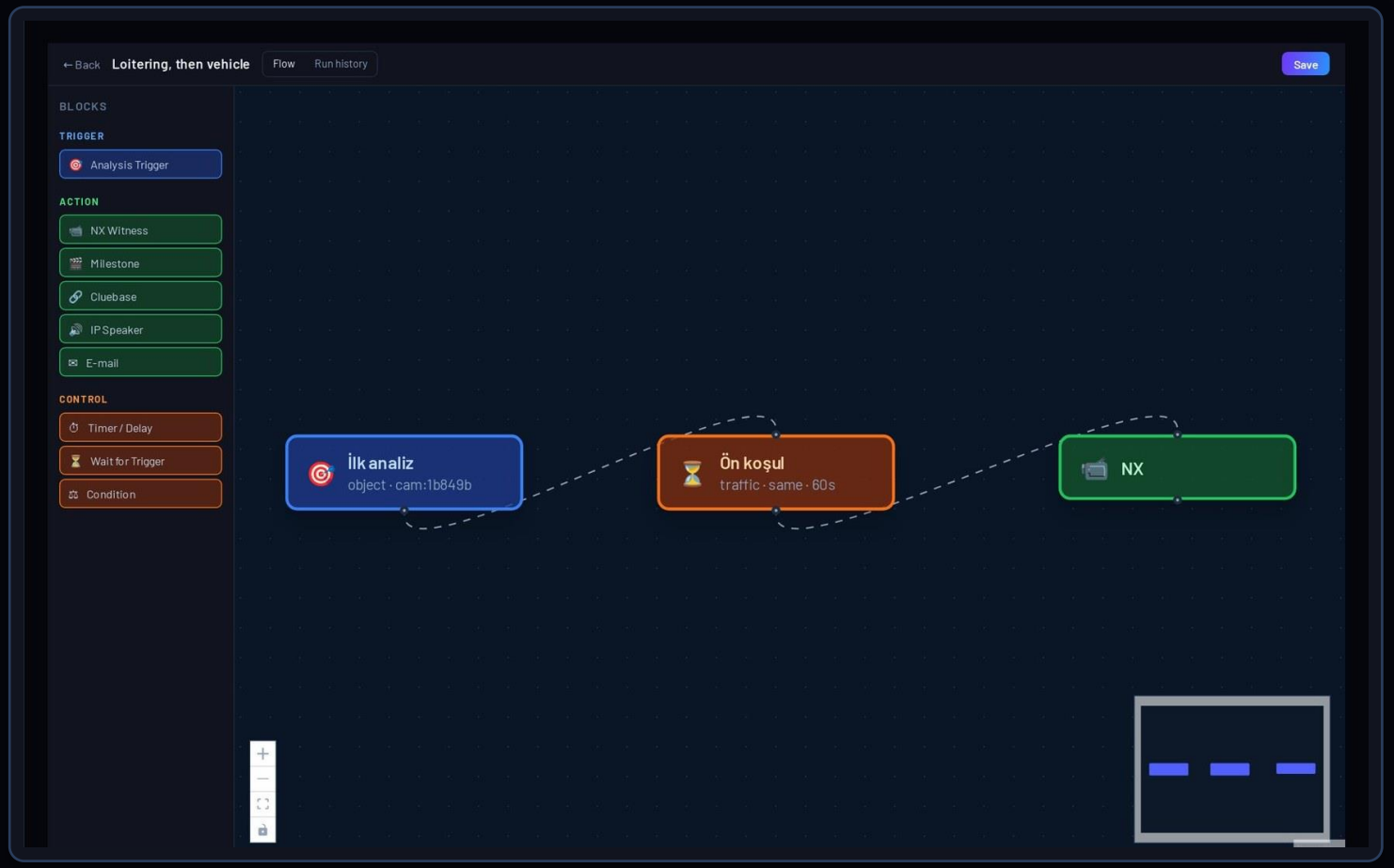
Entry and exit cameras open and close sessions; occupancy per lot in real time.

Operator correction

Fix a misread plate; the original reading is kept as evidence.



Automate the response with Event Manager



Visual flows

Triggers, conditions, timers and actions drawn on a canvas — no scripting.

Correlation

"First A then B": react only when a second event follows the first within a set time.

Ready-made templates

Fire → VMS + speaker, watchlist match → VMS, e-mail on alarm and more.

Run history

Every execution and every step's result is visible, with credentials removed.

Fits into the systems you already run

Nx Witness / Nx Meta

Events, bookmarks, object search with best shot, analytics managed from Nx Desktop.

Milestone XProtect

Alarms with image and region over the REST API, operator decisions back, evidence lock.

Webhooks

HMAC-signed JSON to any HTTP endpoint, with retries and a delivery log.

REST API

Versioned API, scoped and expiring API keys, live alarm stream, interactive reference.

E-mail

SMTP notifications with templates, delivered in the background.

IP speakers & Cluebase

Audio announcements on site and alarm delivery to Cluebase.

Enterprise-grade security

Roles and directory sign-in

Separate view and action permissions; LDAP / Active Directory with group-to-role mapping.

Full audit trail

Who changed what, when and from where — with secrets masked.

Encrypted everywhere

Credentials encrypted at rest; internal connections encrypted with certificate verification.

Biometric safeguards

Separate permissions for face images and a dedicated face audit log.

Signed releases

Every update is verified against the supplier's key before anything changes.

Password policy

Complexity, history, expiry, lockout and a forced change on first sign-in.

Simple to deploy, easy to run

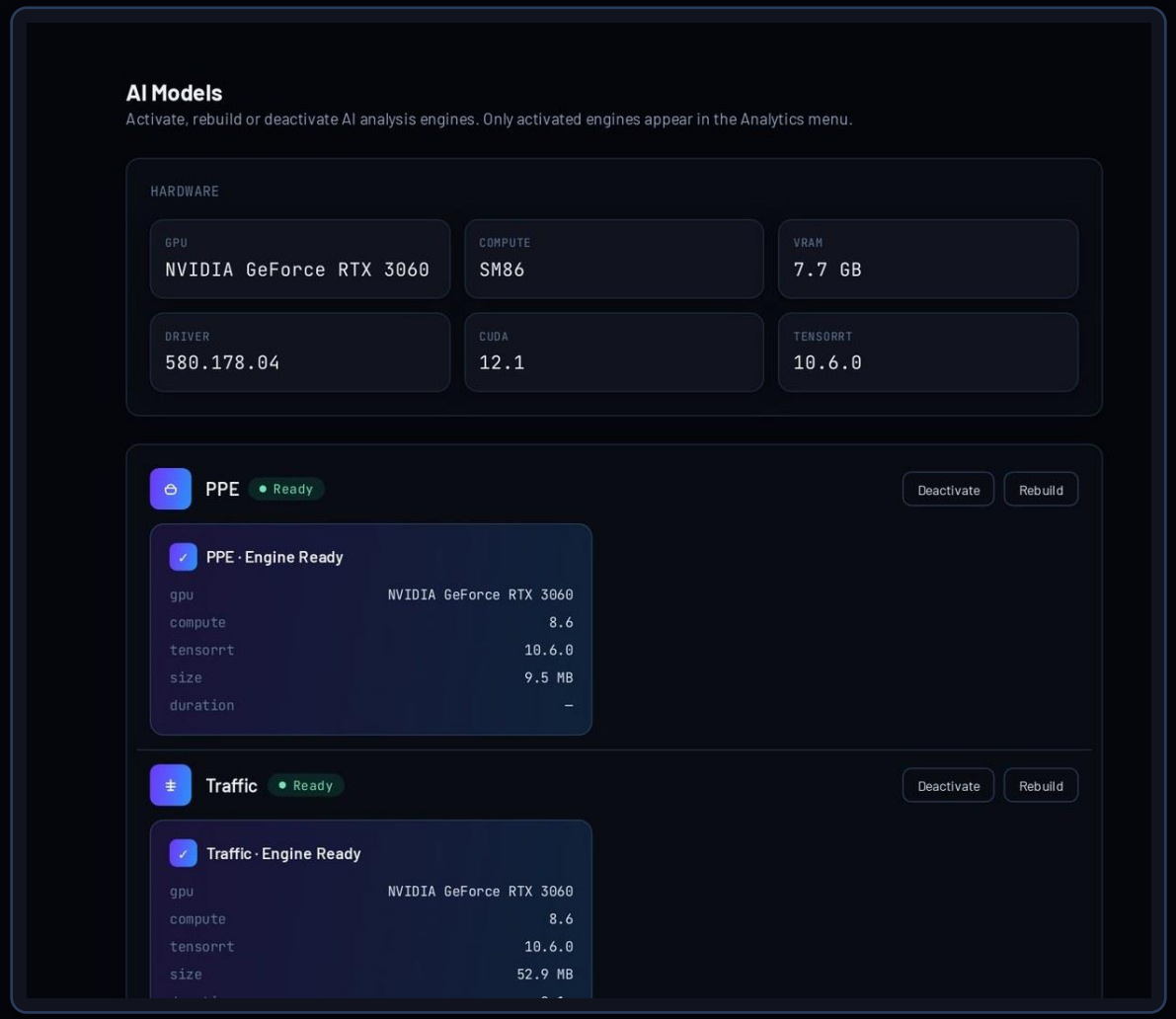
On-premises
Ubuntu 22.04 / 24.04, NVIDIA GPU, a guided installer with pre-flight checks.

GPU-optimised engines
Activated per analysis type and built for your exact GPU.

One-click updates
From the web console, signature-verified, with downgrade protection.

Your brand or ours
FreeFalcon, unbranded, or your company's name and logo — chosen at installation.

Offline licensing
No connection to a licensing server is needed.



From pilot to rollout

1

Site survey

We review your cameras, use cases and server, and size the hardware.

2

Pilot

FreeFalcon runs on your own cameras and data for an agreed period.

3

Rollout

Licences, integrations with your VMS and operator training.

Let's choose the first cameras together.