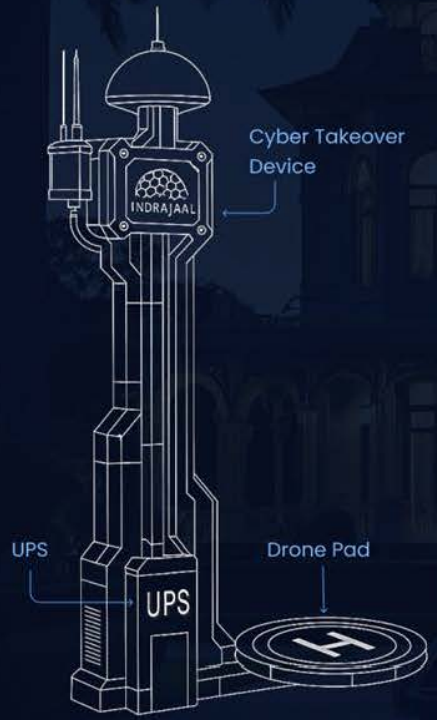
Indrajaal Urban is designed to safely capture rogue drones in urban areas, with minimal disruption and no collateral damage.

FEATURES



No network disruptions (WiFi/radio/cellular)

Seamless defense with zero impact on communication networks.

Vehicle-deployable

Designed for mobility—easily transportable and deployable from vehicles for rapid response

Autonomous engagement

Threats are detected and neutralised autonomously. No manual intervention needed.

Civilian airspace compliant

Operate safely and legally within civilian airspace without compromising security.

Pre-defined fly zones

Customize your defense with pre-defined fly zones to enhance security and control.

48hr installation

Get up and running swiftly with a straightforward installation process—ready in just 48 hours.

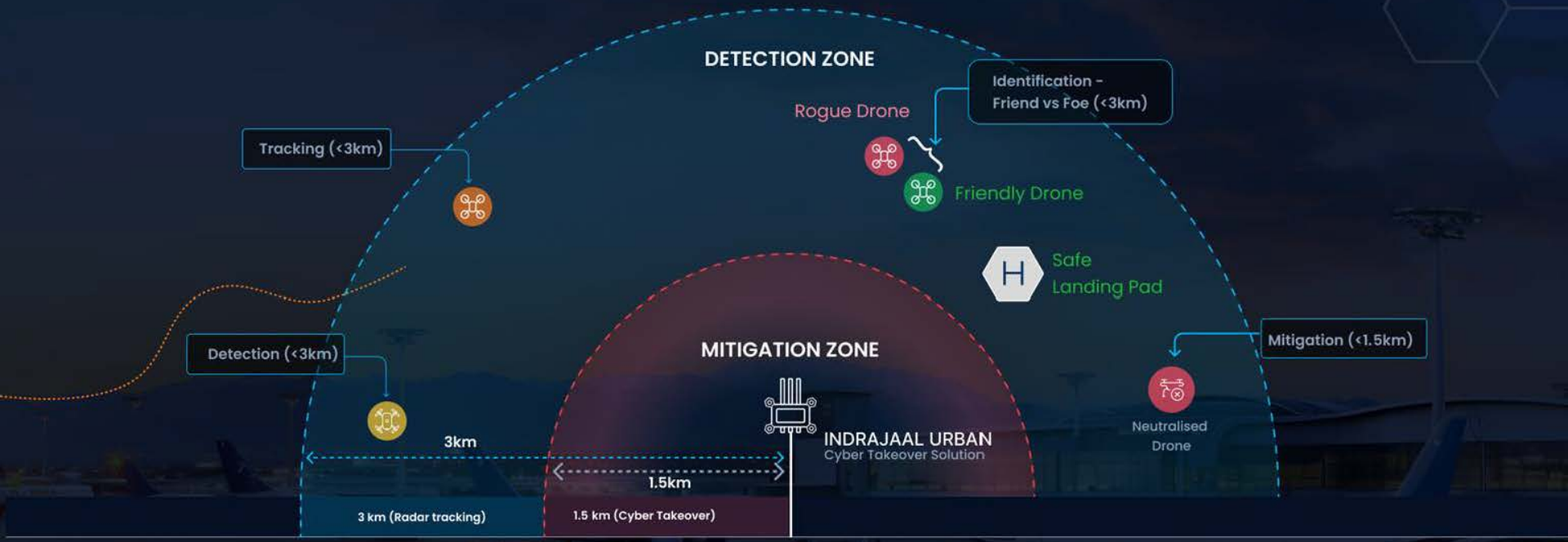
No collateral damage

Neutralize threats efficiently while ensuring the safety of surrounding environments.

Works in all weather, day & night

Reliable performance in any conditions—day or night, rain or shine.

CAPABILITIES



Capabilities

- [x] Off-the-shelf drones
- [ ] DIY Drones
- [ ] FPV Drones
- [ ] Swarm Drones
- [ ] Dark Drones*

*Dark drone mitigation capabilities are supported in Indrajaal Military

DTIM Ranges

Detection (RF)	Tracking (RF)	Identification	Mitigation (Cyber Takeover)
<3kms	<3kms	<3kms	<1.5kms

DEVICES

Cyber Takeover Device

Captures hostile drones mid-air by seizing control of their communication and navigation systems.

Processing unit

A high-speed edge system that fuses sensor data, processes drone signatures, and delivers real-time threat intelligence to connected assets.

Command & Control Unit and Application

The central hub for mission control, managing threat detection, decision-making, and coordinated responses across the entire defense network, powered by the SkyOS platform.

SPECS

CYBER TAKEOVER DEVICE

Range and Coverage	
Drone Detection Technology	Drone Communication Protocol Interceptor/ Decrypter
Operational frequencies supported by the high-band antenna	2.4GHz 5.2GHz 5.8GHz
Maximum detection, tracking, and identification range for the high band omni antenna in urban areas	2km
Maximum detection, tracking, and identification range for the high band omni antenna in rural areas	4km
Maximum detection, tracking, and identification range for the high band sectorial antenna in urban areas	3km
Maximum detection, tracking, and identification range for the high band sectorial antenna in rural areas	7km
Maximum mitigation range for high band omni antenna in urban areas	0.5km
Maximum mitigation range for high band omni antenna in rural areas	1km
Maximum mitigation range for the high band sectorial antenna in urban areas	1km
Maximum mitigation range for the high band sectorial antenna in rural areas	2km
Operational frequencies supported by the low-band antenna	433MHz 800 - 900 MHz
Maximum detection, tracking, and identification range for the low band omni antenna in urban areas	2km
Maximum detection, tracking, and identification range for the low band omni antenna in rural areas	4km
Maximum mitigation range for the low band omni antenna in urban areas	0.5km
Maximum mitigation range for the low band omni antenna in rural areas	1km
Maximum detection time	15s
Maximum concurrency of detection per unit	Unlimited
Track parameters under identification	9
Maximum track refresh rate	2s
Track parameters under tracking	Operating Frequency Location Speed Altitude Operator location Onboard camera direction

Maximum mitigation time	Up to 5 Sec with 95% takeover success rate. 100% success rate on and after second attempt
Maximum concurrency of track mitigation	1 track
Types of mitigation	Safe Landing Disconnect Controller
Mitigation Techniques	Disconnect the remote controller and take over the drone control.

Antenna and Signal Reception	
Maximum Azimuth FoV for Omni antenna	360 degrees
Maximum Azimuth FoV for sectorial antenna	90 degrees
Maximum Elevation FoV	360 degrees

Performance Metrics and Scalability	
Direction Finding Accuracy - RMS	<1 degree
Direction Finding Angular Resolution	<1 degree
Azimuth Accuracy - RMS	<1 degree
Elevation Accuracy - RMS	<1 degree

Environmental and Operational Considerations	
Operating Temperature Range	-32°C to 49° C
Storage Temperature Range	-40°C to 70° C
Maximum Humidity	95%
EMI/EMC	MIL-STD 461G, 810H
Ingress Protection	IP66
Idle Power Consumption	135 W
Max Power Consumption	190 W
Maximum Weight	Main Unit: Max 8.5 kg Omni Antenna: Max 5 kg Sectorial Antenna: Max 10 kg Low Band Omni Antenna: Max 7.5 kg
Maximum Dimensions	Main Unit: Max 372 x 278 x 124.8 mm Omni Antenna: Max 274 x 176 x 73 mm Sectorial Antenna: Max Diameter 300 mm, Max height 471 mm Low band Omni Antenna: Max 274 x 200 x 93 mm
Deployment Options	Vehicle Mounted Stationary

SkyOS™ Platform

Indrajaal Urban is powered by our proprietary AI-enabled platform

FEATURES & BENEFITS

Comprehensive C5ISRT

Indrajaal is a unified Command, Control, Communication, Combat, Intelligence, Surveillance, Reconnaissance, and Targeting (C5ISRT) platform designed to provide integrated and real-time decision-making across multiple domains. threats.

Autonomous, 24x7 Threat Mitigation

Operates continuously without human intervention to detect, track, and neutralize hostile drones in real-time using a fully AI-powered system.

Plug-and-Operate Architecture

Pre-integrated hardware and software stack ensures rapid deployment without lengthy installation or calibration procedures.

Mission-Critical Power Resilience

Integrated UPS and energy management systems ensure uninterrupted protection during grid failures or attacks on power infrastructure.

Scalable for Multi-Tower Network Defense

Easily integrates into a larger Indrajaal network mesh, with synchronized situational awareness and coordinated countermeasures across assets.

Open-Protocol Support

Indrajaal supports open protocols, ensuring compatibility with existing third-party equipment. This allows for smooth integration of previously procured assets into the system without the need for complete replacements.

Rapid Deployment

With its ability to expand through plug-and-play capabilities, Indrajaal is both past-prepared with deep system integration and future-ready to scale with your evolving security needs.

Secure, Remote Command Interface

Enables encrypted, over-the-air monitoring, diagnostics, and manual override, ensuring security teams retain full situational control.

Tamper-Proof & Electrified Casing

Electrified outer shell and reinforced modular construction deter sabotage and resist harsh weather, dust, or vandalism.

Low Maintenance, High MTBF Hardware

Industrial-grade components with self-diagnosing capabilities reduce human servicing requirements and improve lifecycle cost-efficiency.

Rooftop-Deployable, Space-Efficient Design

Engineered for constrained urban sites — with a compact footprint that mounts on flat surfaces without structural overhaul.