Bridging Humanity & Technology with Perfect Harmony

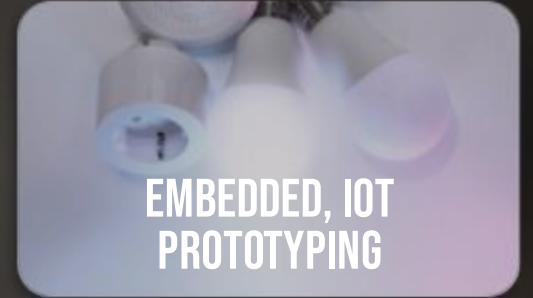grand technology

Slide to Success

OUR IDENTITY

Our brand symbolizes our philosophy—crafted around the principles of the **golden ratio**, it represents the perfect balance between technology and humanity.

grand our technology

This balance reflects our belief that technology should **empower and protect human lives and privacy** while maintaining harmony with the world around us.
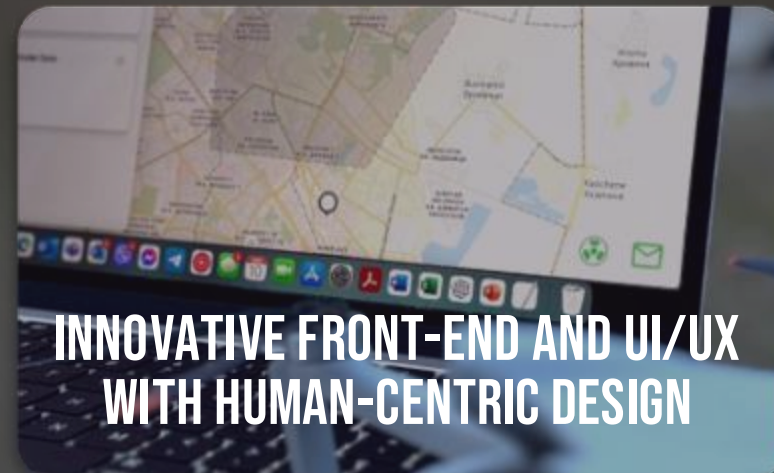
EMBEDDED, IOT PROTOTYPING

HARDWARE PROTOTYPING

EMPOWERING MODERN DEFENSE WITH C-UAS WITH AI ALGORITHMS

INNOVATIVE FRONT-END AND UI/UX WITH HUMAN-CENTRIC DESIGN

VISIONARY TEAM WITH DEEP INDUSTRY EXPERIENCE

CORE EXPERTISE (1)
COMPREHENSIVE SOLUTIONS FOR TAILORED COUNTER C-UAS

1/ REQUIREMENTS AND ARCHITECTURE

From initial ideation to deployment, we manage every aspect of the development lifecycle in-house.
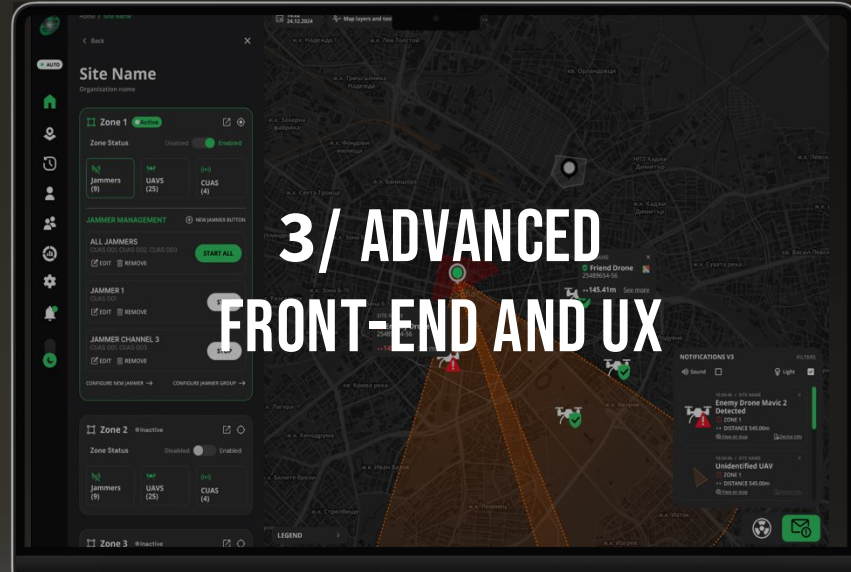
2/ EMBEDDED SOFTWARE AND DESKTOP SOFTWARE

Powering mission-critical functions with robust, low-latency embedded software written in C/C++ and Python.

CORE EXPERTISE (2)
COMPREHENSIVE SOLUTIONS FOR TAILORED COUNTER C-UAS

3/ ADVANCED FRONT-END AND UX

4/ ANTENNA PROTOTYPING

Intuitive, real-time control interfaces designed for seamless operator interaction.

Precision-engineered antennas designed to enhance detection accuracy and range.

CORE EXPERTISE (3)
COMPREHENSIVE SOLUTIONS FOR TAILORED COUNTER C-UAS

5/ HARDWARE PROTOTYPING

6/ SW AND HW INTEGRATION

7/ TESTING

Industrial interfaces designed to meet customer expectations, development demand and standards compliance.

Precision-engineered antennas designed to enhance detection accuracy and range.

End-to-end quality management having intensive testing during design, development and integration with use cases, compliance and constraints.

FLAGSHIP PRODUCT

BEFORE

HEAVY MILITARY EQUIPMENT

NOW

TECHNOLOGY IS THE
DECISIVE FACTOR

AI ENGINE SEES THROUGH NOISE – RADIOFREQUENCY SPECTRUM

WiFi

WiFi

Bluetooth

Cell Tower

Emitter

THREAT

Interference

Antennae

Interference

SDR

Convolutional Neutral
Network (CNN)
Analyses the Data
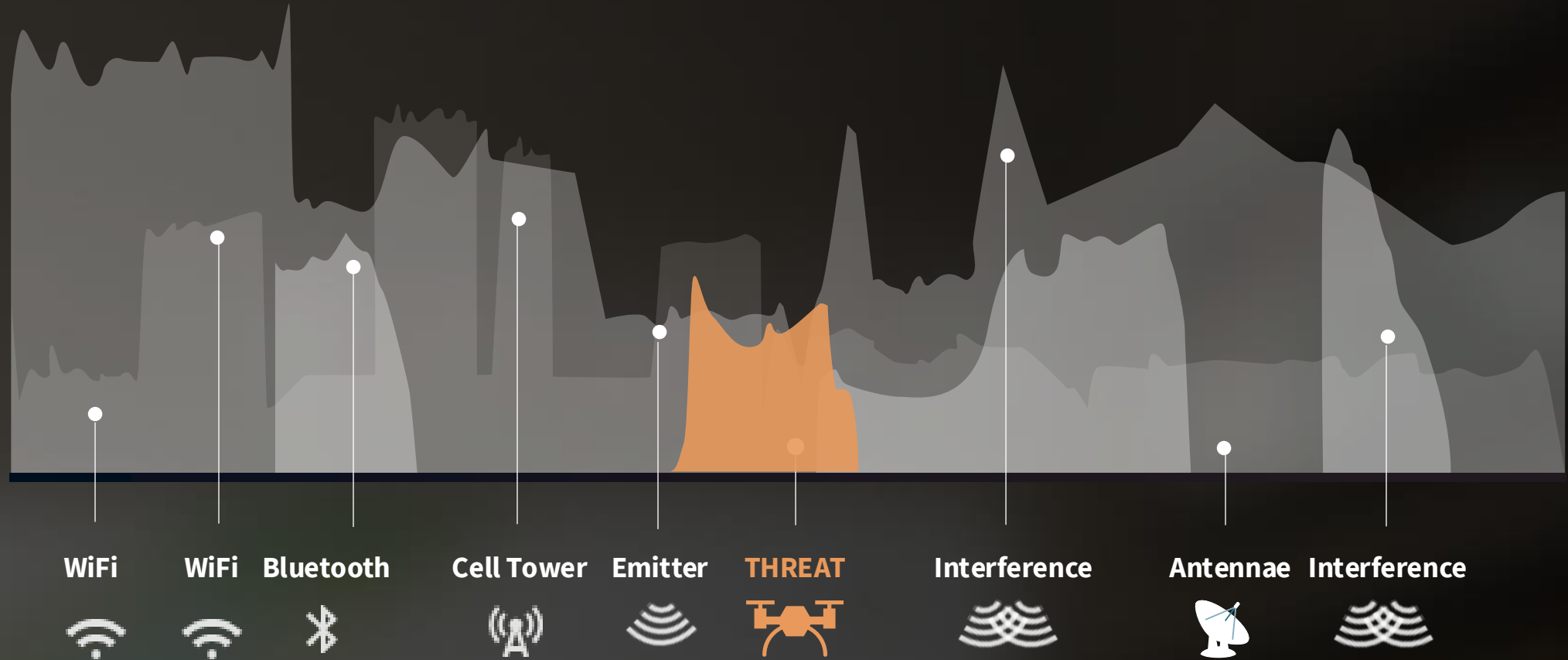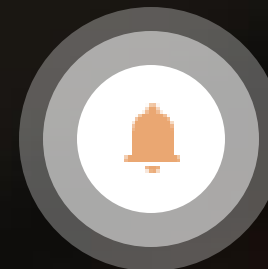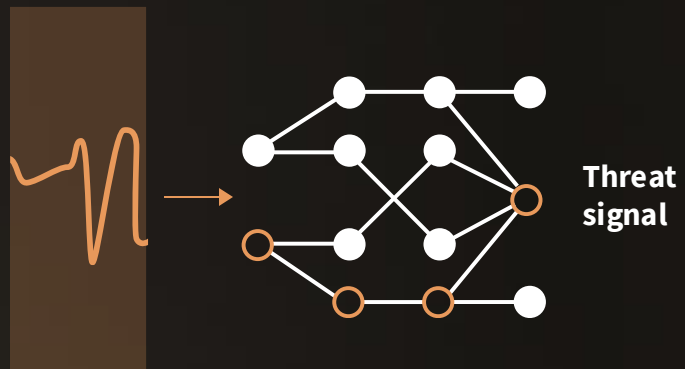
**Threat
signal**

Software Defined Radio
Records and Converts to
Digital Signal

Threat Detection
Output!
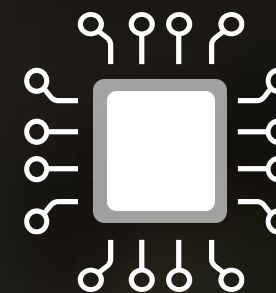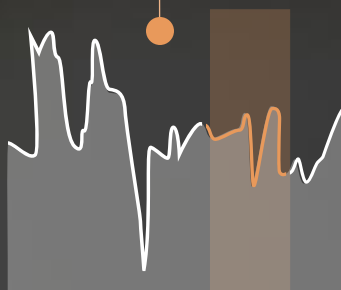
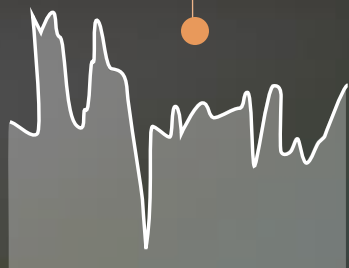**1** **2** **3** **4** **5** **6**

Total Radio
Frequency Band

Software Pre-processes
the Digital Signal

Software Processes CNN
Data Output

10100010101011000

OUR FLAGSHIP ANTI-DRONE PRODUCT – MAIN BLOCKS

MULTI-LAYER MULTI SENSOR ARCHITECTURE

- Open sensor fusion platform
- RF Based Drone 360° detector (RFDD)
- Drone RF Jammer (DRFJ)
- Video based Drone Identification & Tracking (VDIT) (optional)
- Acoustic based Drone Identification & Tracking (ADIT) (optional)
- RADAR (optional)

FPGA AND SOFTWARE DEFINED RADIO TECHNOLOGY

- Wide band of frequencies 70Mhz - 6GHz
- 350+ Drone Protocols Library
- Quarterly software updates
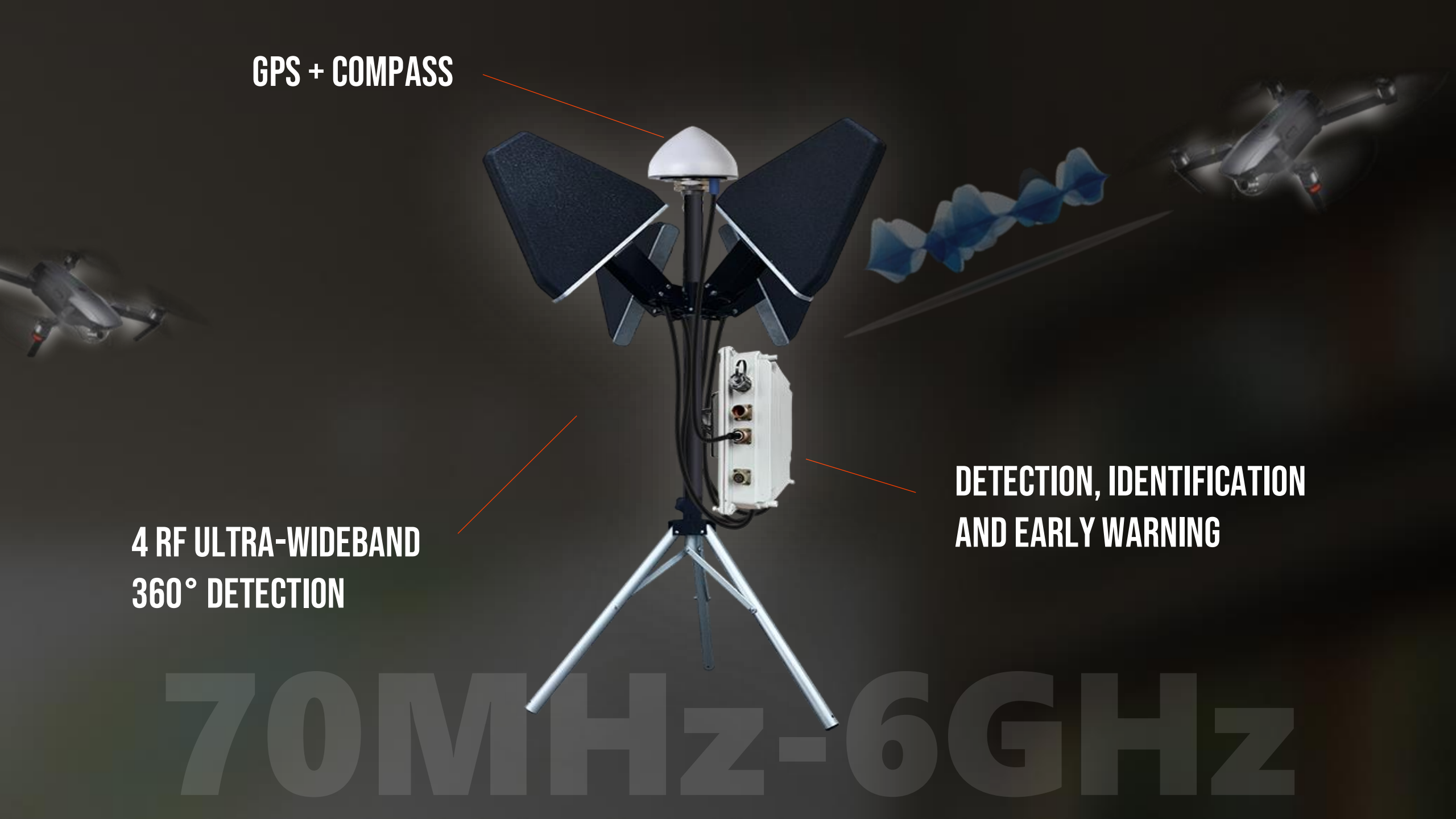- IP67 Robust Military Grade Design

COMMAND AND CONTROL PLATFORM

Enable operators to view real-time analytics of local detection activity with map overlay, while supporting user-defined options for either automatic or manual disruption.

GPS + COMPASS

4 RF ULTRA-WIDEBAND
360° DETECTION

DETECTION, IDENTIFICATION
AND EARLY WARNING

70MHz-6GHz

ADVANCED SENSOR FUSION

|	**Radio Frequency**	**Radar**	**Cameras**	**Acoustic**
Overview	Foundational layer Detects drone comms protocols (via conventional RF library or an AI engine)	Motion tracker - emits signals which are then reflected back to the radar by targets	Electro-Optical (EO), Infrared (IR) and Thermal Video analytics and image capture identification of drone activity	Compares noise of drone blades or motor to a database of acoustic signatures
Advantages	✓ No interference with other sensors ✓ Tracks multiple targets ✓ Passive – cannot be "seen" ✓ Low false alarm rate ✓ Direction-finding capability ✓ Long ranges ✓ Cost effective	✓ Picks up drones without RF emissions ✓ Tracks multiple targets	✓ Best used for verification, classification and tracking of a target detected by other sensors ✓ Potential identification of payloads ✓ Provides "eye on target"	✓ Passive, cost effective ✓ Supporting sensor, filling gaps from other sensors
Disadvantages	✗ Doesn't pick up RF-silent drones ✗ Requires firmware updates	✗ False alarms (birds, etc) ✗ Is "seen" as emits energy ✗ Longer range detection is expensive ✗ Struggles with hovering drones	✗ Not well suited for detection on its own due to field-of-view vs distance trade-off ✗ Requires firmware updates	✗ Short range ✗ False alarms ✗ Cannot locate or track ✗ Requires signature database updates

SOFTWARE
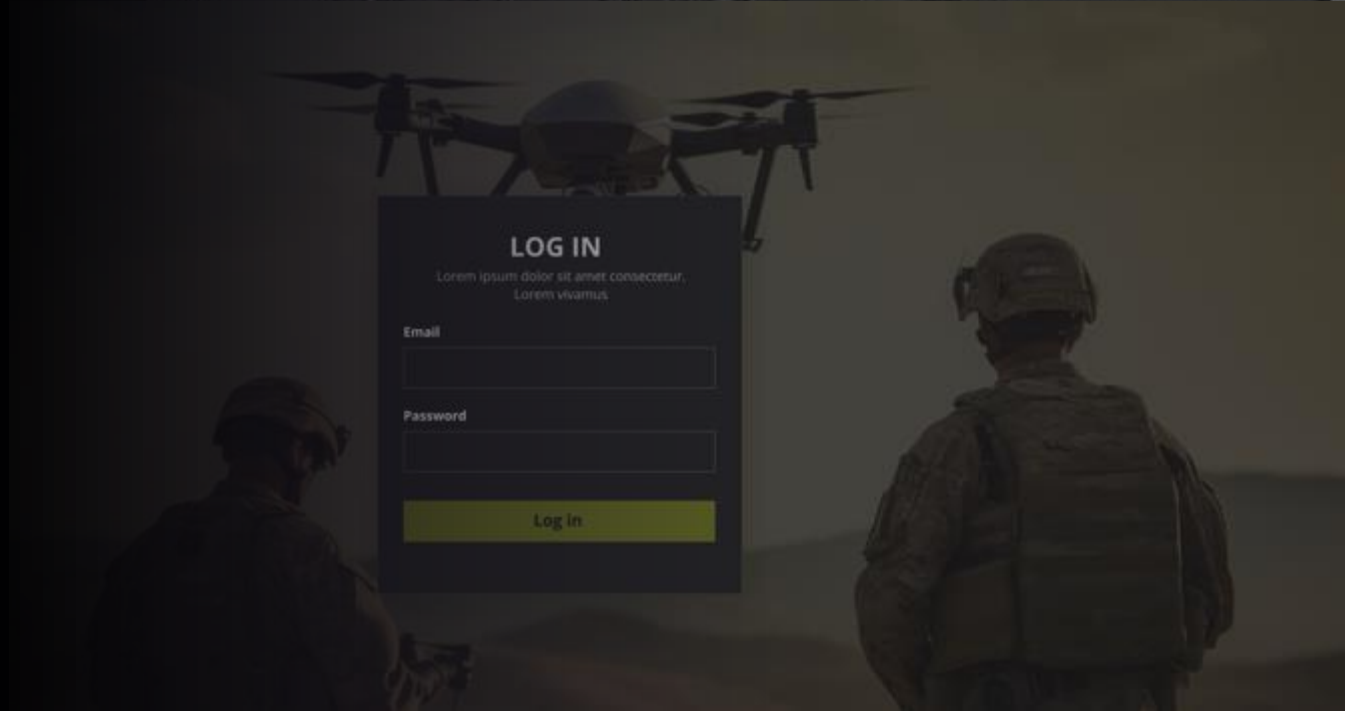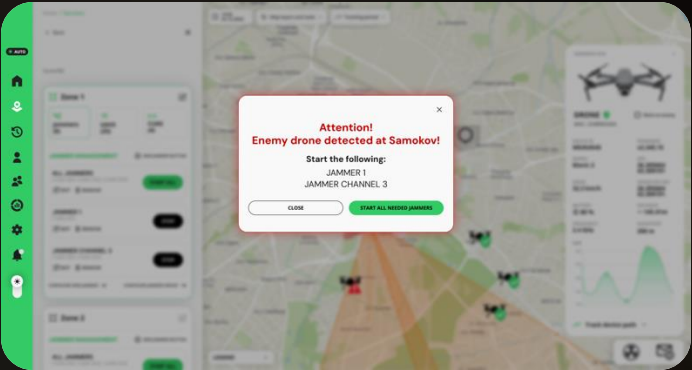
OUR FLAGSHIP ANTI-DRONE PRODUCT - FEATURES

MANAGE THE SITE FROM ANYWHERE
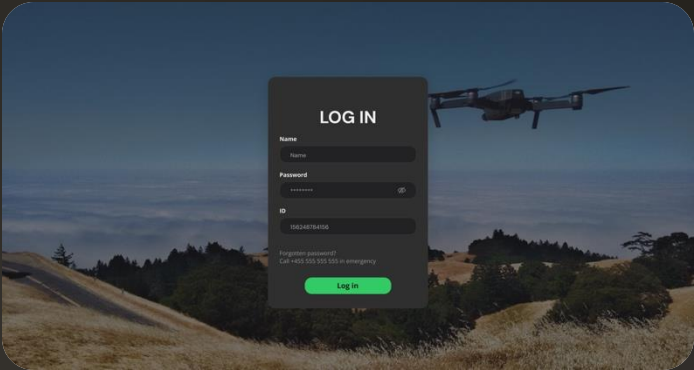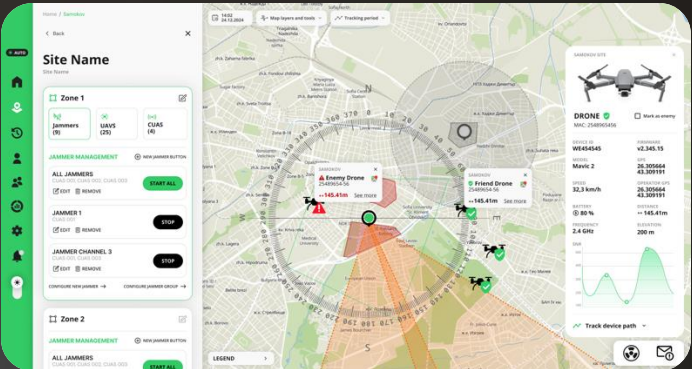

DASHBOARD
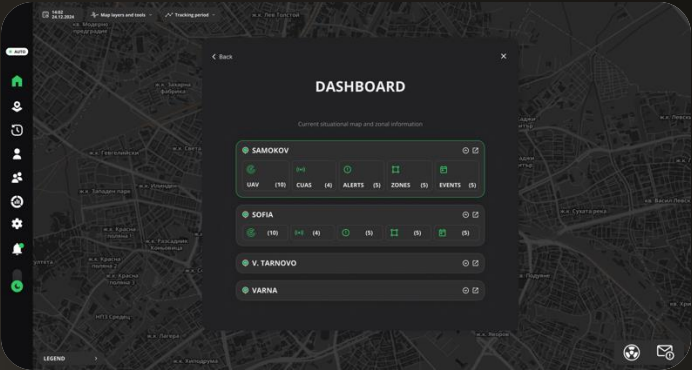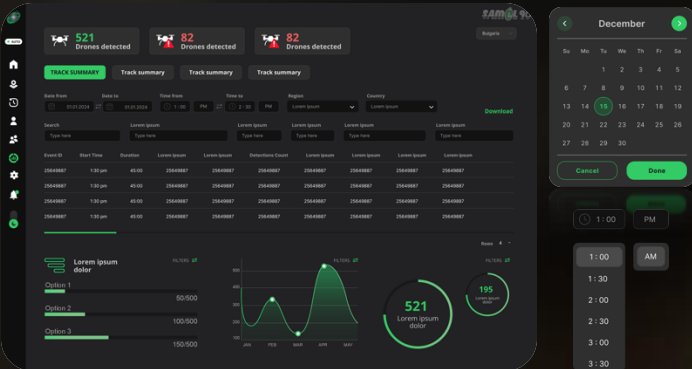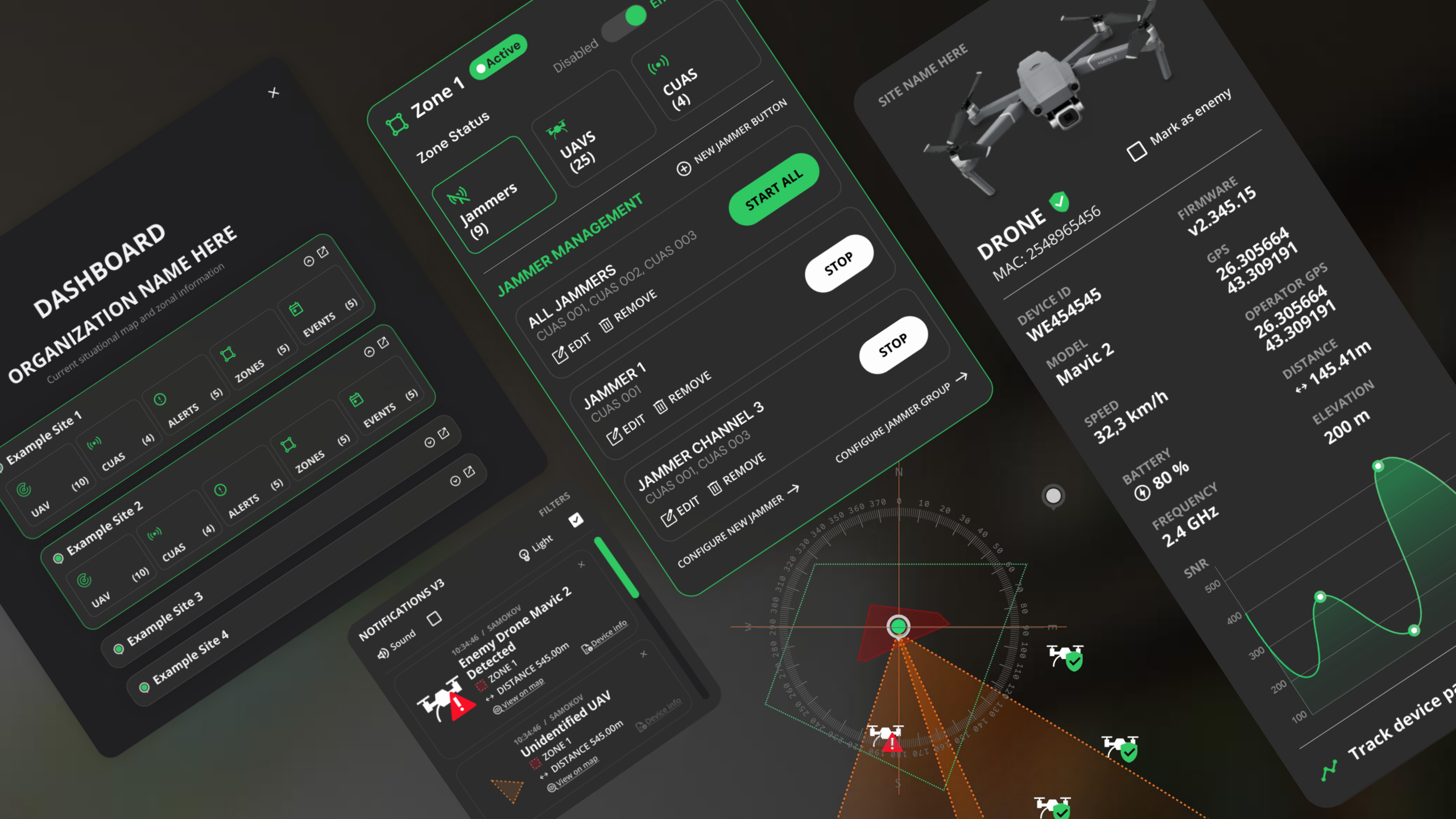

OPERATOR VIEW
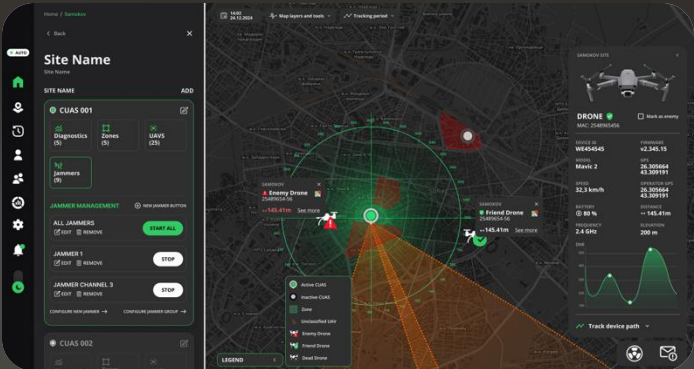
LIVE MONITORING
DASHBOARD

LIGHT /DARK
THEME

DETAILED EVIDENCE
COLLECTION

DASHBOARD
ORGANIZATION NAME HERE
Current situational map and zonal information

ZONES (5)   EVENTS (5)

Example Site 1
ALERTS (5)   ZONES (5)   EVENTS (5)
CUAS (4)
UAV (10)

Example Site 2
CUAS (4)   ALERTS (5)   ZONES (5)
UAV (10)

Example Site 3

Example Site 4

Zone 1 [Active]   Disabled

Zone Status

CUAS (4)

UAVS (25)

Jammers (9)

⊕ NEW JAMMER BUTTON

[START ALL]

JAMMER MANAGEMENT

ALL JAMMERS
CUAS 001, CUAS 002, CUAS 003
✎ EDIT   🗑 REMOVE

[STOP]

JAMMER 1
CUAS 001
✎ EDIT   🗑 REMOVE

[STOP]

JAMMER CHANNEL 3
CUAS 001, CUAS 003
✎ EDIT   🗑 REMOVE

CONFIGURE JAMMER GROUP →

CONFIGURE NEW JAMMER →

FILTERS

💡 Light   ☑

NOTIFICATIONS V3
🔊 Sound ☐   ✕

10:34:46 / SAMOKOV
Enemy Drone Mavic 2 Detected
☐ ZONE 1
↔ DISTANCE 545.00m
@ View on map
📱 Device info   ✕

10:34:46 / SAMOKOV
Unidentified UAV
☐ ZONE 1
↔ DISTANCE 545.00m
@ View on map
📱 Device info   ✕

SITE NAME HERE

☐ Mark as enemy

DRONE ✅
MAC: 2548965456

DEVICE ID
WE454545

MODEL
Mavic 2

SPEED
32,3 km/h

BATTERY
⚡ 80 %

FREQUENCY
2.4 GHz

FIRMWARE
v2.345.15

GPS
26.305664
43.309191

OPERATOR GPS
26.305664
43.309191

DISTANCE
↔ 145.41m

ELEVATION
200 m

SNR
500
400
300
200
100

Track device pa...

TECHNOLOGY ROADMAP - NEW PRODUCTS & SOFTWARE CAPABILITIES
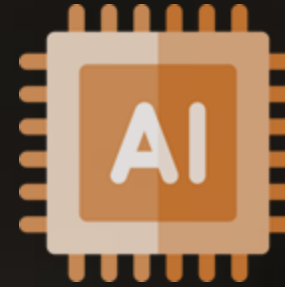
Q4 2024

Launch of Phase 1 of C-CUAS command-and control web on-prem platform

Q3 2025

Deployment - AI identification & classification

Q1 2026

AI-driven computer vision technology to detect verify and track UxS in real time

Q2 2025

Release of enterprise-grade autonomous fixed C-UxS Hardware

Q4 2025

Multi-fusion capabilities of detectors, radars, and optical sensors

C-UAS PLAY A CRITICAL ROLE IN CIVILIAN PROTECTION

Surveillance and Reconnaissance
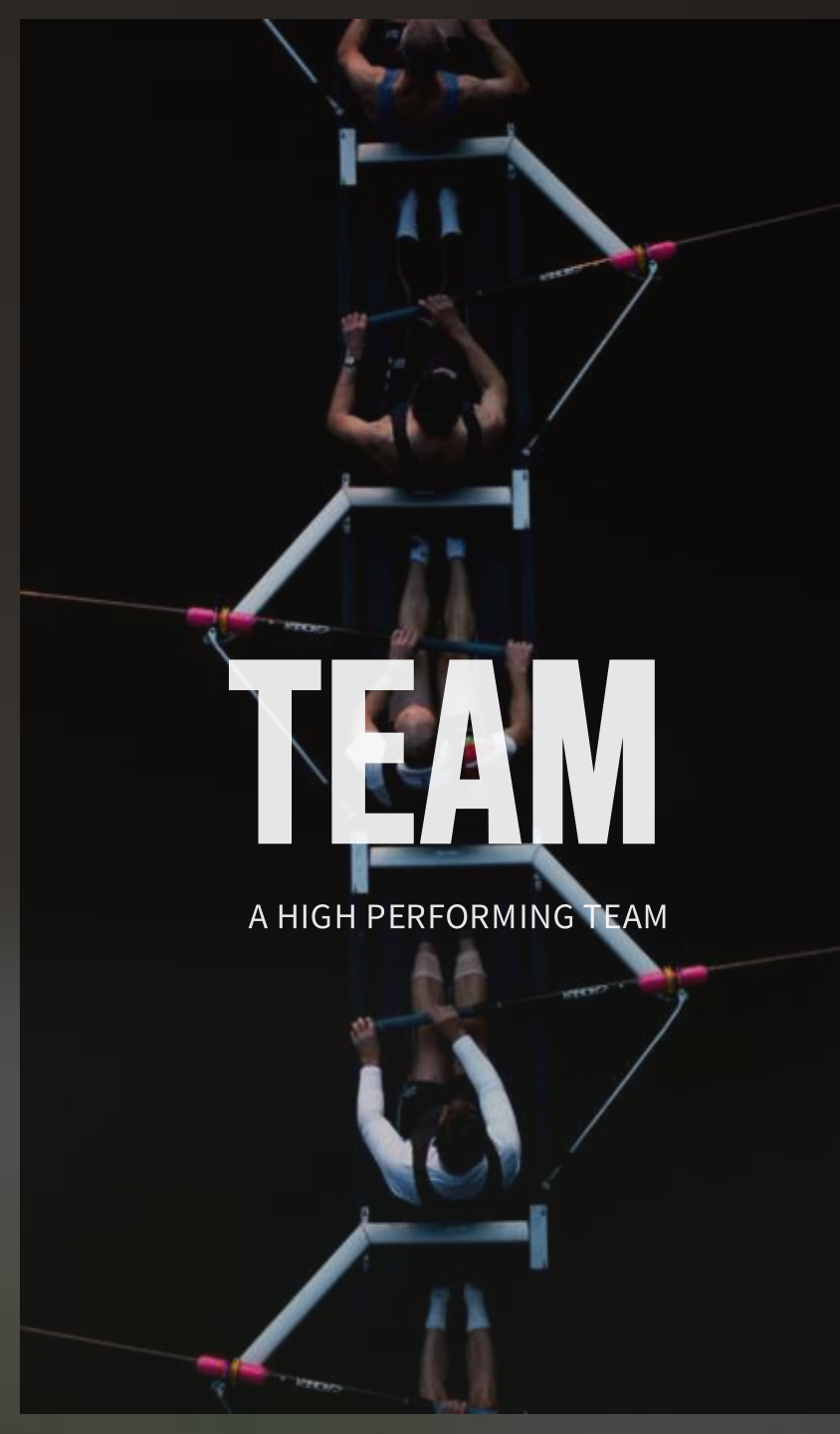
Critical Infrastructure

Logistics & Supply Chain

Disaster Response & Emergencies

Transportation

Public Events & Commercial Venues
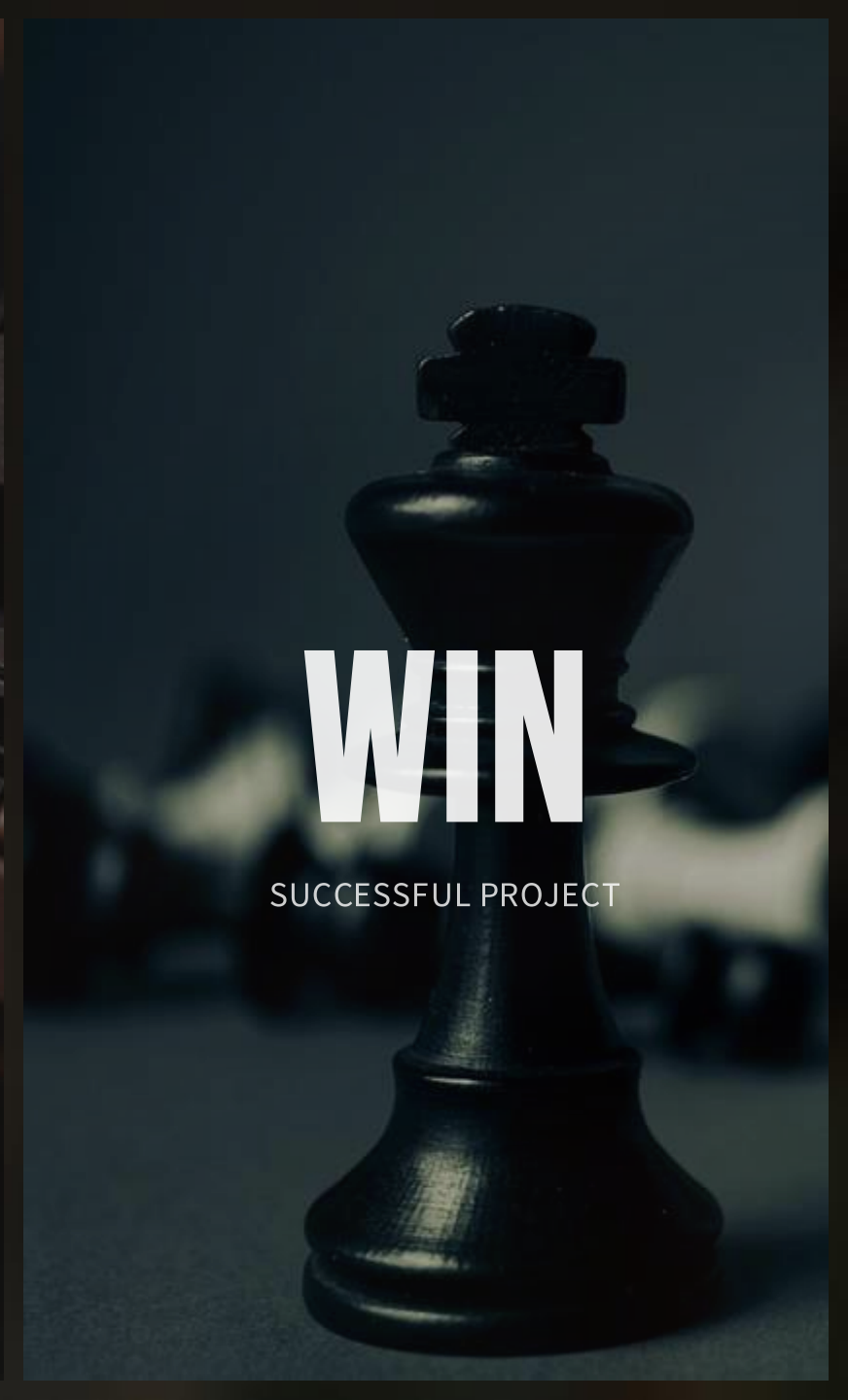
TEAM

A HIGH PERFORMING TEAM

PARTNER

THE RIGHT PARTNER

WIN

SUCCESSFUL PROJECT

grand technology

RECAP & KEY TAKEAWAYS

WHO WE ARE?

Agile Bulgarian tech company
Expert team in embedded
& software systems
Focused on innovation and
local R&D

WHAT WE DO?

R&D in anti-drone and
autonomous platforms
Embedded software, signal
processing, real-time interfaces
Partnering with local defense
firms Aligned with EU/NATO
strategic priorities

WHAT WE SEEK?

Joint R&D initiatives or
co-development of dual-use
systems.
Access to expertise, and
integration with larger defense
platforms. Looking for joint-
ventures and collaborations.

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Grand Tour Technology LTD

SCAN ME

LET'S DO THE NEXT GREAT THING TOGETHER !

grand technology