Throttle Aerospace Systems Pvt Ltd
"Art of Acceleration"

Lookout VTOL™ UAS

see a bit say a lot

What is Lookout VTOL UAS?

- Lookout VTOL is a small size rotary Unmannes Aerial System (UAS) driven by electric propulsion device.
- Lookout is a VTOL-aircraft (Vertical Take-Off and Landing) and able to carry variety of payloads.
- Lookout can fallow a planned fully autonomous flight path or fly according to manual commands by pilot.
- Lookout is designed to be complaince to Civil Authority regulations. It can fly both in Urban Airspace and Industrial Lookout VTOL is a small size rotary Unmannes Aerial System (UAS) driven by electric propulsion device.
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Innovation & Technology

- Lookout VTOL UAS gives best payload to Endurance combination which has made this product truly unique in this segment.
- Lookout VTOL comes with in-house developed TAS_GCS tabled flight planning software, with our TAS-GCS any one can operate with minimal training.
- Lookout VTOL is designed for true flat symmetric fuselage with optimized aerodynamic characteristic & its made out Aviation grade 3k carbon fibre Airframe.
- Field swappable Battery & payloads systems makes lookout VTOL an true multi mission capable Unmanaed Aerial Systems

LOOKOUT VTOL UAS

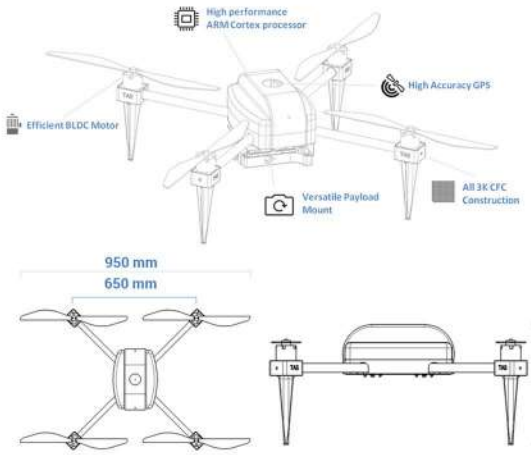
The Throttle Aerospace Systems introduces Mapper series of unmanned aerial systems are the only true & efficient aerial photo-grammetric system in the world. The TAS Mapper series is a cost efficient and time saving solution to capture and process aerial data with unparalleled accuracy.

- Specifically designed for high accurate photogrammetric mapping
- Fully autonomous , safe & reliable
- Tablet based intuitive, user friendly flight planning
- Rapid data acquisition, capture of detailed georeferenced imagery
- Field swappable battery & payloads
- Wide range of flying conditions: can fly under clouds and in strong winds

Reasons to choose LOOKOUT

- Unprecedented Relative accuracy: less than 2.5cm horizontal and less than 7cm in vertical.
- Revolutionary Dynamic-stabilised Platform, Inhouse developed dynamic Gimbal counteracts the aggressive flight movements.
- Upgradable for Direct Georeferencing System (mapping with no ground control points up to mm level accuracy) L1/L2 /PPK/RTK
- Calibrated customized camera up to 24Mp.
- Dynamic-stabilised Platform, camera integratedand controlled via in-house developed TAS-GCS Flight control software to ensure the nadir camera position with no 'crab' angle.
- TAS-GCS innovative tablet based Flight Control for total easiness of operation, live update and accurate mission planning.

Technical Specification	Lookout VTOL
Physical Size	900 x 900 x 350 mm
Operational Range	Up to 5 Km
Endurance	Up to 40 Mins
Cruise Speed	6-8 m/s
Wind Tolerance	Up to 12 m/s
Service Ceiling	Up to 1000 Ft AGL
Weight W/O Payload	Approx 3.75 Kg
Max Payload capacity	Up to 2 Kg
Propulsion	Flat 4 x smart BLDC motors
Batteries	Smart Li-po Chemistry
Material	Carbon fibre
Man Packable	Yes
Autonomy	GPS waypoint profiles, fail-safe return home on low battery & communication failure.
Payload	Multiple type of Cameras,Lite Lidar
GUI	TAS_GCS™ Intuitive Tablet GUI (Optional Rugged)
CGS to Antenna	Wireless
Aural Signature	<30dbs@400M
Std. Accessories	Battery Charger, Carry Case, Tripod stand
Default Payload	Calibrated 24 Mp camera on 2-axis stabilized platform RAW, RAW+JPEG ,16 mm Fixed focal length lens APS-C (23.5mm x 15.6mm)Exmor® R CMOS sensor Max Shutter Speed:1/160 Seconds Pixel size 15.1 µm² Colour depth - 24.1 bits Autonomous camera triggering
Area Coverage Chart & Accuracy	0.4 Sq Km Area in single flight (120M, F.O 60%, S.O60%) X& Y – 2 to 5 Cm* Z – 5 to 12 Cm* GSD – 1.5 cm / px @ 60 M *With Std GCP's



Payload Up to 2 Kg's

Endurance Up to 40 Mins

Industry Leading performance

Wide range up to 6 km

Industry Leading Endurance & Payload

Unique Design For Better Flight Stability

Redundant, Fail-safe & Field Proven

High Wind tolerance up to 14 m/s

Tablet GUI intuitive user interface

GSD @ 2.4 cm/px

Cruise speed @ 6 m/s

Accuracy
X & Y = 2 to 5 cm
Z = 5 to 10 cm

Area Coverage @120 m, 0.4 sqkm per flight

DELIVERABLES

Deliver impressive results to your customers in industry standard formats: Inpho, LPS, Global Mapper, ArcGIS, Quantum GIS, AutoCAD, MicroStation, 3Ds max, Quick Terrain Reader, VRMesh, Google Earth, Google Maps, , Blender, Meshmixer, LASTools, Sketchfab, Mapbox, etc

Orthomosaic
3D Point Cloud
3D textured models
DEM/DSM
Contours

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SimActive automates direct georeferencing

SimActive Inc., a developer of photogrammetry software, has launched an automated solution for direct georeferencing from real-time kinematic (RTK) positioning.

Within the new workflow feature, users can achieve get high accuracy in projects without the use of ground control points (GCP), saving time in collecting and processing data.

“Direct georeferencing greatly helps reducing cost for applications like corridor mapping, “The new automated option within SimActive software for direct georeferencing greatly facilitates the user workflow.”

“With RTK GPS available on drones, the use of direct georeferencing is growing within the industry,” said Louis Simard, CTO of SimActive. “Correlator3D allows users to maximize their hardware and software investment.”

For a live demonstration and sales, contact

Designed For Farmers

KISAN KOPTER™

Autonomous Aerial Spraying + Crop Health Management

Designed for autonomous spraying of pesticides, Fertilizers, herbicides and to monitor health of the crops.

Industry Leading Endurance & performance

Tablet based ground control station (GCS)

FARMER FRIENDLY GUI

Fully Autonomous, maintain height of crops

KISAN KOPTER ™ UAV

Throttle Aerospace Systems, Kisan Kopter™ is an indigenous developed UAV for agriculture purpose, "Built for Farmers"

TAS Kisan Kopter™ deliver exceptional payload capacity and endurance proven Carbon fibre airframe.

TAS Kisan kopter™ can autonomously spray pesticides and also monitor the health of the crops in simple intuitive ways

"TAKE YOUR AGRICULTURAL BUSINESS TO NEXT LEVEL WITH TAS KISAN KOPTER"

Reasons to choose KISAN KOPTER ™ UAV

TAS Kisan Kopter is built for farmers. Our passion to build and implement this drone technology grew out of our own desire to make farming more productive and efficient. Today's crop scouting methods are outdated and quite simply, inefficient. We developed this technology so farmers manage their fields efficiently in an effort to be more productive. Simply put, our agriculture drones allow you the ability to scout, diagnose and address distressed areas in less time than it would take you to walk the entire field.

The Kisan Kopter UAV was designed and developed by a aerospace industry professional and systems engineering backgrounds as well as years of military uav experience in design, development, and flight testing.

The Kisan Kopter constructed of aviation grade 3k Carbon fiber composite materials. Kisan kopter is professionally designed by an engineering staff with years of hands-on manned/ unmanned aircraft design experience.

Technical Specification

Technical Specification	kisan kopter™
Physical Dimension	1500 mm of Octo-copter
Operational Range	Up to 2Km
Endurance	20 Minutes
Weight W/O Payload	Approx 7.5 Kg
Max Payload capacity	Up to 10 Kg
Propulsion	8 X Electric Motors , Rechargeable Lipo Battery Pack
Vehicle Speed	Up to 12 M/s
Material	Aviation grade 3K Carbon fibre Composite
Modular	Modular design
Autonomy	Fully Autonomous, GPS waypoint profiles, fail-safe return home on low battery & communication failure. Auto Terrain Following (Optional)
Default Payload (Agri Sprayer Kit)	Spray Tank Volume : 10 Litters No of Spray Nozzles: 4 Nos Spraying Speed : 0.56 Litre/Min Spray Ceiling: 4 M above the Crops Crop Health Monitor Sensor (Optional)
GCS	“Built for Farmers” Tabled Based GUI with Com Box of 2.4 Ghz std com, 430 to 450 Mhz UHF telemetry modem, with suitable antenna, Link rate up to 12 Mbps

Truly Unique design & Cutting Edge Technology

Throttle Aerospace Systems Pvt Ltd

"Art of Acceleration"

FASTER SPRAYING THAN TRADITIONAL METHOD

INCREASE EFFICIENCY , IMPROVE YIELDS

BUILT FOR FARMERS, EASE OF USE

PRECISE , ACCURATE SPRAYING

FULLY AUTONOMOUS, FIELD PROVEN

ADJUST AUTOMATICALLY DEPENDS ON CROP HEIGHT

for details contact

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