GARUDAUAV

Long endurance, large payload, stable structure and high reliability, two version gasoline or heavy oil powered VTOL fixed-wing UAV is specially designed for both land or sea-base mission featuring high-precision and large area aviation application.

Equipped with the state-of-the-art MG-170E EO/IR/LR triple sensor stabilized gimbal camera which integrated with visible light sensor, infrared sensor, and laser rangefinder, RTN-40 can be used for various application scenarios, such as intelligence reconnaissance, rescue and searching, anti-smuggling, border patrolling, environmental monitoring, forest fire prevention.

Operators can also navigate the RTN-40 while using the JOUAV® EagleMap™ with integrated features of mission planning, video surveillance, real-time mosaic, AI processing, multi-station networking, remote take-off & landing, etc, which will offer you real-time situational awareness and actionable intelligence.

RTN-40
LONG ENDURANCE HYBRID UAV

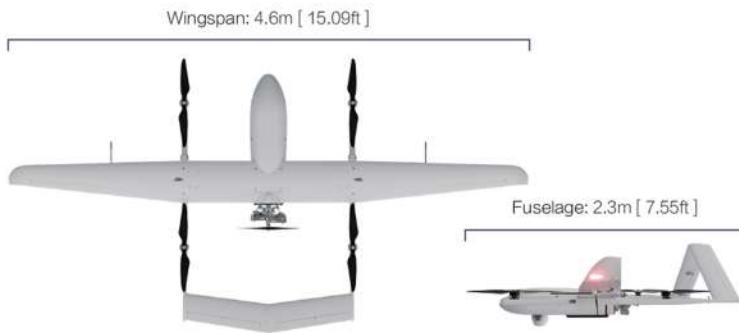|			
Heated & Drained Pitot Tube		Data encryption function	
Multi redundant avionics system		VTOL Marine Vessel (OPTIONS)	

RTN Series Family
Intelligent autonomy builds the future.

Wingspan: 4.6m [15.09ft]

Fuselage: 2.3m [7.55ft]

MG170E
EO/IR/LR GIMBAL CAMERA

- EO sensor 1080p@50Hz video resolution, 30X zoom:4.3~129mm
- IR sensor resolution :640×512, Dual FOV : 63mm, 2X digital zoom
- LR sensor 50~4000m distance measuring, ±2m measuring accuracy
- Lightweight inertial stabilized turret system and shock absorber
- AI assistance for the continuous recognization and tracking of specified target

High-performance graphics processor and NVIDIA Jetson™ module bring us ultra-high performance and energy efficiency.

Downlink imagery from EO sensor   Downlink imagery from IR sensor

HARDWARE

Fuselage / Wingspan	2.3m / 4.6m [7.55ft / 15.09ft]
4 Stroke Engine	EFI Gasoline, Option: Heavy Oil
MTOW	45kg [99.2lb]
Communication Range	200km [124.3mi]
DGPS	RTK / PPK
Navigation Light	Standard
Carrying Case Size (L*W*H)	1700×700×350mm, 1700×700×450mm

FLIGHT

Endurance	8-10hrs
Cruising Speed / Max. Flight Speed	90km/h / 150km/h [48.6kts / 80.9kts]
Wind Resistance	13.9-17.1m/s
Max. Takeoff altitude / Ceiling	4000m / 6500m [13123.4ft / 21325.5ft]
Takeoff & Landing	VTOL

ADVANTAGES

Modular Design
- The whole system adopts modular design and can be quickly assembled and detached. Field deploy time ≤ 15min, withdrawal time ≤ 10min.

Aviation Grade Reliability
- High-altitude performance ｜ Ultra-long endurance
  Heated and drained airspeed tube ｜ Super waterproof performance
  Dual difference GPS ｜ Dual magnetic compass.

EFI/Heavy Oil Engine
- With 4 stroke engine features low acoustic, less vibration and longer TBO, RTN-40 features structurally stability and reliability in harsh environment.

Advanced Flight Control and Navigation System
- High precision MEMS ｜ High performance IMU
  Active safety technology ｜ Autonomous flight
  Anti-electromagnetic interference ｜ Data encryption function.

Smart Surveillance, Intelligent Command

GROUND CONTROL SYSTEM

Eagle Map	GCS-303	TC200
SOFTWARE	PORTABLE GCS	HANDHELD TABLET OPTIONS