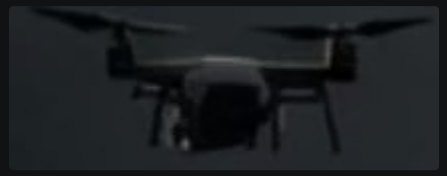


Absolute Airspace Sovereignty

skyhawk — The world's most advanced mobile Counter-UAS defense platform, delivering military-grade airspace lockdown for private estates, superyachts, and critical infrastructure.

ELITE TACTICAL COUNTER-DRONE DEFENSE



The Evolving Threat in the Visual Domain

Modern asymmetric warfare has bypassed the perimeter. Autonomous drones, loitering munitions, and stealth swarms operate **below conventional radar**, turning the skies above private estates, superyachts, and critical infrastructure into critical vulnerabilities.

Traditional security is no longer a deterrent.

The New Threat Vector

- Autonomous drones & loitering munitions
- Stealth swarms below radar coverage
- Silent, invisible, and highly evasive



An Uncompromising Mobile Fortress

Introducing the **skyhawk Counter-UAS platform** — a fully integrated, military-grade defense dome tailored for the private sector. It delivers unparalleled airspace lockdown, neutralizing hostile threats with silent, invisible precision. Elite protection that moves wherever you do.

Military-Grade

Defense-tier hardware adapted for private sector deployment

Fully Integrated

Seamless sensor-to-effector architecture in one platform

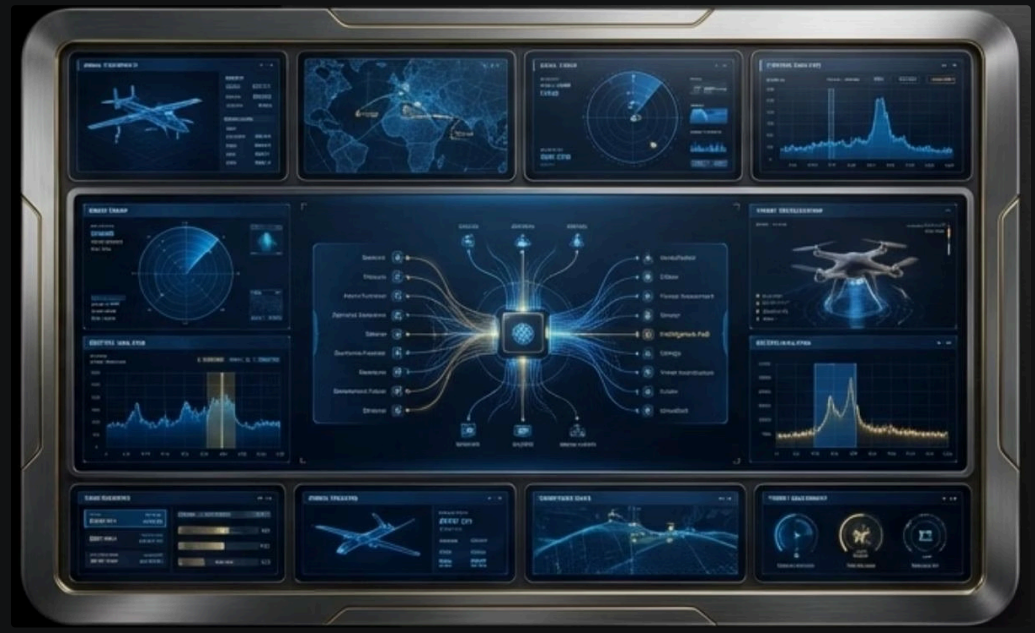
Mobile

Moves with you — estate, convoy, or private port

CHAPTER 1: INTELLIGENCE

The Central Intelligence: ARKS OS AI

Hardware is only as effective as the mind that commands it. **ARKS OS AI** is our proprietary command, control, and data fusion intelligence. Operating autonomously at machine speed, it ingests multi-sensor data, eliminates false alarms, and executes threat neutralization seamlessly — with zero blind spots.



Multi-Sensor Fusion

Ingests RF, optical, and mmWave data simultaneously

False Alarm Elimination

Negative filtering separates threats from authorized assets

Autonomous Execution

Machine-speed neutralization with no human latency

The DTIM Architecture

A comprehensive, multi-layered shield built on **four uncompromising pillars** — the backbone of every skyhawk deployment.



Detect

Seeing the invisible across the RF, optical, and mmWave spectrum

Track

Maintaining persistent, autonomous lock on highly evasive targets

Identify

ARKS OS AI rapidly distinguishing friend from foe

Mitigate

Erasing the threat via cascading electronic or kinetic force



DTIM PHASE I & II

Detect & Track: Multi-Sensor Arrays

Advanced multi-sensor arrays provide early warning and continuous tracking, locking onto threats **before they breach the horizon**.

RF Drone Detector

8–10 km — Detects communication signals and pilot location

mmWave FMCW Radar

6–8 km — Tracks autonomous drones and swarms

EO/IR HD Camera

3–5 km — Visual confirmation and target locking

DTIM PHASE III

Identify: Machine-Speed Decision-Making



skyhawk OS AI fuses **optical tracking and RF spectrum analysis** to instantly classify incoming objects. By utilizing negative filtering and an extensive drone library, it separates harmless anomalies from hostile threats in real time — ensuring zero collateral disruption to your authorized assets.

Optical + RF Fusion

Simultaneous multi-spectrum classification

Negative Filtering

Extensive drone library eliminates false positives

Real-Time Output

Friend-or-foe determination at machine speed

DTIM PHASE IV

Mitigate: The Engagement Spectrum

A **cascading wall of defense** tailored to the threat's proximity and severity.

1

Soft-Kill EW

4–6 km — GNSS and multi-band RF disruption, forcing landing or return-to-home

2

mmWave Hard-Kill

4.5 km — Directional energy to disrupt and fry drone electronics

3

Laser Hard-Kill

1.5 km — Directed Energy Weapon for immediate physical neutralization





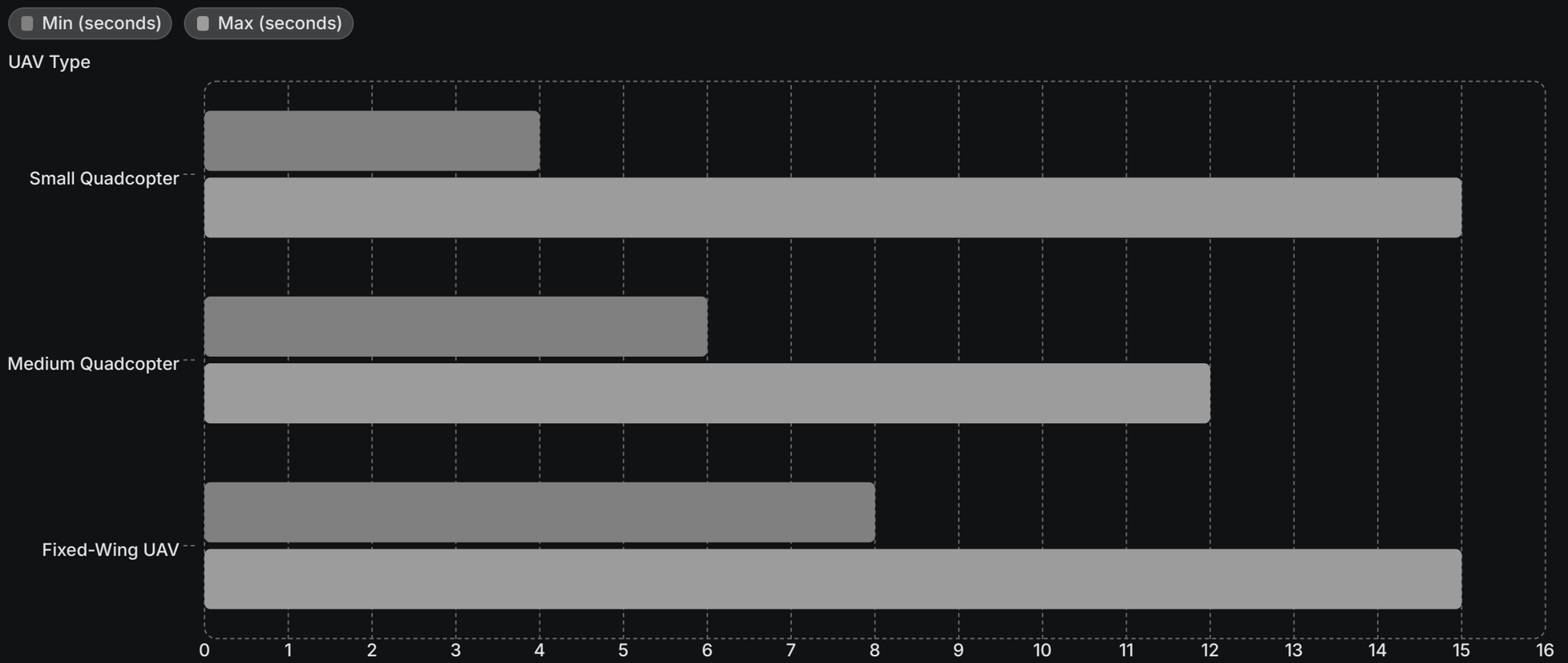
The Ultimate Deterrent: 5kW Fiber Laser

Silent. Invisible. Absolute. When electronic disruption is insufficient, the 5kW Fiber Laser Directed Energy Weapon engages at 1.5 km. Liquid-cooled and directed by a precision motorized optical turret, it delivers devastating thermal energy to destroy motors, ignite batteries, and melt sensors with pinpoint accuracy.



Precision Hard-Kill: Engagement Timings

ARKS OS AI ensures the laser beam remains locked on the most vulnerable sub-components of the target, **erasing threats in seconds** — silently and decisively.



From small quadcopters neutralized in as few as 4 seconds to fixed-wing UAVs eliminated within 15 seconds, the laser's precision ensures no threat lingers in your airspace.

CHAPTER 2: DEPLOYMENT

Unprecedented Mobility & Deployment

Elite security on your terms. The entire **skyhawk** platform is **vehicle or trailer-mounted** for rapid redeployment. From transit mode to total airspace lockdown, the system achieves full operational readiness in under 30 minutes. Protection that moves seamlessly between your estate, your convoy, or your private port.



30

Minutes to Deploy

Full operational readiness from transit mode

10km

Protection Dome

Total airspace coverage radius

30+

Simultaneous Targets

Tracked and engaged concurrently

Independent Power Architecture



True Security Requires Absolute Autonomy

The skyhawk platform operates entirely **off-grid**, driven by a dedicated power supply that does not rely on vulnerable external infrastructure.

Power Specification

20kW Input — fully generator-backed, ensuring continuous, uninterrupted operation of both ARKS OS AI and the 5kW Directed Energy Weapon. ~15–20 kW consumption during laser firing.

Physical Profile

System weight: **800–1,200 kg** | Operating temp: **–10°C to +50°C**

CHAPTER 3: SYSTEM OVERVIEW

The Modern Sanctuary: 10 km Protection Dome

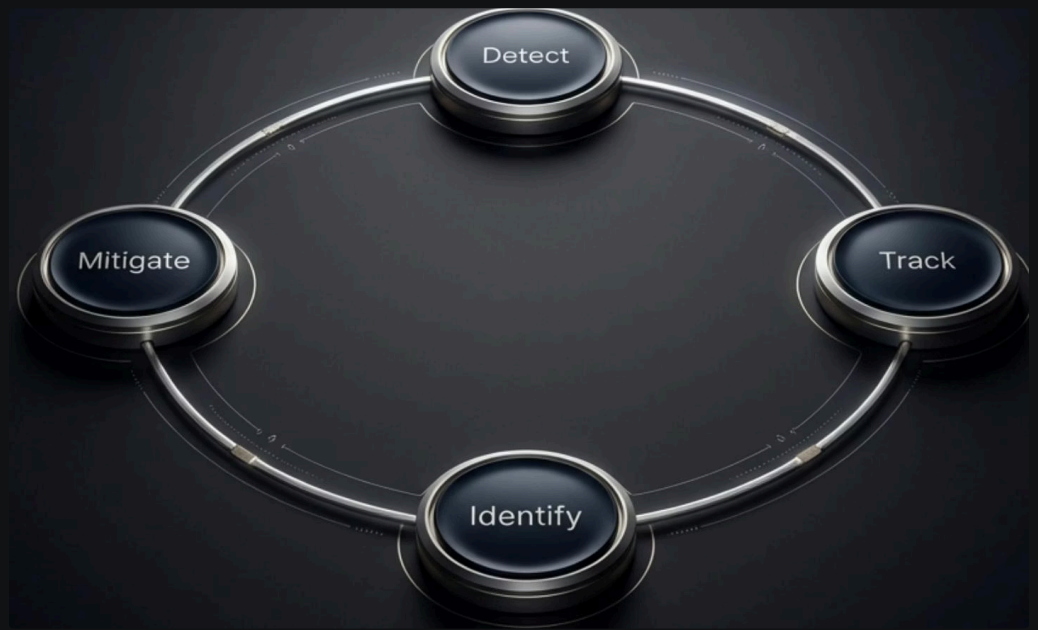


True luxury is absolute privacy. In an era where the most invasive threats arrive silently from above, conventional security is no longer enough. You require a seamless, invisible **10 km tactical protection dome** over your estate and critical infrastructure.

System Type	Counter-UAS (Soft Kill + Hard Kill)
Detection Range	10 km
Soft-Kill Range	4–6 km
Hard-Kill Ranges	4.5 km (mmWave) / 1.5 km (Laser)
Target Capacity	30+ simultaneous targets
Setup Time	< 30 minutes

The Brain of the Operation: ARKS OS AI

Security should be omniscient, not intrusive. Driven by the proprietary **ARKS OS AI**, our platform operates on a fully autonomous Detect-Track-Identify-Mitigate (DTIM) loop. It makes surgical decisions at machine speed, ensuring the principal's peace of mind is never disturbed.



Layer 1: Detection

- **RF Spectrum Detector:** 8–10 km | 400 MHz–6 GHz | Detects control links & pilot location
- **mmWave Radar:** 6–8 km | 76–81 GHz | Tracks up to 50 targets including swarms
- **EO Tracking Camera:** 3–5 km | HD, 25–30x zoom | 2-axis gimbal stabilization

Layer 2: Soft-Kill EW

- **RF Jamming:** 4–6 km | 20–50 W per band | Breaks command link
- **GNSS Jamming:** 2–4 km | 20–30 W | Targets GPS L1/L2, causes navigation failure

Layer 3: Hard-Kill

- **mmWave Disruption:** 4.5 km | 24–60 GHz | 100–200 W | Fries flight electronics
- **5kW Fiber Laser:** 1.5 km | ~1070 nm | Liquid-cooled | Motor destruction & battery ignition

CHAPTER 4: THE STANDARD

The skyhawk Standard

The pinnacle of private and tactical airspace sovereignty — four pillars of uncompromising excellence.



ARKS OS AI

Autonomous, machine-speed command and control



DTIM Framework

Multi-layered detection and engagement with zero blind spots



Rapid Mobility

Vehicle-mounted, <30-minute setup, 10kW independent power



Directed Energy

5kW Fiber Laser for 1.5 km precision hard-kill



Secure Your Sky

Absolute Control. Absolute Privacy. Silently protecting your sanctuary with the world's most elite tactical defense platform.

To arrange a private briefing and secure your deployment of the world's most advanced mobile defense dome, contact our executive team.

skyhawk — Elite Tactical Counter-Drone Defense. The Invisible Shield.

FOR MORE DETAILS
AND INQUIRIES

Please contact us for more information or assistance:



WRITE TO US

For direct inquiries or
specific requests:

info@worldoneindia.net

WORLD ONE INDIA
Empowering Progress

Thank you for your attention!