

Technical Specifications

Wingspan	1.25 m / 4.1 ft
Length	0.6 m / 1.97 ft
IP Rating	IP54
Data Link Range	15 km
Data Link Freq.	2.2 - 2.5 GHz 4.4 - 4.9 GHz
Data Encryption	AES 256
Al Processina	NVIDIA Jetson Orin

Flight Performance

MTOW	3.8 kg
Flight Endurance	90 min
Speed Range	19 - 21 m/s
Wind Tolerance	10 m/s (ground) 12 m/s (air)
Max. Take-Off Altitude (MSL)	3200 m
Max. Operating Altitude (MSL)	3700 m
Operating Mode	eVTOL

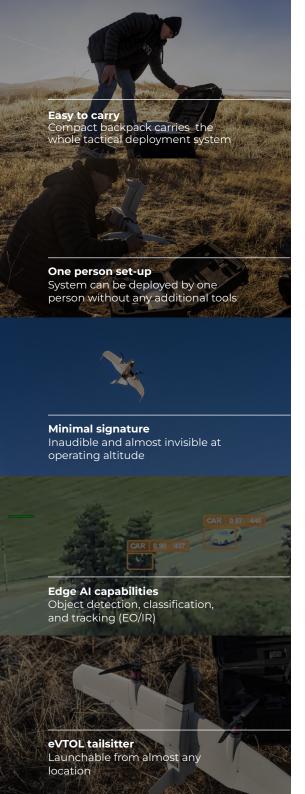
Twister is a compact eVTOL sUAS that delivers visual and acoustic aerial intelligence for **critical short-range ISR missions** in military, defense, and public safety sectors. It supports surveillance, artillery optimization, border security, reconnaissance, disaster management and law enforcement, **enabling better decision-making and operations**.

Payloads

- EO/IR gimbal (with laser illuminator option available)
- Acoustic sensor

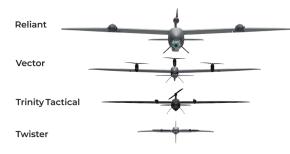
At Quantum Systems, we innovate drone technology by integrating hardware, software, and AI to **redefine aerial intelligence**. Our Twister sUAS delivers exceptional solutions for **Multi-Domain Operations (MDO)** and **Software Defined Defense (SDD)**.





Family of Systems (FoS)

Our family of systems, comprising four eVTOL drones and a drone-port solution, integrates hardware, software, and AI to deliver innovative aerial intelligence for Multi-Domain Operations and Software Defined Defense. Our scalable and functional solutions are the key to efficient and networked situational awareness in dynamic environments.



Digital Battlefield Capabilities

Gather Aerial Intelligence

- High-resolution EO/IR visuals in real-time
- Tactical insights and mission-critical information powered by onboard AI

Operate Anywhere

- Absolute & relative referencing for uninterrupted GNSS-denied operations
- Autonomous navigation and minimal footprint

Secure and Future-Ready System

- Scalable, modular design adaptable to evolving threats
- Blended and modular training concepts for efficient user enablement



EO/IR Gimbaled Video Sensor

■ High-resolution imaging for missioncritical intelligence

Navigation and Awareness Systems

Detection of acoustic events such

as gunshots, artillery fire, and other

■ Precise localization of acoustic events

in day/night conditions

Acoustic Data

explosions

■ Advanced encoding formats: H.265, AV1

■ Precision landing and obstacle avoidance

Data Processing

ISR Tactical Edge

- Advanced visual and acoustic intelligence for surveillance and reconnaissance
- Real-time decision-making in dynamic

environments

Platform Flexibility

- Modular ROS/Docker architecture for scalability and future-proofing
- Powered by NVIDIA Jetson Orin NX for onboard AI processing

Receptor Al Unified Software Suite

- **Sensor Fusion** for improved flight operations, tactical insights and predictive maintenance
- Al Capabilities
 - Advanced image processing (EO/IR)
 - Scene analysis for immediate threat assessment



Unified Operational Picture

- Integrated data streams for real-time situational awareness
- Comprehensive, actionable insights across domains

EW-Resilient Communications

- **Dual-band connectivity** with automated frequency changes
- Interoperable APIs for battle management systems like SitaWare, FacNav, and Kropyva

Autonomous and Flexible Operations

- Swarm missions and distributed planning with minimal user intervention
- Enables distributed mission planning and swarm operations (MUM-T)





