Long Endurance Patrol Unmanned Aircraft

Efficiency Revolutionizes Innovation

100min
Maximum Endurance

15KM
Real-time HD Video Transmission

Level 7
Wind Resistance

100km/h
Maximum Flying Speed

AI Recognition
Target Tracking and Recognition

Innovation
New Experience

|			
Overall Dimensions	998*157*442mm (Assembled) 536*237*332mm (Disassembled)	Main Rotor Diameter	1332mm
Maximum Endurance	100min	Wind Resistance	Level 7
Maximum Take-off Weight	6.99kg	Hovering Ceiling	7000m
HD Video Transmission Distance	15km	Hover Accuracy	Vertical: ±2.0m (GPS)±0.1m (RTK) Horizontal: ±1.5m (GPS)±0.1m (RTK)
Maximum Horizontal Speed	100km/h	Obstacle Avoidance Function	support
Cruising Speed	50-60km/h	Maximum Climb/ Descend Speed	4m/s
Aircraft Weight	3.2kg (without battery)	Storage Temperature	-20℃ ~ +45℃
Battery Weight	3.2kg	Operating Temperature	-20℃ ~ +55℃

10X Laser Ranging POD

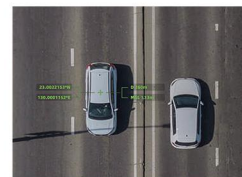Visible / Infrared / Laser ranging / Tracking / Position acquisition
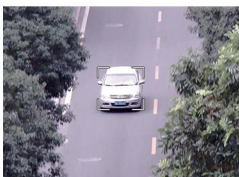
10X Enhanced optical zoom
Visible Light Sensor Parameters
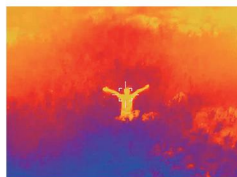
Focal length: 25mm Effective Pixel: 640*512
Infrared Thermal Imaging Parameters

1200m
Measuring Range

EFFICIENT AND INNOVATIVE

100 Minutes of Flight Endurance

- A wide range of operations in a single sortie,
reducing frequency of landings and battery replacement

NEW INTERACTION

From Solid to Flat - Simplify the Complex

- Full touch screen control, user-friendly UI, game-like control experience
- Easy to use, reduced risk of misoperation

Payload

10X Laser Ranging POD
Megaphone
Searchlight

10X Laser
Ranging POD

Megaphone + Searchlight

Accessories

Handheld Ground Control Station
Battery Box
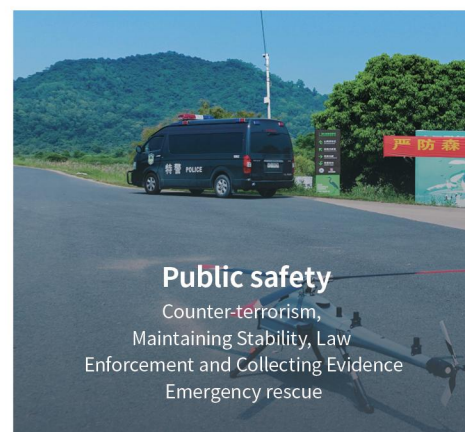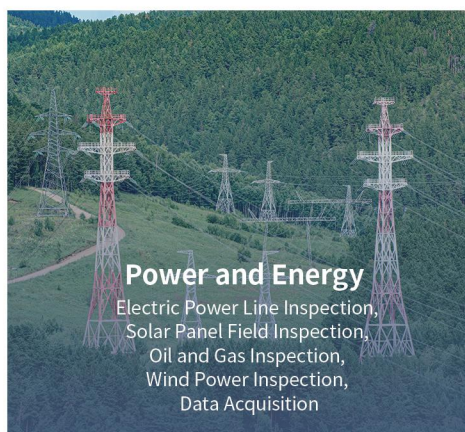Portable Backpack

Handheld Ground
Control Station

Battery Box

Portable Backpack

Industry Applications

Make it your best work partner

Power and Energy
Electric Power Line Inspection,
Solar Panel Field Inspection,
Oil and Gas Inspection,
Wind Power Inspection,
Data Acquisition

Marine Applications
Marine Monitoring and Inspection,
Shoreline Mapping,
Marine Patroling,
Marine Law Enforcement,
Coastline Inspection

Public safety
Counter-terrorism,
Maintaining Stability, Law
Enforcement and Collecting Evidence
Emergency rescue

Unmanned Transport Helicopters

Grey Whale G1

21KG	**30KM**	**40KM**	**6000M**	**Level 7**	**Parachute**
Payload	BVLOS Transmission	Flight Distance	Max Altitude	Wind Resistance	Emergency

Dimensions	Without rotor blade: 1942*495*715mm (L*W*H)	Disassembled	Fuselage: 1106*435*515mm (L*W*H) Tail Boom: 861*133*282mm (L*W*H)	
Main Rotor Diameter	2180mm	Communication Range	30KM	
Max Take-off Weight	45kg	Communication Frequency	1360-1450MHz	
Max Payload	21kg (single battery) 15kg (dual battery)	Wind Resistance	Level 7	
UAV Weight	17kg (without battery)	Max Service Ceiling	6000m	
Battery Weight	Dual battery: 13kg	Hover Accuracy	Vertical: ±2.0m (GNSS) ±0.1m (RTK) Horizontal: ±1.5m (GNSS) ±0.1m (RTK)	
Cruising Speed	50-75km/h	Max Climb/Descend Speed	5m/s	
Max Speed	90km/h	Operating Temperature	-10°C~+55°C	
Endurance	65min	Storage Temperature	-20°C~+60°C	
Flight Range	60km	Parachute	Support	

Enable "Low-altitude Economy" Scenarios
Withstand Complex Environment

Triple Upgrade

Upgraded Quad Blades
Enhanced lift power, payload weight and wind resistance

Modular and Foldable
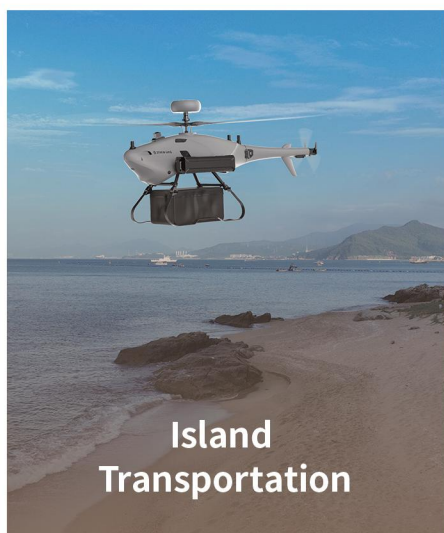Dismantle modular fuselage and fold landing gear

Extensively Stable Landing
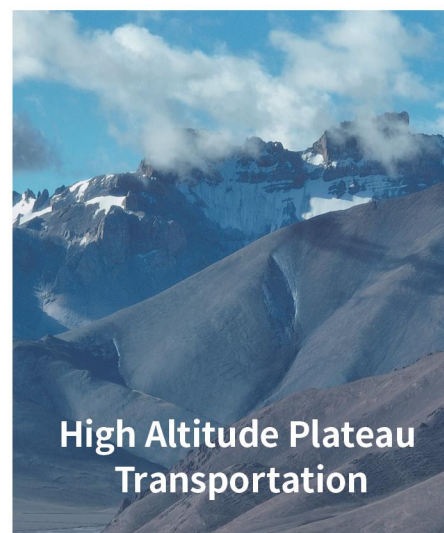Re-designed landing gear for smoother take-off and landing

Industrial Applications
Make G1 Your Best Work Partner

Island Transportation

Mountainous Transportation

High Altitude Plateau Transportation

Long Endurance Unmanned Aircraft

Long Lasting Endurance No Battery Replacement

Ranger P2X

120min	30km	6 Level	5500m	Intelligent Obstacle Avoidance Millimeter Wave Radar	Autonomous Take-off/ Follow/Landing Platform [1]
Maximum Endurance	Real-time HD Video Transmission	Wind Resistance	Maximum Flying Altitude		Mobile Take-off and Landing

Overall Size	1690*247*495	Maximum Flying Altitude	5500m
Main Rotor Diameter	1910mm	Wind Resistance	6 Level
Maximum Take-off Weight	16.5kg	Operating Frequency	1360-1450MHz
Standard Weight	3.7kg	Hover Accuracy	Vertical: ±2.0m (GPS)±0.1m (RTK) Horizontal: ±1.5m (GPS)±0.1m (RTK)
Maximum Horizontal Speed	100km/h	Maximum Climb/Descend Speed	Climb Speed: 2.5m/s Descend Speed: 1.5m/s
Battery Weight	11.3kg		
Video/Data Link Transmission Distance	30km	Obstacle Avoidance Module	Obstacle Sensing Range: 60m FOV:130°
Maximum Payload	1.5kg	Operating temperature	-20°C ~ +60°C
Cruising Speed	50-70km/h	Storage temperature	-10°C ~ +55°C
Maximum Endurance	120min	Protection class	IP54
Maximum Range	120km		

*①The Ziyan movement base take-off and landing follower module is an optional module

Modular Design
Portable

Small Unique detachable structural design

Fast 3 minutes fast deployment

Light Aviation composite material percentage>50%

Tri- sensor Pod

30X Laser Ranging POD

Optional Equipment

Oblique Camera

Lidar

Loud speaker

Ground Control System

Handheld Ground Control Station
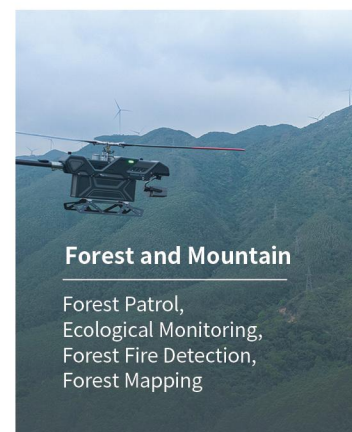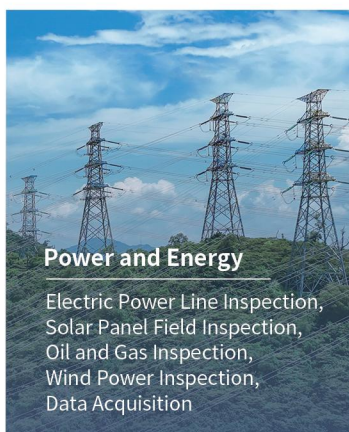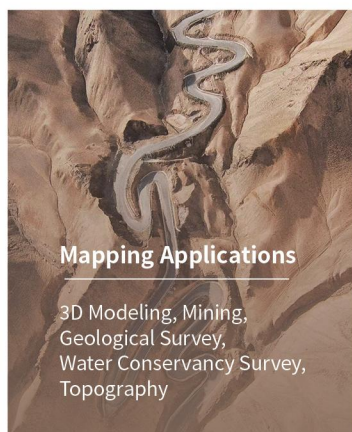Communication Base Station

Handheld Ground Control Station

Communication Base Station

Applications in complex environments
Make it your best work partner

Mapping Applications

3D Modeling, Mining, Geological Survey, Water Conservancy Survey, Topography

Power and Energy

Electric Power Line Inspection, Solar Panel Field Inspection, Oil and Gas Inspection, Wind Power Inspection, Data Acquisition

Marine Applications

Marine Monitoring and Inspection, Shoreline Mapping, Marine Patroling, Marine Law Enforcement, Coastline Inspection

Forest and Mountain

Forest Patrol, Ecological Monitoring, Forest Fire Detection, Forest Mapping

Unmanned Aircraft System

High Mobility Enhanced Portability

130km/h

Falcon-10

Collapsible	5500m	130km/h	Autonomous
Portable	Maximum Flying Altitude	Maximum Speed	Obstacle Avoidance Large Angle Avoidance

|			
Overall Size	1655*565*580mm	Control Radius	30km
Overall Size (Folded)	865*315*360mm	Maximum Endurance	50min
Main Rotor Diameter	1910mm	Maximum Flying Altitude	5500m
Maximum Take-off Weight	22kg (Plain data)	Cruising Speed	60-90km/h
UAV Weight	7.6kg (Without battery)	Maximum Horizontal	130km/h
Battery Weight	7.4kg	Wind Resistance	Beaufort Level 7 (Wind speed 17m/s)
Maximum Payload	7kg	Storage Temperature	-20~60℃
Operating Temperature	-10~55℃ [1]		

*[1]Customized low temperature batteries are available

Expanded Functionality
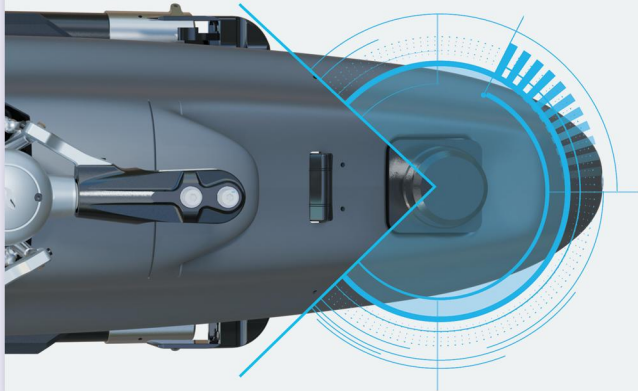

◉ Autonomous Obstacle Avoidance

A single module to make it easy to avoid large angled obstacles, reduce load on the fuselage, reduce redundant modules, possess higher mobility.

◉ Large capacity Open payload cabin

Customized multi payload; quick release universal hanger, easy to deploy, pair the Falcon-10 with multiple mini-UAVs to from a primary-secondary system and launch suicide attacks.

30km
Video Transmission
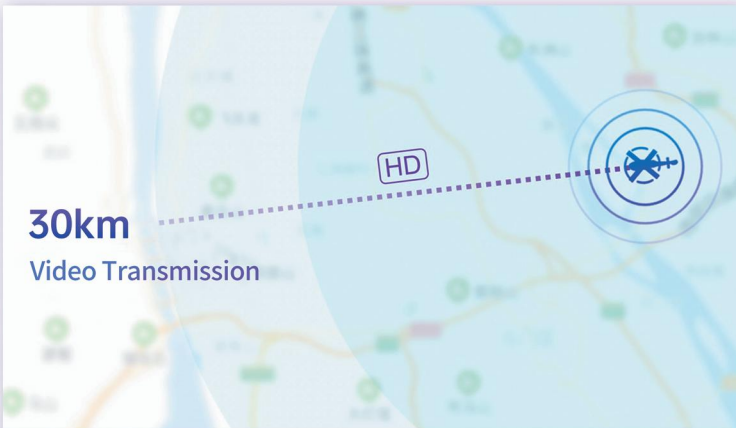
◉ Beyond Visual Line of Sight Image

Support transmission of video and data over 30km, integrated design for video and data transmission, decentralized system technology, one node to multiple nodes communication, flexible and compatible, strong anti-jamming capabilities, ensure instant communication.

◉ Portable

Fuselage collapsible mode, suitable for single operator, simplify procedures for operator.

Surveillance and Combat

Blowfish A4

15KG
Maximum Payload Capacity

30km
Real-time HD Video Transmission

5500m
Maximum Flying Altitude

level 7
Wind Resistance

**H** Autonomous Take-off/Follow[①] /Landing Platform
Mobile Take-off/ Landing

Diverse Payload
Multi Domain Solutions

Dimensions	Unfold (without rotor blades): 1942*495*715mm (L*W*H)	Maximum Communication Distance	30km	
Fuselage (disassembled)	1106*435*515mm	Communication Frequency	Integrated Data and Video link: 1380-1480MHz	
Main Rotor Diameter	2180mm	Wind resistance	level 7	
Maximum Take-off Weight	45kg	Maximum Flying Altitude	5500m	
Maximum Payload	15kg	Hover Accuracy	Vertical: ±2.0m (GPS) ±0.1m (RTK) Horizontal: ±1.5m (GPS) ±0.1m (RTK)	
Aircraft Weight	Without Battery: 16.5kg			
Battery Weight	Dual Batteries: 13.2kg	Maximum Climb /Descent Speed	5m/s	
Economic Cruising Speed	50-75km/h	Operating Temperature	-20°C~+55°C	
Maximum Ground Speed (IGS)	90km/h	Storage Temperature	-20°C~+60°C	
Maximum Endurance	65min	Protection Level	IP54	
Maximum Flight Range	60km			

*① Ziyan Autonomous Take-off/Follow/Landing module is optional
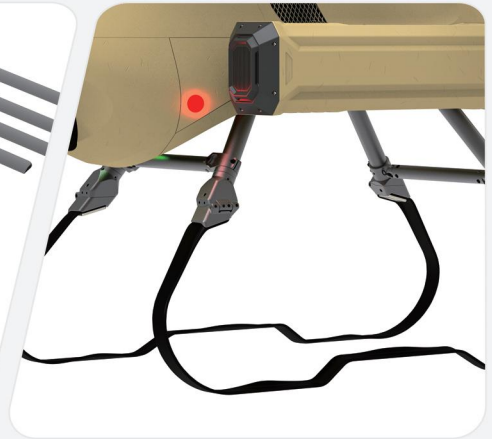
Triple Upgrade
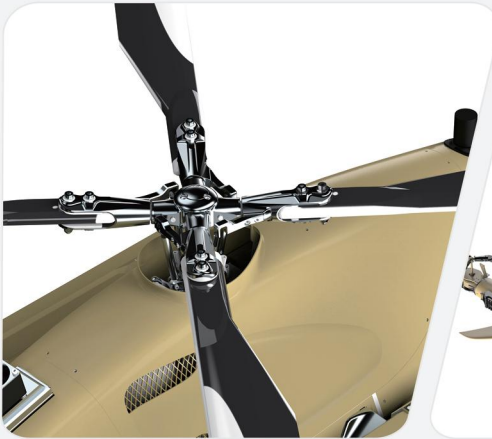
Upgraded Quad Blades
Enhanced lift power, payload weight and wind resistance

Modular and Foldable
Dismantle modular fuselage and fold landing gear

Extensively Stable Landing
Re-designed landing gear for smoother take-off and landing

◉ Intelligent Swarm

Ziyan "Intelligent Swarm" keeps swarm aircrafts interlinked and maintains formation by communicating with each other instead of relying on ground stations for orchestration. If a swarm aircraft does not receive signals from ground control station, it can still keep flying in formation and can avoid the other swarm aircrafts independently. The swarm aircrafts can also be grouped into smaller sub-swarms in real time.
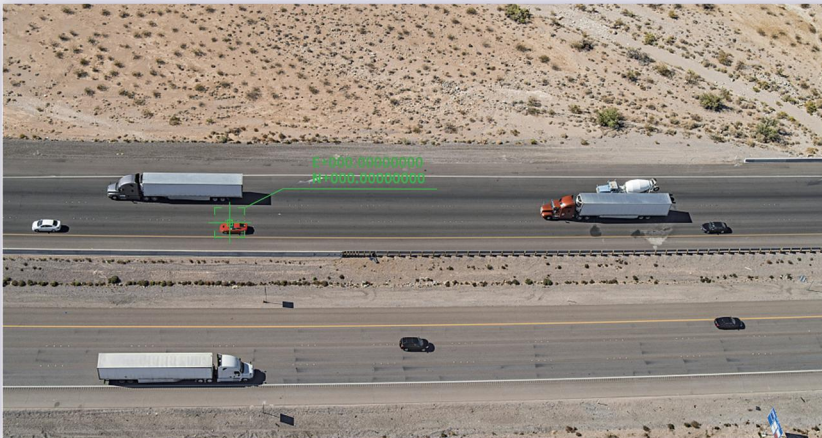
◉ Reconnaissance and Strike

Detect, lock, track and strike targets from the air. Acquire position of target, and execute automatic strike on the target with installed weaponry.

◉ 30X Quad-Sensor AI POD

Electro-optical (10x/30x Optical)
Thermal Imaging (25mm 640×512)
Laser Rangefinder Measurement Distance (1.5km)
AI Human, Vehicle and Ship Identification, Recognition and Tracking

Four Sensor Camera

- Dual 30X + 10X visible light sensor, operating simultaneously
- 25mm thermal imaging sensor, 1500m laser ranging
- Multi-lens linkage, continuous zoom
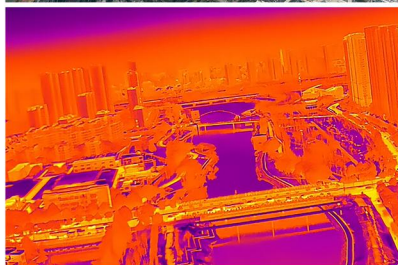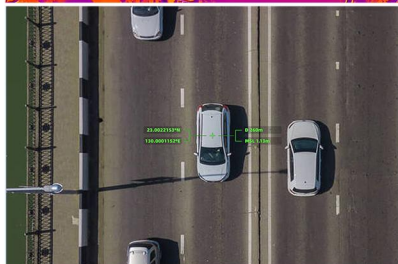- Automatic AI identification and tracking

CF01

Specifications

30X Visible Light Sensor		
	Resolution	1920x1080,1280x720
	Sensor Size	1/1.8"
	Pixel Size	2.9um
	Lens Focal Length	6.5mm～162.5mm
10X Visible Light Sensor		
	Resolution	3264x2448
	Sensor Size	1/3"
	Pixel Size	1.5um
	Lens Focal Length	4.9mm～49mm
Thermal Imaging Sensor		
	Resolution	640x512
	Pixel Size	12um
	Lens Focal Length	25mm
Laser Ranging	Range	15-1500m

SWARM F1-C

Moth UAV Platform F1-C

Dimensions	Unfolded: 310*316*91mm Folded: 396*98*91mm
Maximum Take-off Weight	1.7kg
Aircraft Weight	1400g (with battery)
Maximum Payload	300g
Maximum Climb Speed	8m/s
Maximum Endurance (speed 10m/s)	20min (no payload) 15min (full payload)
Maximum Horizontal Spee	25m/s
Maximum Communication Distance	10km
Maximum Altitude	5200m
Communication Frequency	1360-1450MHz
Wind Resistance Level	level 6
Operating Temperature	-10°C~+55°C

Ground Control Station (Standard version)

Dimensions	313*225*16mm
Weight	1.8kg
Processor	I7-13700H
Memory	32GB
遥感	XBOX

Tri-screen Ground Control Station (Professional)

|	
Dimensions	427*334*138mm
Weight	12.6kg
Processor	I7-7500U
Memory	8GB/DDR4
Battery	6h

◉ Functional Features

One operator uses one ground station to control 10 drones simultaneously,
which makes operation more efficient.
The system supports various formations such as horizontal, vertical, triangular, circling and more, allowing multiple formations to be set up in real-time for different mission requirements.
Attack mode is used to initiate a coordinated attack without needing to plan a specific path or route.
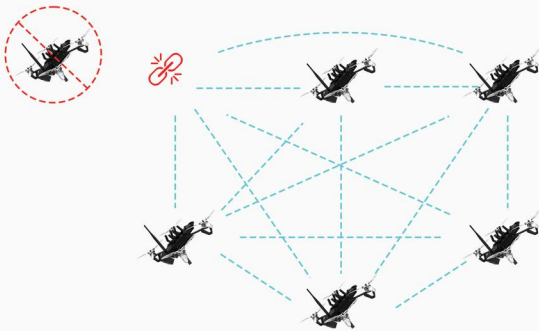
◉ Decentralized System

In a decentralized swarm, if one drone is damaged, the others automatically fill its position, ensuring the integrity of the formation and the continuation of the mission.

◉ Diverse

Supports heterogeneous swarm systems such as reconnaissance + attack aircraft, helicopters + multi-rotors for execution of coordinated missions.

Radar   Multi-rotor Drones

Vehicle
Command Center   Helicopter

Situational Awareness Box
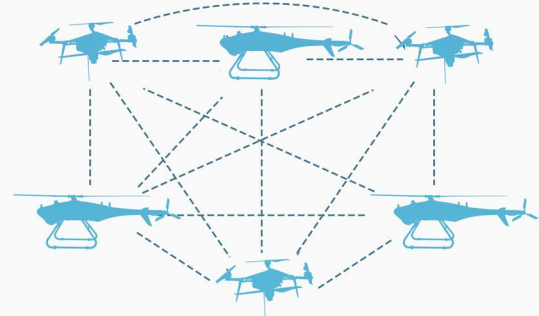
◉ Support for importing coordinates from other devices

Support coordinate information of radar, from other drones or equipment and import to the swarm to improve the multi-domain cooperative combat features.

◉ Worry-free simulation and training

No need to access real UAV, swarm system software training and tactical simulation can be realized based on the ground station and host.

Host   Ground Control Station

VTOL Fixed Wing

10 h
Long Endurance

50km
Long Communication Distance

10min
Easy Assembly/Disassembly

|			
Dimensions	without rotor blades 2020mm*3744mm*696mm	Aerodynamic Layout	Tail Propulsion + Four Rotors
Transport Box Dimensions	2120mm*90mm*640mm	Operating Environment Conditions	-20°C~45°C；Rainfall≤10mm/24h
Maximum Take-off Weight	35kg	Service Ceiling	5850m (Fixed Wing) 3500m (VTOL Mode)
Maximum Payload	13kg	Wind Resistance	Level 6 (Fixed Wing) Level 5 (VTOL Mode)
Standard Cruising Speed	25m/s	Minimum Circling Radius	200m （Not less than 250m in plateau）
Maximum Flight Speed	40m/s	Fuel Consumption	0.96L/h
Stall Speed	18m/s	Communication Distance	50km
Endurance Time	10h （Standard Load 3kg）	Positioning Accuracy	±1.5m

Product Features

Fuel Powered

10 hours Long Endurance

50km

50km datalink

Wide Communication Distance
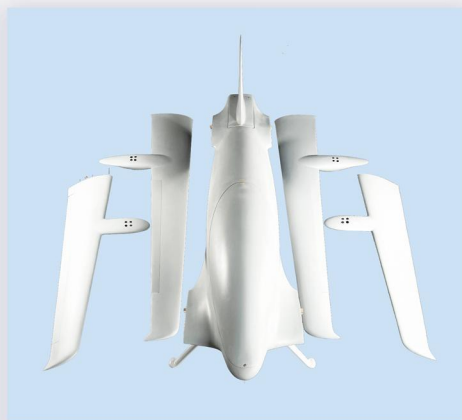
Easy Disassembly and Assembly

10 Minutes Deployment
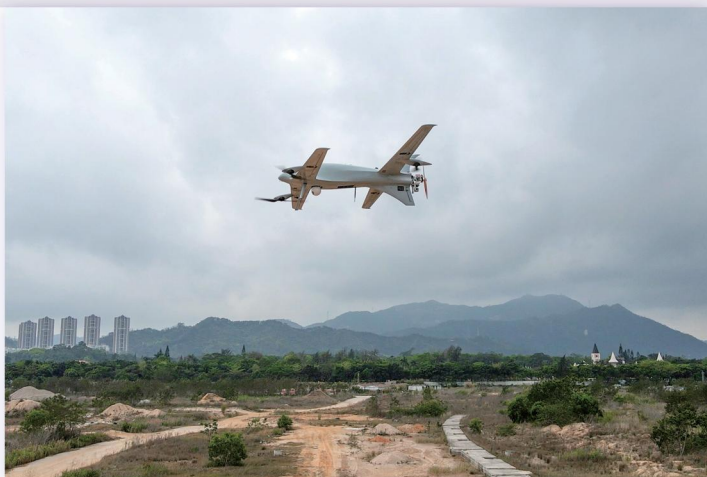
Application

Detection, Tracking and Ranging

Quad-sensor camera with EO (10x/30x), IR, and LRF sensors provides detection and tracking of objects from a far. 30x optical zoom of the EO sensor provides enhanced view during day missions and 25mm IR enables thermal imaging mode. Track objects and measure range of tracked object by LRF (laser rangefinder).

ISR

Equipped with detecting, recognizing, identifying, tracking, ranging and positioning features, Qinglong UAS provides excellent surveillance and reconnaissance capabilities in complex environments. Integrating Qinglong with multiple other different platforms can provide extensive situational awareness.

IoT Situational Awareness System

Ground Team	Vehicle Fleet	Stand-alone UAV	Swarm UAVs	DJI UAVs
Mobile Terminal	Mobile Terminal	Handheld Ground Control Station	Tri-screen Ground Control Station	Handheld Tablet Remote Control

The IoT situational awareness system uses the Internet of Things to collect and analyze data in real time to assist in fully grasping the on-site situation. Main functions include real-time one-way or multi-way sharing of location information, sharing of labeled information and notes, interactive re-use of labeled information and location information, real-time video feed and transmission of images.

Structural Parameters		Performance Parameters	
Overall Dimensions	482*408*154.4mm	Endurance	2.5h
Weight	9.4kg	Operating Temperature	-20°C ~ +50°C
Color	Black	Storage Temperature	-20°C ~ +60°C
Interface & Network		Operating System	Win7、win10
Support maximum number of 20 devices (level 1)		Deployment Mode	Local
Data Access Type	2D, 3D geographic location information/video feed	Main Features	Information convergence, information distribution
Network port	4 way RJ45	Video Streaming Protocol Format	RTMP/RTSP
Unified Interaction	Simultaneous Access to Information, SPA Design Mode	Data Transmission Protocol	MQTT

Product Compatibility

◉ Unmanned Aircrafts

Support Ziyan Mainstream Models


◉ Radar

Maximum Detection Distance Range: 48NM (89KM)
Accuracy: 25m Blind Zone: 25m
Range: 0.25NM~48.0NM (11 steps) Orientation accuracy: ±1°

◉ Other Equipment

Support DJI models, photoelectric PODs, surveillance equipment, soldier body-cam and vehicle positioning equipment
Support multi-level IoT situational awareness system interconnection, realize different levels of authority management
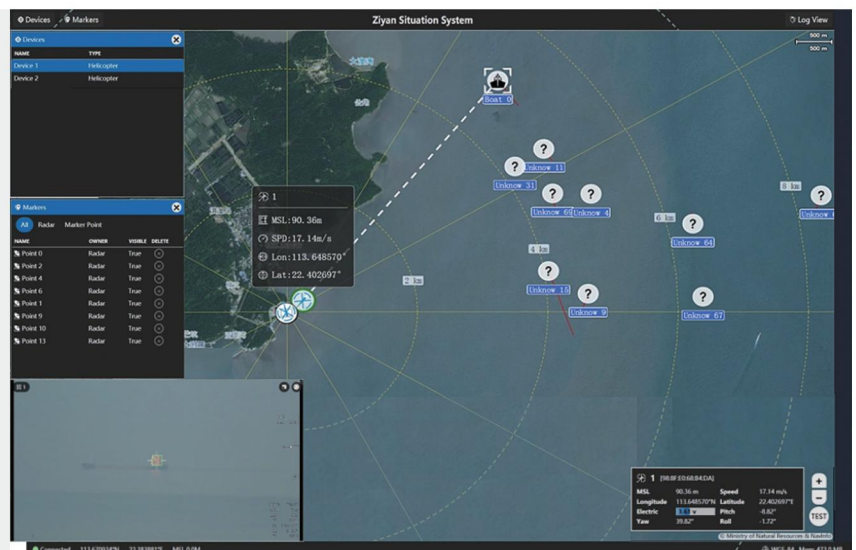
Application Scenarios

Defense Applications

Border and Maritime Defense Applications