# Mini Coaxial Dual-Rotor helicopter



### The all-new mini Coaxial Dual-Rotor UAV

An efficient unmanned aerial vehicle (UAV) developed for the market based on helicopter aviation technology principles.

Features a cylindrical fuselage, no tail wing, and modular design, greatly enhancing its adaptability to various tasks while being easy to carry, transport, take off, and launch.

Unique coaxial dual-rotor configuration provides characteristics such as long endurance, strong payload capacity, and low noise, making it widely applicable in industries such as defense, law enforcement, emergency response, energy, and bridge construction.

Unique symmetrical upper and lower rotor blade design with a cylindrical tower-like body arrangement. A disruptive technology, incorporating unique quick-change modules, making it a high-performance product combination and a brand-new user experience to industry applications.

ITEMS	Min100	Min300	Min750
MAX ENDURANCE (1 battery)	45 minutes	40 minutes	50 minutes
	(without payload)	(without payload)	(without payload)
MAX RANGE (1 battery)	27km	30km	30km
MAX OPERATING RADIUS	within 3.5km	5km	10km
MAX RANGE SPEED	36km/h (10m/s)	45km/h (13m/s)	43km/h (12m/s)
MAX SPEED	82km/h (23m/s)	90km/h (25m/s)	82km/h (23m/s)
MAX WIND RESISTENCE	43km/h (12m/s)	43km/h (12m/s)	43km/h (12m/s)
ENVIRONMENTAL	IP56	IP56	IP56
MTOW	2.2kg	6.5kg	18kg
AIRCRAFT(empty)	0.5kg	1.5kg	7.5kg

MAX PAYLOAD (1 battery)	0.7-1.3kg	3.6kg	3.6kg
CORE DIAMETER	90mm	130mm	160mm
Height (Max)	680mm	450mm	1080mm
TIP-TO-TIP SPAN	430mm	650mm	880mm
MAX ALTITUDE TO TAKEOFF	5000m	5000m	5000m
RECOMMENDED CEILNG	150m	300m	300m
TARGET RECOGNITION	200m	600m	1000m

# **Key Advantages**

## Less components

70% Reduction in Overall Machine Components

- Eliminating all power transmission components found in traditional helicopters
- Reducing control components by 60%



#### Quietness

Ultra-quiet Aerodynamic Design

By means of adjusting rotational speed and aerodynamic rotor design, it can achieve ultra-quiet flight

# Patented flight control system

Equipped with a Coaxial Dual-Rotor Helicopter Flight Control System Developed in-house

- One key take-off and landing
- Autonomous return
- Autonomous hovering
- Smart route planning

# Modular design

- Modular design, enables quick assembly and disassembly for easy
- Different functional payloads can be accommodated to fulfill various mission requirements



## **Application Scenarios**

#### Defense

- Surveillance & Reconnaissance
- Target Acquisition & Tracking
- Force Protection
- Battlefield Damage Assessment
- Communication and Relay
- Search and Rescue
- Etc...





## Security

- CBRN Detection
- Surveillance and Monitoring
- Perimeter Security
- Crowd Management
- Anti-Terrorism Operations
- VIP Protection
- Traffic Monitoring
- Etc...

#### **Maritime**

- Maritime Surveillance
- Search and Rescue Operations
- Maritime Research and
- Data Collection
- Offshore Industry Support
- Anti-Smuggling and
- Drug Interdiction
- Etc...

## **Emergency**

- Search and Rescue Operations
- Damage Assessment and Surveying
- Remote Sensing and Mapping
- Delivery of Emergency Supplies
- Hazardous Material
- Detection
- Etc...

## **Energy**

- Infrastructure Inspection
- Surveying and Mapping
- Asset and Facility Management
- Solar Farm and Wind Farm Inspection
- Etc...













