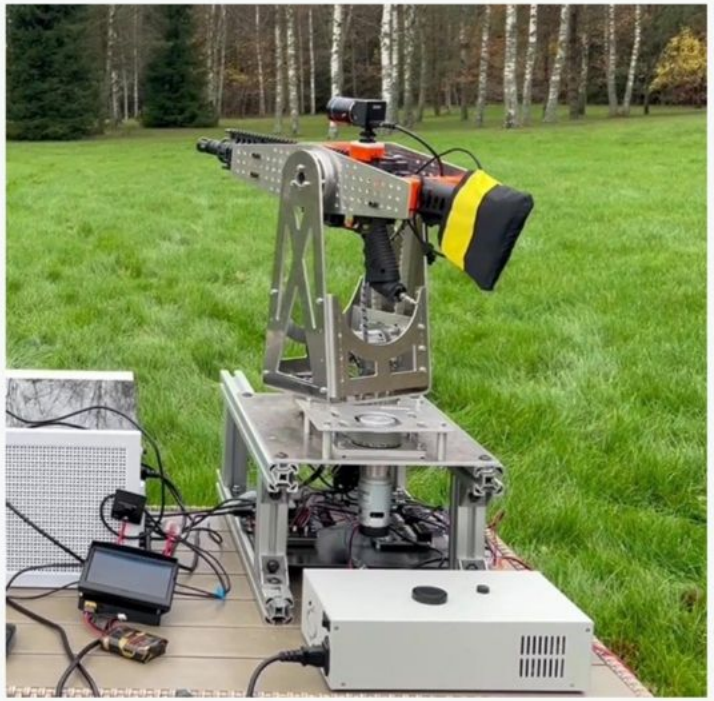
WIDE CAMERA: SPOTS THE DRONE



THE TURRET



GUN CAMERA: LOCKED ON



DRONEPAIN

An AI assistant that lets one operator defend with many low-cost turrets.

The problem

Cheap drones now decide the war in Ukraine: Ukrainian officials say drones of all types destroy **more than 80% of enemy targets**.

The same drones are reaching Europe, and incursions over airports and infrastructure are now a regular problem.

Defending against a drone still costs far more than the drone itself. Jammers do nothing against fibre-optic or autonomous drones, a growing share of FPVs, and interceptors are expensive per unit or per shot.

What is missing is a physical defence cheap enough to place in numbers.

Defence has to be cheaper than attack.

FPV attack drone	**$300–600**
Interceptor drone, per kill	**$2k–125k**
Missile or guided rocket, per shot	**$20k–1M+**
Fighter jet in the air (F-35A)	**~$40k / hour**
Anti-drone shotgun round	**~€18**

Sources: DronePain research, Nov 2026; Bild via LIGA.net, 11 Sep 2025; APKWS, AIM-9X and AMRAAM unit costs (TWZ, US FY2026 budget); F-35A cost per flight hour approximate, GAO/DoD

DRONEPAIN

The solution

AI that detects and tracks small drones and aims low-cost turrets built from off-the-shelf parts. One operator supervises several turrets.

1 · Spot

A wide camera sees anything moving across 180°.

2 · Turn

The pan/tilt turret swings onto the target.

3 · Confirm

AI flags the drone; the operator confirms the target.

4 · Track and hit

Aim corrects for distance, drop and motion.



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Where we are

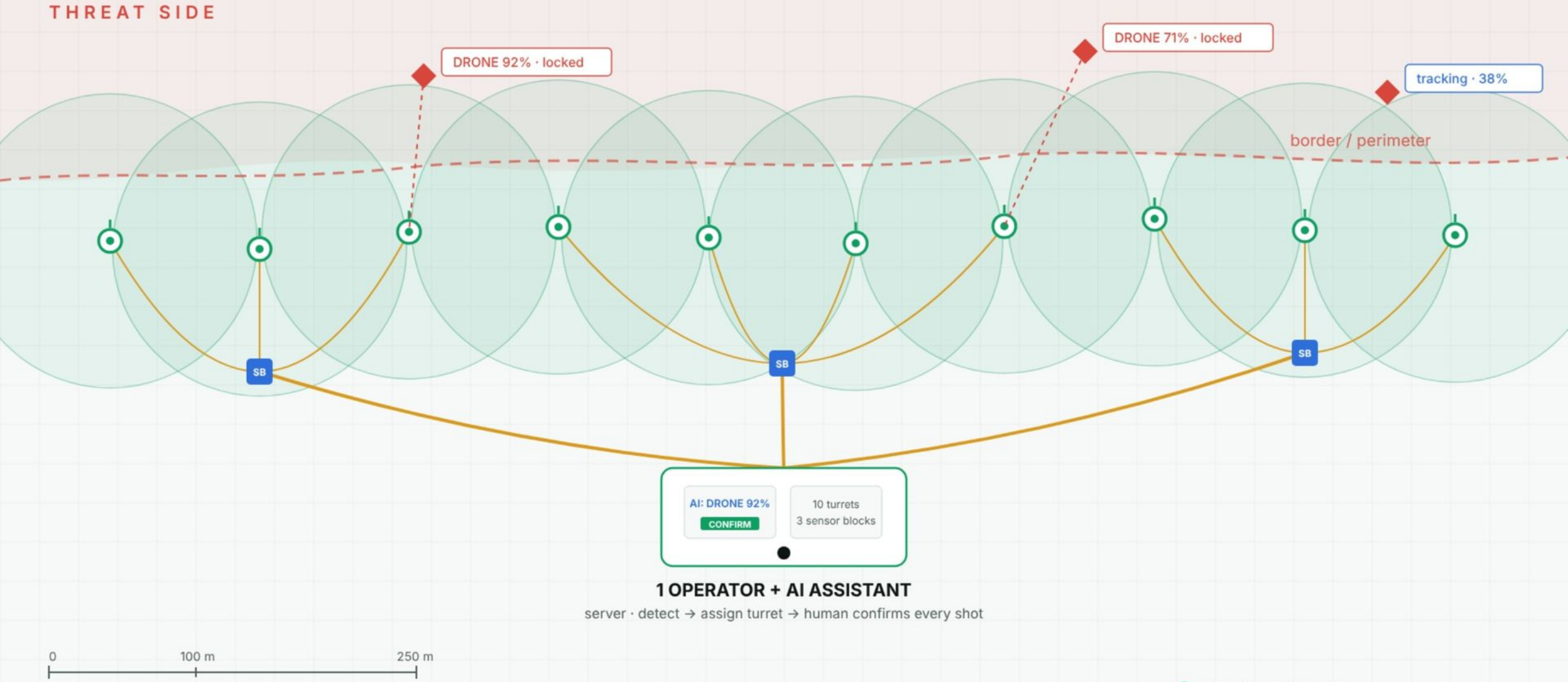
Outdoor tests since September, tested repeatedly against real drones.
First drone brought down in October, at about 20–30 m, on video.

R&D in numbers	
From start to first drone down	4 months
Two-camera detection and tracking	October 2026
Parts cost of the first unit	< €3,300
Outdoor tests against real drones	every 2 weeks

Range estimated; hit rate not yet measured. No users or agreements yet.

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Target architecture: 1 operator · ~1 km

Last line of defence. Overlapping turret coverage (design target ≥100 m per turret), wide-area sensor blocks, fibre to one operator post.

Concept visual, schematic. Current paintball prototype ≈30 m; ≥100 m is the target with a real weapon.

Vision

Each system = 1 operator · 10 turrets · ~1 km

≈ 280

operator seats on duty at the same time

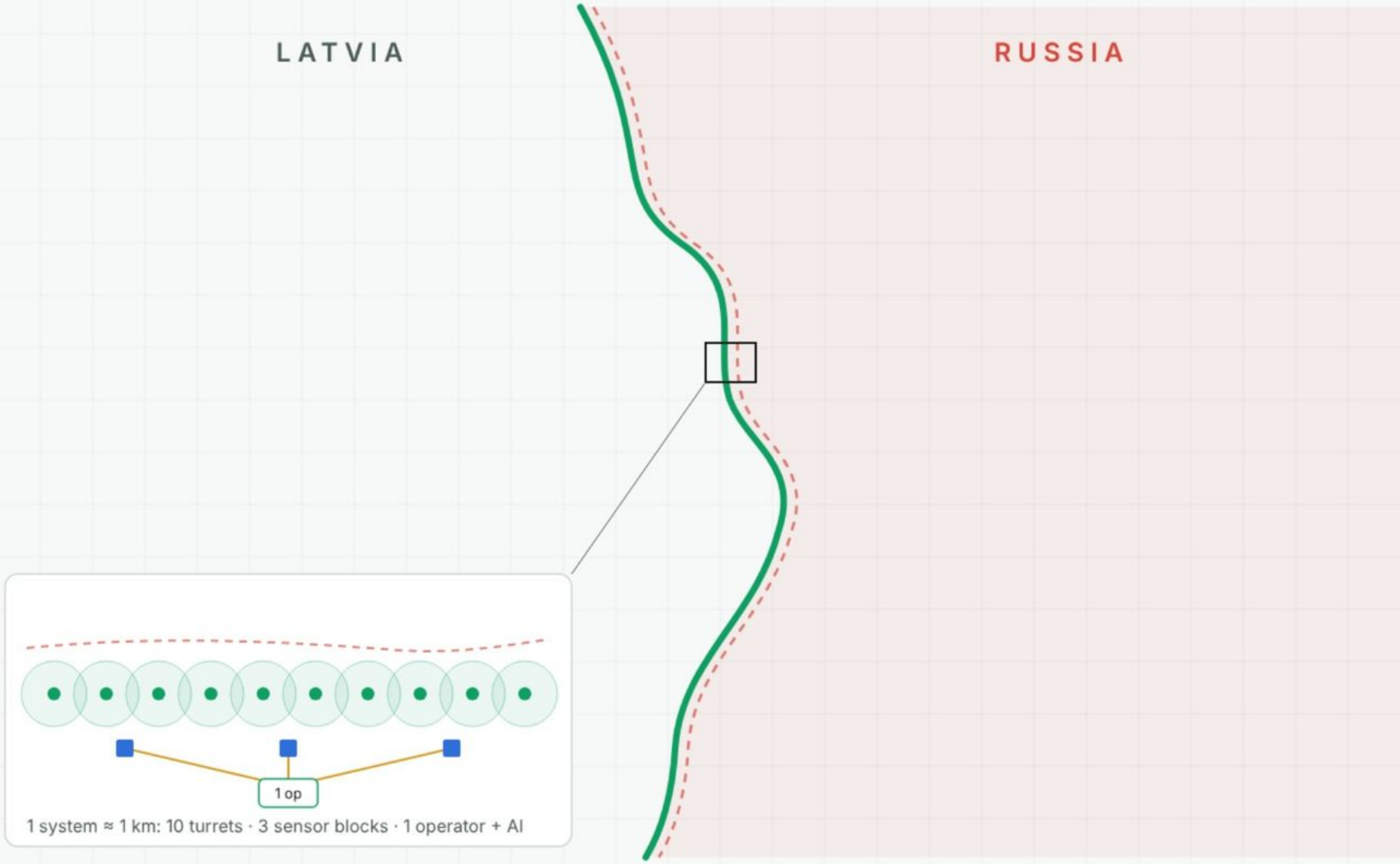
≈ 2,800

turrets, overlapping, last line of defence

≈ 1,400

people to run it 24/7 (≈5 per seat in shifts)

Goal: defending cheaper than attacking.



Latvia–Russia border · 283.6 km (schematic line, not a map)

Concept visual. Assumes ≥100 m effective range per turret (target with a real weapon; current paintball prototype ≈30 m) and ~1 km per operator. Border length: 283.6 km.

Market size

TAM

$9.2bn / yr

Global counter-drone market in 2026 (MarketsandMarkets)

SAM

€506M / yr

Short-range gun point defence: shotgun or up to 12.7 mm, with its fire control

SOM

€20M / yr

Frontline NATO states, our home market. Part of the €85M a year realistically open to a European startup

Analysts expect counter-drone spending to grow about **26% a year**, from $9.2bn in 2026 to $29.7bn in 2031.

THE MONEY IS MOVING

>$40bn
NATO Allies, counter-drone, next 5 years

€21.3bn
SAFE second call (Oct 2026), counter-drone a priority

€1.6bn
France, extra for anti-drone systems

€50M
Latvia, drone capabilities 2026 (€20M in 2025)

Sources: TAM and growth, MarketsandMarkets, counter-drone market 2026–2031 (analyst range for 2026: $9.2–14.4bn). SAM and SOM, DronePain estimate (Nov 2026) built on NATO, US Army FY27, Gulf and national budget figures; order of magnitude, segments overlap. NATO (Jul 2026); European Commission, SAFE (Oct 2026); France (Apr 2026); Latvian MoD budget 2026.

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WHO NEEDS PROTECTION

Military bases
Front-line positions
Border sections
Power plants
Airports

Route to the customer

1. **Latvian MoD drone centre (ASKC)**
   Has permission to fast-track purchases

2. **NATO test range at Sēlija, Latvia, and NSPA**
   NATO-standard testing, then NATO counter-drone purchasing frameworks

3. **Brave1 “Test in Ukraine”**
   Combat validation for foreign companies

4. **Estonia and Lithuania**
   Both are moving money to urgent counter-drone buying

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Civilian markets

Without the weapon, the system is a camera-and-AI tracker. That is legal to sell almost everywhere.

LEGAL NOW

Drone detection and tracking

Airports, prisons, power plants, data centres, events.

$2.3bn detection market by 2029, from $0.85bn in 2025

192 drone disruptions at German airports in 2025, up from 141

+43% drone incidents at prisons in England and Wales: 1,712 in a year

OPENING, NEEDS LEGAL CHECK

Non-lethal stopping at critical sites

A net or non-penetrating projectile instead of a gun.

Latvia since Jan 2026, guards at critical-infrastructure sites may stop drones, including by capture or damage, and owners buy the devices

Poland 2026 law gives similar means to infrastructure security

SAME TECH, OTHER TARGETS

Birds at airports and wind farms

Retrain the AI model; the tracker and turret stay the same.

24,447 wildlife strikes on US aircraft in 2025

$391M yearly cost to US aviation, 74,000 hours of aircraft downtime

Firearm turrets have no private market. Civilian buyers get detection and tracking first, a non-lethal effector later.

Sources: MarketsandMarkets drone detection market (2025); Euronews, 20 Nov 2025, citing DFS; UK Ministry of Justice, 31 Jul 2025; Latvian Security Guard Activity Law and Cabinet Reg. 147/2026; Polish Dz.U. 2026 poz. 815; FAA Wildlife Strike Report 1990–2025.

DRONEPAIN

Business model

Unit sales

We sell complete units, with yearly support and software updates.

Per-unit licences

We license our detection and tracking system to manufacturers vetted by the Ministry of Defence, who build it into their own equipment. Protection gets deployed faster than we could build it ourselves.

What turret systems sell for today

UKRAINIAN MODULES	SKY SENTINEL TURRET	EUROPEAN MODULES
~$12k	**~$150k**	**$187–242k**

Our target price is **under €10k per turret module**, with weapon and sensors extra, in the range of today's cheapest modules.

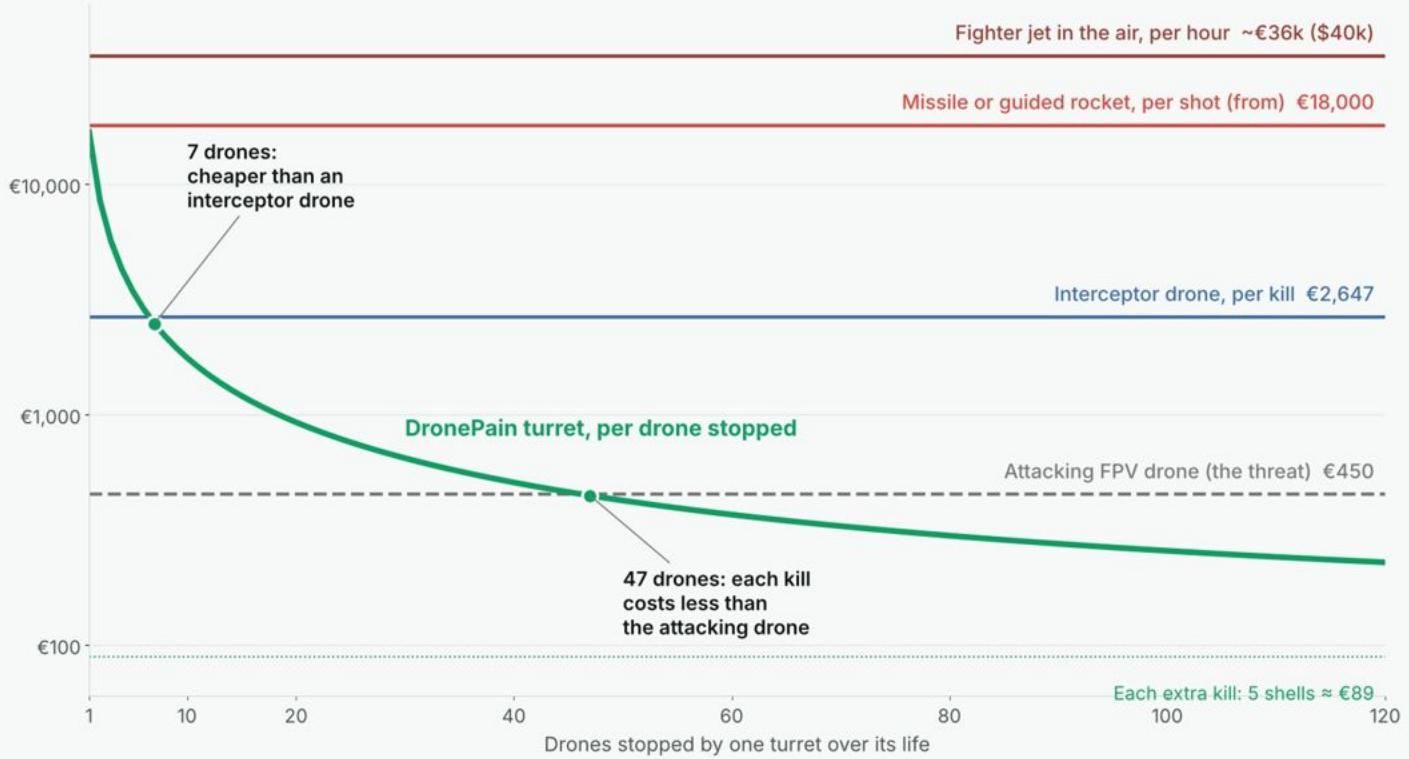
Unit sales plus licence fees let revenue grow faster than our own production.



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Cheaper than every alternative

Cost per drone stopped (EUR, log scale): the more drones one turret stops, the less each one costs.



€16,733

Full cost of one turret position: module €10,000 + weapon €2,500 + share of sensors and server €4,233

7 drones

After 7 stopped drones the turret is cheaper per kill than an interceptor drone

47 drones

After 47, each kill costs less than the attacking drone itself

€89

Each extra kill after that: ammunition only

Assumptions: 5 shots per kill (hit rate not yet measured), shell €17.78. Interceptor €1,800 at 68% success. Sources: DronePain cost-per-kill calculator (16.11.2026): Defense News, UkraNews, Militarnyi, varuste.net, TWZ (missile costs), GAO/DoD (F-35A per hour). Missile shown at the low end of $20k–1M+; jet per flight hour, not per kill.

DRONEPAIN

Team

Girts Aleksans

CEO · FULL-TIME

10+ years of energy and infrastructure projects; leads teams building AI energy-forecasting products. Business, funding, AI.

Edgars Grankins

CTO · FULL-TIME

10+ years in robotics, software and firmware: Aerones, NATRIX, Squad Robotics; Betaflight contributor. Wrote all the turret software.

Mārtiņš Kokins

HEAD OF MECH. ENG. · FULL-TIME

10+ years on large hardware: Aerones drones and wind-turbine robots, Forma Campers. Designed and built the turret.

AI and backend developers

ALREADY ON THE SYSTEM

Build the drone detector and backend. An equity pool is reserved for them.

Edgars and Mārtiņš worked together at Aerones; Edgars and Girts at PC Group since 2025. We started DronePain in June 2026, self-funded.

First year and use of funds

12 months: 3 founders + team, first multi-turret system with real weapons, first users

Item	EUR
Team: 3 founders + developers, full employer cost	266 954
R&D: next-gen turrets, sensor blocks, server, real-weapon parts	135 000
Marketing and 3 defence expos	70 000
Licences, legal, insurance	53 600
Workshop, tools, computers	41 400
Data: test drones, recording, labelling, compute	20 000
Contingency (20%)	117 391
Total	**704 345**

We are raising €705k · about €59k per month

JUN–OCT 2026 · DONE
Prototype built, first drone brought down

QUARTER 1
3 stable turrets; measured test campaigns at 10–50 m; detection pushed to 50 m

QUARTER 2
3 turrets linked into one system run by one operator; sensor blocks; mechanics for a real weapon

QUARTER 3
Operator interface; next-gen turret fires a real weapon for the first time

QUARTER 4
Full system test with real weapons; first government trial (ASKC, Sēlija or Brave1)

DRONEPAIN

DRONEPAIN

Cheap enough to protect everything.

info@dronepain.eu

RIGA, LATVIA