PAAPL

Peace Arms & Ammunitions Private Limited

A FIRST LINE OF DEFENSE TO SAVE LIVES

MAKE IN INDIA

COMMITMENT   COMPETENCE   CHARACTER

VISION

It is our mission to develop unmanned robotic systems to protect our soldiers and to reduce overall casualties. Robotic Systems are intended to provide meaningful reconnaissance and protection. Soldier casualty leads to a reduced morale in the forces. Unmanned vehicles limits the use of extreme measures leading to reduced casualty thereby increasing morale of the forces.

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A FIRST LINE OF DEFENSE TO SAVE LIVES

DRONES – ANTI DRONES

Multi Role Drones

Riot control drone

Interceptor anti drones

Medical drone

(4)

MULTI ROLE SWARM

(5)

HEAVY LIFT GARUD DRONE

(6)

MUNITION DROPPING DRONE | RIOT CONTROL DRONE

(7)

MUNITION DROPPING DRONE | RIOT CONTROL DRONE

5 MULTI ROLE DRONE

19

Interconnected, co operative drones that are capable of working together to overwhelm challenging tasks.

1. Audio communication : Loud speaker based communication will ensure that any particular information that needs to be conveyed is being able to conveyed without putting soldiers at any unnecessary risk.

2. Area illumination : 125,000 lumen area illumination enables that the drone will be able to illuminate certain areas providing selective illumination and the chance of surprise attack.

3. Thermal surveillance : Long distance thermal camera integration ensures rigorous scanning of the environment for detection of

4. Autonomous navigation : Full autonomous motion ensures mission completion even under jamming and other non line of sight communication.

5. Pan tilt zoom camera for surveillance : Full 360 degrees coverage independent vibration damped imagery with zoom capability to ensure surveillance and tracking of target.

6. High precision landing and take off : High precision landing and take off to ensure take off and landing from top of a vehicle and mobile drone take off and landing platforms.

7. Ai enabled suspicious activity detection: High precision AI enabled system to ensure detection and tracking of suspicious activities.

APPLICATIONS INCLUDE

- Targeted Impact
- Coordinated Activity
- Multiple Coordination

MULTI ROLE DRONE

SPECIFICATIONS

Dimensions
Weight   : Less than **18** kg
Width   : Less than **2900** mm
Length   : Less than **2900** mm
Height   : Less than **450** mm

Operations
Lithium polymer rechargeable batteries
30 – 35 minutes mission dependent flight time
Pay load   : **15.0** kg

Mechanical
Material   : Carbon fiber
Compactness   : Frame
Frame   : Hexa-copter

RF transmitter and video relay
Frequency   : **2.4** GHZ - **5.8** GHZ
Batteries   : Rechargeable
Communication :   Encrypted
Range   : **5 K**m los

Camera and gimbal
Video communication   : Real time display
Image   : Gimbal **3**x stabilized
Camera   : **12** Megapixels
Video communication   : **4**k Real time communication
Pan and tilt control   : Pan – **300**◦ , Tilt – **90**

Maneuverability
Max speed   : **50** km/h
Operational   : Water proof
Wind condition : **10** knots
Gust condition   : **15** knots

User interface
Fail safes for auto correction in any eventuality
Precision landing | take off | localization
Autonomous take off and landing
Multiple GPS integration | dual IMU redundancy
Integrated GCS application software
Real time video feedback
Geographic map based feedback

Integrated sensors
Gyroscope | accelerometers | GPS

Multiple high precision GPS redundancy
Accuracy   : cm in air
Technology   : Global Navigation Satellite System
Satellite   : **18** satellites connectivity

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INTERCEPTOR ANTI DRONE

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Interceptor drone is a high speed drone with target drone intercepting mechanism. It can intercept an invader drone with the help of net trapping. FPV view can be used for high speed or long distance operation.

User supported flying modes are helpful in controlling the drone through windy condition. Its mechanism can be adjusted for reuse purposes

Live video with Zero lag & clear feed helps to control the drone in tricky areas and monitoring the invader drone motion.

FEATURES

- Real time video feed with zero lag.
- Adjustable catcher net.
- Reception, recording, storage and playback of payload information with real time display
- Control of manual modes
- Preparation and upload of the mission
- Real-time parameters and battery monitoring

DRONES – ANTI DRONES

INTERCEPTOR ANTI DRONE

RADIO RANGE = 2KM
VIDEO RANGE = 2KM

SPECIFICATIONS

DIMENSIONS & WEIGHT

Length	: 250 mm
Width	: 250 mm
height	: 125 mm
Frame	: QUAD x frame
Weight	: 750 gm (battery included)
	: 250 gm (net catcher)

MANUVERABILITY

Drone Max speed	: 150 km/h
RC Max range : 2 km (LOS)	
Video range	: 2 km
Launch altitude : 1000 m (ASL)	
Operating altitude	: 100 m
Operating temperature	: -10 to 55 deg Celsius
Landing	: manual

POWER SUPPLY

Operating voltage	: 14.7 – 16.8 VDC
Batteries	: li-po batteries
Operation time	: 10 minutes

SAFETY SYSTEMS

Failsafe	: Failsafe to land

CONTROLS

- 16 channels RC controlled
- 2.4 GHz (enhanced encription)
- Manual Throttle control
- Servo activating switches
- On screen display parameters
- Modes switches
- Failsafe switches

VIDEO TRANSMISSION SYSTEM

Display unit	: FPV goggles
Video transmission	: integrated system
Transmitting frequency	: 5500 – 6000 MHz
Video quality	: 720 p with no latency
Camera	: 5 MP front fixed camera

5 MEDICAL DRONE

19

Interconnected, co operative drones that are capable of working together to overwhelm challenging tasks.

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APPLICATIONS INCLUDE

- Targeted Impact
- Coordinated Activity
- Multiple Coordination

DRONES – ANTI DRONES

MODEL NO : 05_IPAAPL_ HLG - UAV_ 03-PA

MEDICAL DRONE

SPECIFICATIONS

Dimensions

Weight   : Less than **18** kg
Width   : Less than **2900** mm
Length   : Less than **2900** mm
Height   : Less than **450** mm

Operations

Lithium polymer rechargeable batteries
30 – 35 minutes mission dependent flight time
Pay load   : **15.0** kg

Mechanical

Material   : Carbon fiber
Compactness   : Frame
Frame   : Hexa-copter

RF transmitter and video relay

Frequency   : **2.4** GHZ - **5.8** GHZ
Batteries   : Rechargeable
Communication :   Encrypted
Range   : **5 K**m los

Camera and gimbal

Video communication   : Real time display
Image   : Gimbal **3x** stabilized
Camera   : **12** Megapixels
Video communication   : **4k** Real time communication
Pan and tilt control   : Pan – **300**∘ , Tilt – **90**

Maneuverability

Max speed   : **50** km/h
Operational   : Water proof
Wind condition : **10** knots
Gust condition   : **15** knots

User interface

Fail safes for auto correction in any eventuality
Precision landing | take off | localization
Autonomous take off and landing
Multiple GPS integration | dual IMU redundancy
Integrated GCS application software
Real time video feedback
Geographic map based feedback

Integrated sensors

Gyroscope | accelerometers | GPS

Multiple high precision GPS redundancy

Accuracy   : cm in air
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DRONES – ANTI DRONES

MODEL NO : 06_PAAPL _ MDD|RCD - UAV_ 03-PA

6   RIOT CONTROL DRONE

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Munition Dropping Drone- Riot Control Drone is a compact drone with a specific objective to be achieved. It can be used to drop items like tear gas grenade for riot control, flags marching in parade and flower dropping. It can also be used to drop seeds.

1. **Tear gas grenade drop** : Mid air safety pin triggering capability enables the drone to be armed only when necessary ensuring safety at all times.
2. **Flag carrying and flower dropping** : Flag carrying and flower dropping integration to be used during military drills and other activities.
3. **Seed dropping:**   Seed dropping for variety of terrains with individual and bulk dissemination
4. **Supply of medical equipment | ammunition supplies** : 15 kg of payload capability ensures that the drone can supply pin pointed medical equipment or supplies to troops to ensure without risking additional

APPLICATIONS INCLUDE

- Targeted Impact
- Autonomous Surveillance Mission
- Suicidal Autonomous Missions

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DRONES – ANTI DRONES

MODEL NO : 06_PAAPL _ MDD|RCD - UAV_ 03-PA

RIOT CONTROL DRONE

SPECIFICATIONS

Dimensions
Weight   : Less than **12** kg
Width   : Less than **2100** mm
Length   : Less than **2100** mm
Height   : Less than **250** mm

Operations
Lithium polymer rechargeable batteries
30 – 35 minutes mission dependent flight time
Pay load   : **3** kg

Mechanical
Material   : Carbon fiber
Compactness   : Frame
Frame   : Hexa-copter

RF transmitter and video relay
Frequency   : **2.4** GHZ - **5.8** GHZ
Batteries   : Rechargeable
Communication :   Encrypted
Range   : **5 K**m los

Camera and gimbal
Video communication   : Real time display
Image   : Gimbal **3**x stabilized
Camera   : **12** Megapixels
Video communication   : **4**k Real time communication
Pan and tilt control   : Pan – **300**∘ , Tilt – **90**

Maneuverability
Max speed   : **50** km/h
Operational   : Water proof
Wind condition : **10** knots
Gust condition : **15** knots

User interface
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