



TROOPER

PORTABLE DRONE PROTECTION MANPACK

Disclaimer: This illustration is a representational concept. Final design, features, and specifications may vary based on engineering, regulatory, and operational requirements.



A manpack drone
detection and
mitigation system
designed for covert
operations.

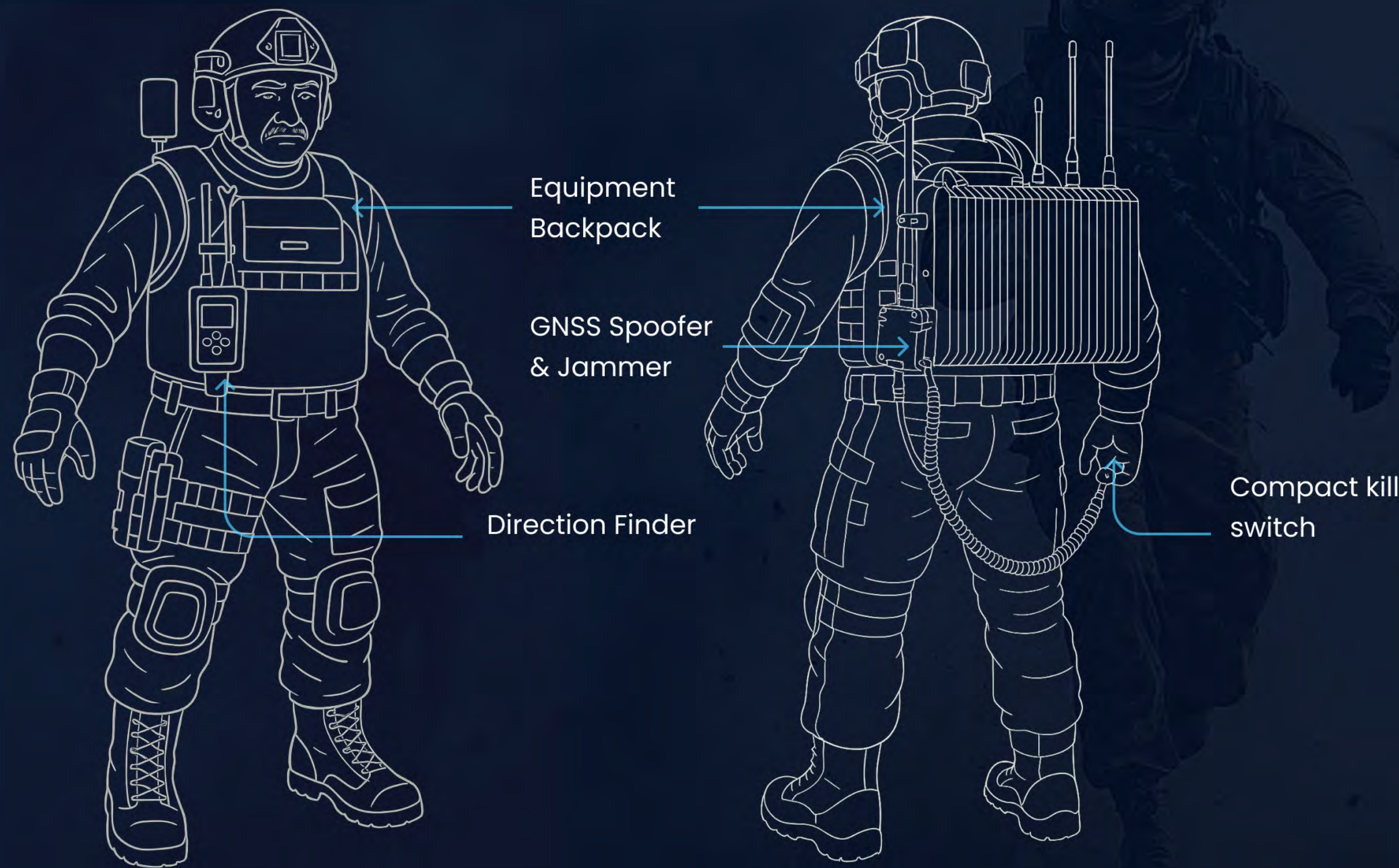


Manpack Direction
Finder



GNSS Spoofer
& Jammer

FEATURES



Rugged Tactical Build
Engineered for harsh terrains, extreme weather, and sustained field operations.



Multi-Band RF Coverage
Scans and monitors multiple commercial and custom drone frequency bands.



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

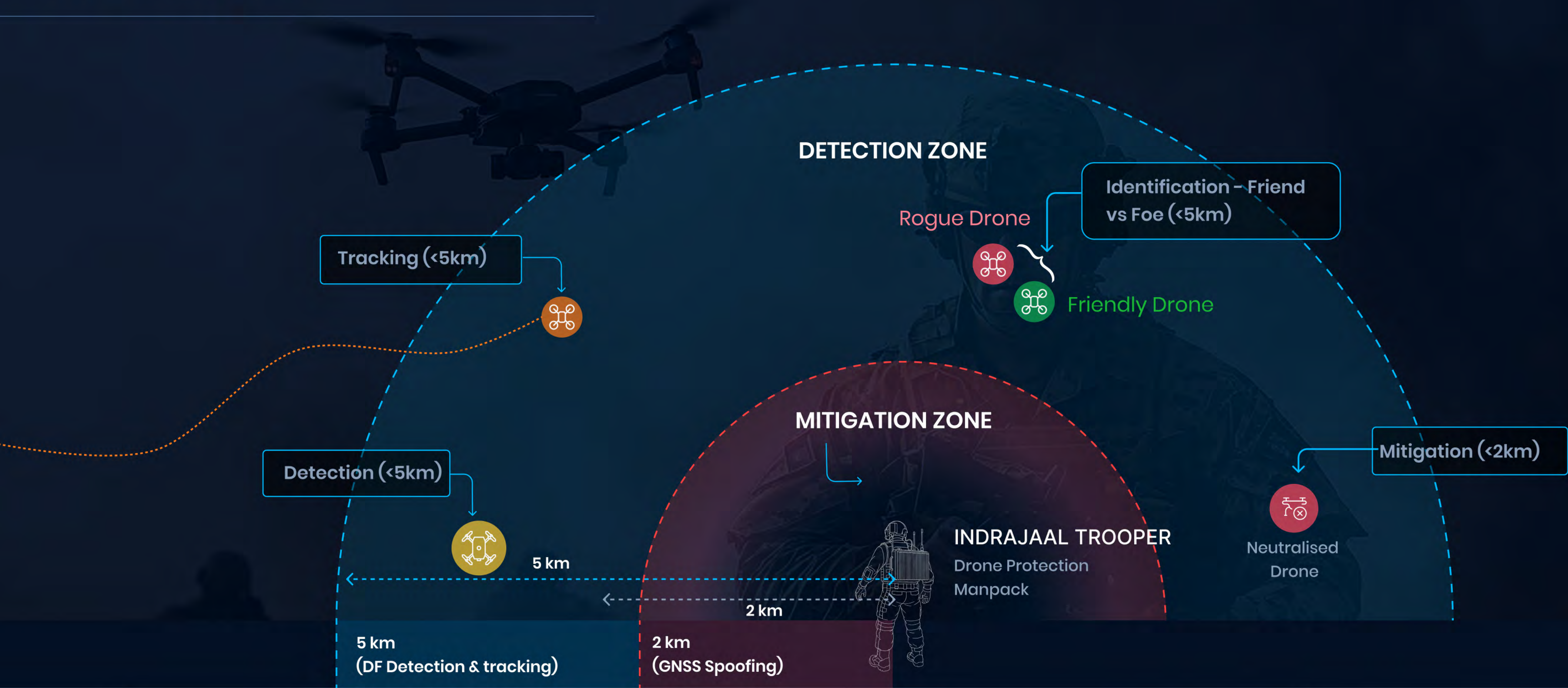


Directional Signal Tracking
Identifies bearing of hostile drone signals for improved situational awareness.



C2 Network Compatible
Interfaces with tactical command-and-control networks for live data sharing.

CAPABILITIES



Capabilities

- ☒ Off-the-shelf drones
- ☒ DIY Drones
- ☒ FPV Drones
- ☒ Swarm Drones
- ☐ Dark Drones*

*Dark drone mitigation capabilities are supported in the Indrajaal Military product

DTIM Ranges

Detection (DF)	Tracking (DF)	Identification	Mitigation (GNSS Jamming)
<5kms	<5kms	<5kms	<2kms

RF Detector	
Detection methodology	Passive detection of radio-frequency (RF) signals; zero emission
Detection range	Up to 5km
Detection coverage	Full 360° (all-airspace)
Threat Library	Extensive library coverage, which includes 450+ different drones/ UAVs, remote controllers, drone-telemetry and FPV models
Drone swarm detection with electronic fingerprints	UAVs and remote controllers are detected precisely and identified with electronic fingerprints. Simultaneously tested and verified identification of 30+ different UAVs (15+ non-DJI models) and 30+ different remote controllers (15+ non-DJI models)
Whitelist/blacklist	Supports whitelist/blacklist feature for certain brands/models, which helps distinguish friend from foe
Software upgrade	Can be upgraded online or offline
Control functions	Control functions include but are not limited to viewing the system operation status, receiving drone activity alerts, viewing black and white lists, etc.
Detection frequency bands	400 MHz - 1800 MHz 2.3 GHz - 2.6 GHz 5GHz - 6GHz
Scanning frequency resolution	≤100Hz
Sensor Weight (without battery)	800g
Sensor Size(without battery and antenna)	16cm x 9cm x 4.5cm
Ingress Protection	≥IP65
Working temperature	-22oC to +55oC (-7.6oF to +131oF)
Battery	Rechargeable lithium-ion battery (10.8 Volt DC) Commonly used NATO military grade battery Compatible with the standard PRC-152/ PRC-163 radios
Battery duration	up to 6 hours

GNSS Spoofer & Jammer	
Range and Coverage	
Range	2Kms
GNSS Signal Jamming Capability (GPS or Galileo or BEIDOU or GLONASS)	All 4 constellations on L1 and L2
GNSS Spoofing Capability (Yes or No)	Yes
GNSS Spooling Type (Fixed Location or Defined Waypoint or Both)	Both + dynamic scenarios
GPS Bands Spoofing Coverage	L1
Galileo Bands Spoofing Coverage	E1
BeiDou Bands Spoofing Coverage	B1
GLONASS Bands Spoofing Coverage	L1
GPS Bands Jamming Coverage	L2
Galileo Bands Jamming Coverage	E5b
BeiDou Bands Jamming Coverage	B2
GLONASS Bands Jamming Coverage	L2
Operating Parameters	
Operating Temperature	-40°C to +50°C
Weight	Repulsor: 7kg and Tripod+Antenna: 4kg
Power Supply	100-240VAC, 100W

Battery Specs	
Battery Type	Rechargeable Li-ion Battery Pack
Battery Capacity	15.6 Ah @ 3A
Battery Energy	230Wh
Battery Charging Time	2 hours
Battery Life	4 hours
Battery Lifecycle	300 cycles to 80% capacity @ 100% DOD
Battery Dimensions	186.2mm X 69.5mm X 65mm
Battery Weight	1250gms
Battery Housing	ABS
Battery Energy Density	177 Wh/kg; 269 Wh/l
Battery Charge Cycle Temperature Range	0°C to 45°C
Battery Discharge Cycle Temperature Range	-34°C to 60°C
Battery Storage Temperature Range	-20°C to 50°C
Battery Humidity Range	0 to 90%
Battery Transportation Class	9
Battery Certifications	MIL-STD-810E
Battery Safety	Under/over voltage Under/over current Short circuit Temperature Reverse polarity



Equipment backpack

Military-grade backpack engineered to carry spoofer hardware in harsh operational conditions.

Compact kill switch

Handheld RF jammer to instantly sever drone control links within line-of-sight range.

GNSS Spoofer & Jammer

Disrupts and deceives drone GPS signals, forcing navigation errors and mission aborts.



Manpack Direction Finder Unit

Portable RF direction-finding device to pinpoint hostile drone signal sources in real time.

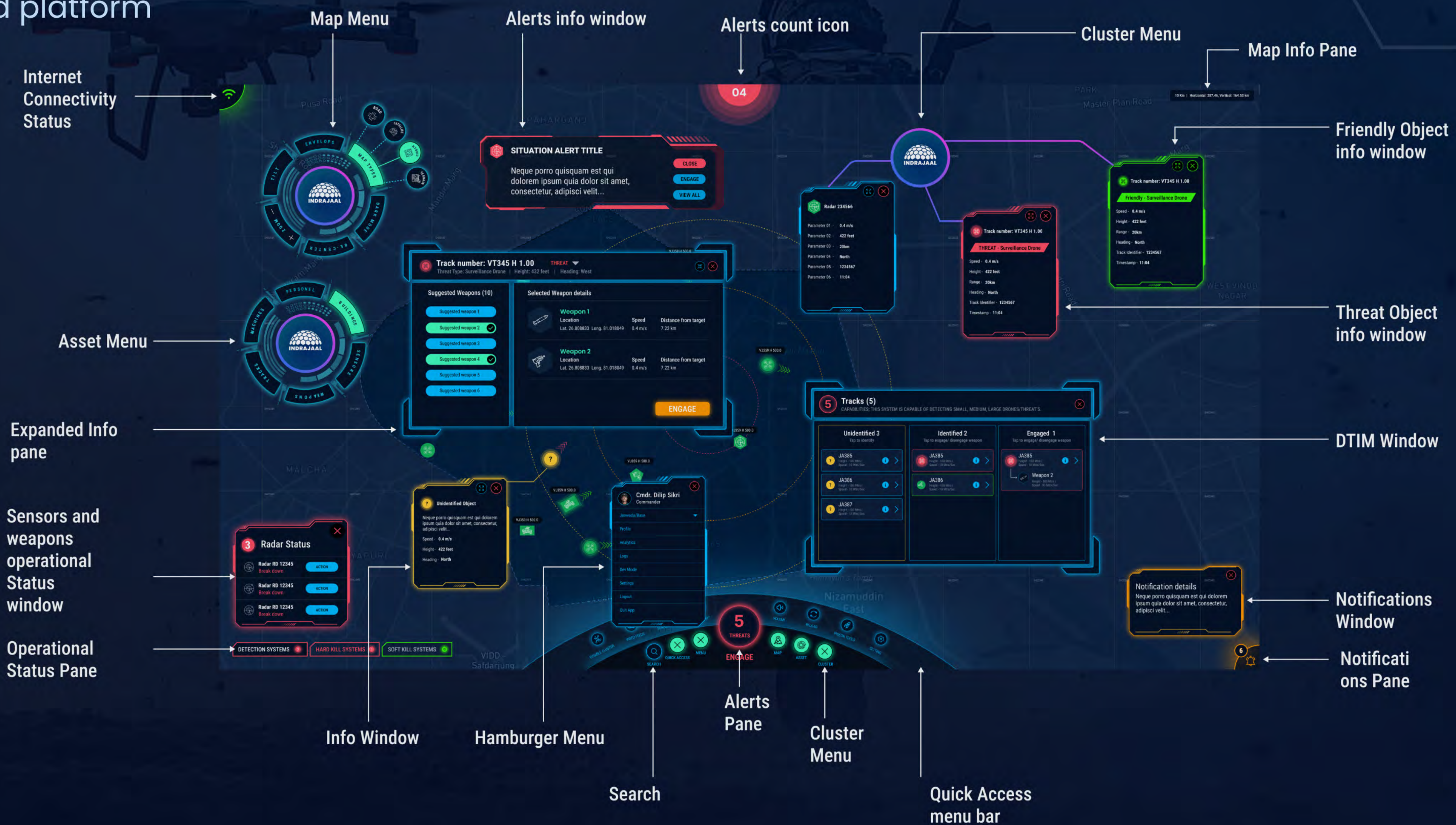
Accessories

Tripod for static installation

Power Supply

- 1. Backpack includes batteries
- 2. Portable 28-volt power supply source and desktop charger, compatible with two standard 14-cell batteries, featuring two power connectors (one for each battery) and a unified ring power cable.

Indrajaal Trooper is powered by our proprietary AI-enabled platform



BENEFITS



Comprehensive C5ISR

Indrajaal is a unified Command, Control, Communication, Combat, Intelligence, Surveillance, Reconnaissance, and Targeting (C5ISR) platform designed to provide integrated and real-time decision-making across multiple domains. threats.

Plug-and-Operate Architecture

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

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.

Ultra-Portable, Mission-Ready Form

Lightweight, backpack-mounted system designed for rapid deployment in high-mobility scenarios.

Field-Proven Power Resilience

Integrated battery pack and energy management ensure continuous operation during extended missions.

Scalable for Multi-Tower Network Defense

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

Low Maintenance, High MTBF Hardware

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

Rugged, Combat-Grade Casing

Impact-resistant, dust-proof, and weather-sealed equipment built for hostile, unpredictable terrains.

Secure, Remote Command Interface

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

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.

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.

GET IN TOUCH



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