



# Vector AI

## Next-Gen Mid-Range eVTOL sUAS

ISR platform for land and maritime operations



### Fixed-Wing Configuration

#### Technical Specifications

Wingspan	9.2 ft / 2.8 m
Length	4.9 ft / 1.5 m
IP Rating	IP55
Packed Size	31.5 x 21.3 x 16.6 in (80 x 54 x 34.5 cm)
Data Link Range	40+ km
Data Link Freq.	2.2 - 2.5 GHz 4.4 - 4.9 GHz
Data Encryption	AES 256
AI Processing	2 x NVIDIA Jetson Orin

#### Flight Performance

MTOW	21 lbs / 9.5 kg
Flight Endurance	180+ min
Speed Range	34 - 45 mph
Wind Tolerance	22 mph (ground) 27 mph (air)
Max. Take-Off Altitude (MSL)	9,843+ ft / 3,000+ m
Max. Operating Altitude (MSL)	13,123+ ft / 4,000+ m
Operating Mode	eVTOL

Vector AI is a next-generation eVTOL sUAS built on a combat-proven platform, delivering real-time intelligence and rapid deployment for forward operators in contested environments.

Deployable in under three minutes from confined spaces or moving vehicles, Vector AI's 2-in-1 design enables agile multicopter reconnaissance and extended fixed-wing ISR.

It excels in GPS-denied and EW-contested areas, featuring CRPA

for jamming resistance, VIO/SLAM for GNSS-independent navigation, and dual-band connectivity with automated frequency changes to provide resilient, uninterrupted communication and navigation.

Dual NVIDIA Jetson Orin SOMs for onboard AI/ML processing support advanced object detection and tracking data that can be shared in real time via ATAK and other mission-integrated platforms.

# Multicopter Configuration

## Technical Specifications

Wingspan	4.5 ft / 1.37 m
MTOW	17.6 lbs / 8 kg
Packed Size	30.1 x 14.8 x 11.2 in

## Flight Performance

Flight Endurance	45 mins
Data Link Range	40 km
Speed Range	0 - 33 mph

## Sensor



NextVision  
**RAPTOR 360**

EO Zoom	40x optical 2x digital
EO Resolution	1280 x 720
IR Zoom	8x digital
IR Resolution	1280 x 720

## ADDITIONAL PAYLOAD OPTIONS

- **SIGINT payload** for threat detection and electronic warfare support.
- **CRPA module** to reduce interference and maximize signal strength in GNSS-denied environments.
- **Multicopter Tether Kit** for persistent ISR with continuous power and data.
- **Acoustic sensor** to detect and classify sound signatures.
- **Additional data links** for compatibility with Rover data link system.
- **Multicopter drop payload mechanism** enables precise release of lightweight payloads, including kinetic effects, for targeted delivery.

## Family of Systems

Built for scalability, interoperability, and dominance, our Family of Systems integrates three VTOL platforms for AI-powered situational awareness in multi-domain operations. With autonomous UAS ready for any ISR mission, this aerial intelligence toolkit ensures warfighters have the right asset at the right time, enabling swift decisions and mission success in dynamic environments.

# Key Features

## RAPID DEPLOYMENT

Modular, tool-free design offers three-minute setup by a single operator. Electric vertical take-off and landing capabilities allow deployment from confined spaces and moving platforms.



## PAYLOAD VERSATILITY

Modular payload system supports ISR, EW, SIGINT, CRPA, and kinetic missions with customizable sensors, tethered surveillance, or lethal payload deployment. A USB-C multiconnector enables seamless third-party integration for maximum flexibility.



## AI-DRIVEN AERIAL INTELLIGENCE

AI-powered high-resolution video delivers real-time ISR, while dual NVIDIA Jetson Orin SOMs enhance object detection and tracking. Advanced AI navigation—leveraging VIO, SLAM, and sensor fusion—delivers precise operation in GPS-denied environments.



Reliant

Vector AI

Twister

