



**Solo Multicopter Mini**

OM UAV Systems



Solo is a FULLY AUTONOMOUS Mini Unmanned Multicopter aircraft. It is capable of carrying a 420 Gram payload. The payload is a Day or Night Camera mounted on a gyro stabilized camera mount. Most high quality cameras are under 300 Grams. The UAV is electrically powered with a very low dB level. The aircraft is fully autonomous right from Takeoff to Landing. The UAV is made of ABS Plastic

## Physical Specifications:

Size	: 460mm (motor to motor)
Height	: 250mm
Flying Weight	: 1800 Gms
Payload	: 420 Gms
Propulsion	: 150 Watt BLDC Motors @14.8 Volt X 4
Propellers	: 10x4.5 nylon x 4
Flying Battery	: Lithium-Polymer 14.8 Volt, 5200mAh

## Flying Characteristics:

Range	: 2.0 Km*
Endurance	: 25 Mins
Accuracy	: Within 3 meters of programmed waypoint
Cruise Speed	: 20 Km/Hr
Max Speed	: 30 Km/Hr
Max Wind	: 20 Km/Hr
Altitude Optimum	: 200 Meters AGL
Altitude (AGL)	: 1000 Meters
Altitude Ceiling	: 3000 Meters

## Autopilot

- Based on ARM Cortex M4 32 bit Processor @ 168 Mhz, running at 252 MIPS, on NuttX Real Time Operating System
- ST Micro L3GD20, 3-Axis Gyro
- MPU6000, InvenSense 3-Axis Gyro + Accelerometer
- uBlox GPS with positioning from GPSS, GLONSS, Galelio, Biedu
- Secondary GPS for backup (optional)
- HMC5883L 3-Axis Dual Magnetometer (Dual)
- MS5611 High Resolution Barometer
- Onboard Micro SD card for Flight Data Logging

## Capabilities:

- Fully Autonomous from Takeoff to Landing
- Can be programmed for 300 Waypoints
- Can Loiter over the subject at any waypoint
- Has Manual over ride at any stage
- Can be 'Guided' to specific location during flight by clicking over map
- Can activate/deactivate any payload from the GCS
- Auto payload activation on reaching the waypoint
- Failsafe built in. Will 'RTH' if link is lost. Will 'Land' if battery is low

## Standard Package Contents:

- Solo Aircraft 1 Nos
- GCS consisting of Android Tablet
- Clover Leaf Video Antenna
- Omni Antenna for Data Link
- Microprocessor based battery Charger
- Radio Control Transmitter
- Mini Tool Kit
- ABS Back Pack Carry Case

## Radio Control Link

Encoding	: Wi-Fi
Modulation	: FHSS
Freq Band	: 2400 Mhz
Max Rf Output	: 100mW Max
Channels	: 8
Range	: 2.5 Km (when airborne)
Display	: No Display
Battery	: Li-Poly 11.1V, 2650 mAh (12 Hrs continuous operation)

## Datalink

Output Power	: 100mW (Configurable)
Modulation Type	: Wi-Fi
Freq Band	: 2400Mhz ( Mhz)
Data Rat	: 10Mbps
Range	: 1 Km





## Onboard Video Recorder

- Inbuilt Video Recording

## GCS

- Android App installable on Tablet and Android Phone

## Camera Gimbal

- Gyro Stabilized on Roll and Pitch and Yaw Axis. Microprocessor based. Correction rate of 2000 deg/sec. Common Gimbal for all cameras mentioned in the camera options list. Cameras are changeable in the field within Five Minutes



## Video Link

Type	: Wi-Fi Digital Video with integrated Data
Rf Power	: 100mW
Frequency	: 2400 mhz, 40 Channels
Power Consumption	: 100mA @11.1 V
Video Resolution	: 1080x720 pix
Camera Mount	: High Accuracy Gyro Stabilization on Roll and Pitch Axis
Recording	: Onboard recording on 32 GB SD card in *.mov format

## Payload Options

- Option 1: Color video/still HD camera with onboard HD video recording on 32 GB memory at 1280x720 pixels and AV out of 640x480 pixels. Can be programmed for still images with preset time interval. Max Video HD resolution of 2700 x 2000 pixels (for onboard recording only)







## Solo Multicopter Mini



## Our other products...



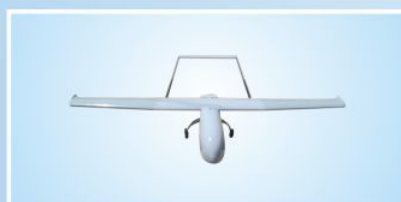
Baaz Mini UAV



Guardian Civilian UAV



Guardian- Trainer



Eagle Eye Mini



Kisan Crop Duster



Pushpak-hexacopter



Curiosity Quadcopter UAV



Curiosity Plus Quadcopter UAV



Kasper Autonomous 4WD Rover

## OM UAV Systems

60-UA, Jawahar Nagar, Delhi 110 007, India  
[sales@omuavsystems.com](mailto:sales@omuavsystems.com), [www.omuavsystems.com](http://www.omuavsystems.com),  
 Contact: Ravindra Singh, Mob.: +91 9810442574