

EBIPAX™ INC. 2019



AISS

THE NEXT GENERATION OF AUTONOMOUS E2E ARIEL SECURITY SOLUTION

The Aerial Intelligence Security Suit (AISS) consists of unmanned EBIPAX G series quadcopter drone/s, meeting the harshest demands of First Responders, Security and Emergency Service Agencies for an end to end aerial autonomous intelligence gathering and security solution, operating 24/7 without an UAV pilot in most challenging environmental conditions.

EBIPAX G series quadcopter drone fly through fog, rain, snow, and up to 45 km/hr (25 knots) winds, was built to last by durable and lightweight carbon-fiber frame supporting wide range of Radiometric thermal, 4K color and day/night imaging solutions.



AISS EBIPAX COMPONENTS

AISS performs scheduled and on-demand monitoring security tasks through optional redundant communication links of 900Mhz, 2.4Ghz, multiple LTE bands and secured TETHERED communication links. IASS consists of 3 components:

- EBIPAX G series Drone; A lightweight, autonomous, remotely operated, unmanned quadcopter drone that can carry various payloads;
- EBIPAX SAFE-GUARD STATION; A self-sustaining military grade ground station that charges the EBIPAX Drone's battery and protects it from extreme weather conditions and through transportation.
- EBIPAX RCMC (Remote Control and Monitoring Center) A proprietary Remote Control and Monitoring Center that enables command and control of a single or multiple remotely operated drones, while transmitting/receiving high-definition and video streams in real time.

EBIPAX GR

QUADCOPTER DRONE

• Lightest drone weight deployable in less than 6 seconds!

• Super precision landing into SAFE-GUARD STATION.

Military-grade carbon-fiber frame.

Can carry various payloads (cameras, projector lights & speakers).

Extended flight-time up to 50 minutes.

• Execute scheduled and on-demand monitoring tasks.

Supporting redundant communication links.

 Supporting wide range of Radiometric thermal, 4K color and day/night imaging solutions.

EBIPAX GT

TETHERED QUADCOPTER DRONE

EBIPAX GT is capable of TETHERED flight for remote deployment, continuous and unlimited secured video streaming, intelligence, surveillance and reconnaissance data monitoring system. It is the only solution which can be activated and operated remotely.

Ideal solution for perimeter security of condensed critical compounds such as military bases, electric plants, distribution centers, infrastructure, dams and other sensitive compounds supporting radius of coverage over 350 meters in all directions with 70 meters tether.

Emergency battery onboard to allow safe landing in case of tether power cable malfunction. In the event of an operational malfunction, the tether's pulley mechanism will automatically retract the Swift Drone inside the SAFE-GUARD STATION to insure safety.

EBIPAX GX

HEAVY LIFTING QUADCOPTER

The EBIPAX GX Drone has an X8 frame consists of four arms made of reinforced heavy-duty carbon tubes. Each arm contains two heavy-lift motors developing trust of more than $20 \text{Kg} \@ 12S$.

FLIGHT TIME (MINUTES) BATTERIES FOR A REPRESENTATIVE CONFIGURATION*				
PAYLOAD	1kg	5kg	8kg	15kg
ONE BATTERY*	60	40	30	20
TWO BATTERIES*	65	50	40	30
THREE BATTERIES*	70	55	45	



WIDE RANGE OF IMAGING SOLUTIONS

- Dual EO-IR stabilized camera built for day and night use, offering excellent image quality and sharpness to capture detailed imagery, such as license plates and faces.
- High resolution, radiometric thermal imager, 4K color camera, and a full suite of on-board sensors to bring you the most powerful dual-sensor imaging solution in the world for small commercial drones.
- Accurate, non-contact temperature measurements from an aerial perspective. Every still image contains accurate, calibrated temperature data embedded in every pixel. Fully radiometric data-gathering for power grid inspections, infrastructure analysis, precision agriculture and public safety.
- Real-time, on-the-fly, Al based, computer vision thermal analytics creating valuable insights based on drone-harvested data and translates it into actionable tasks.





EBIPAX SAFE-GUARD STATION GR OPERATIONAL MODES

- Mobile & highly durable with military grade housing.
- Easy to operate and maintain.
- Precision landing mechanism.
- Wind and temperature sensors.
- Internal & external cameras.
- Lightweight (80-110Kg) with handles for easy deployment.
- Automatic electric direct self-charging upon landing.
- Short charging cycle (30-40 minutes).
- Power-grid independent using solar panels or external generator (optional).
- Small size (1.22m x 1.22m x 0.61m; 4ft x 4ft 4x 2ft); fits any standard pickup truck.
- Ability to control and reset the entire system from any authorized remote location.
- Low power requirements (220V; 110V; 24V or 12V) depending on configuration.



UAF BASE NEAR DAYTON, OHIO, SEP, 2018

EBIPAX SAFE-GUARD STATION GT MAIN FEATURES

- Operated remotely from any authorized location without the need for an on-site operator.
- Connect to various ground sensor systems and autonomously execute a mission within seconds from a triggering alarm.
- Transmits all data directly to the RCMC via the tether, making the transmission highly secure.
- EBIPAX GT Drone can carry various payloads (cameras 4K, thermal, zoom), projector lights, speakers etc.) that can be easily replaced.
- Simply placed in any standard pickup truck bed, and effortlessly deployed from the vehicle (internal generator is optional).
- In the event of an operational malfunction, the tether's pulley mechanism will automatically retract the EBIPAX Drone inside the SAFE-GUARD STATION to insure safety.

TYPICAL DEPLOYMENT INCLUDES ONE OF THE FOLLOWING SCENARIOS:

- The EBIPAX SAFE-GUARD STATION GT might be deployed on a stationary and secured location in the secured site (i.e. rooftop, main entrance gate etc.), and the AISS will execute either a pre-planned mission or an on-demand mission triggered by an external alarm (i.e. sensors on the perimeter fence or on the ground, fire alarm etc.) and immediately provide continues aerial video surveillance coverage from the air.
- The EBIPAX SAFE-GUARD STATION might be deployed on a pick-up truck, or mounted on the roof of an emergency vehicle (i.e. fire engine, SUV, ambulance, minivan, etc.) and upon arriving to the scene and activating the SAFE-GUARD STATION's internal generator, the EBIPAX Drone will take-off and immediately provide continuous aerial video surveillance coverage.





RCMC

REMOTE CONTROL AND MONITORING CENTER

- Automatic mission planning and real-time manual mission override.
- Remotely commands a single drone or an entire fleet.
- HD video and thermal video feed delivered in real-time.
- Intuitive user interface.
- Smart geo-fencing.
- Automatic comprehensive logs.



AISS OPERATIONAL MODES

SCHEDULED MONITORING MISSIONS

- Autonomous pre-scheduled aerial monitoring missions.
- Intuitive mission planning, including smart geo-fence and safe zones.

TRIGGER-BASED MISSIONS

- Missions triggered by a wide array of third-party sensors (ground sensors, fence sensors, radars, sonar, cameras etc.).
- Six (6) seconds after a ground trigger the drone is in the air.
 Optimal mission planning is calculated autonomously inflight.
- Remotely piloted
- Option to remotely override autonomous mission by an authorized user.

REMOTELY PILOTED

Option to remotely override autonomous mission by an authorized user.

APPLICATIONS

- Law Enforcement
- Military Applications
- Coast SAFGUARD-STATION
- Maritime Vessels
- Tactical Vehicles
- Border PA Systems
- Aircraft Hangers
- Industrial Plants
- Stadiums
- Railway Stations
- Emergency Response



For more information on our mission critical intelligence solutions, please contact us at: support@ebipax.com