



Airport Defense Solutions EBX-3500AS RF AI ENABLED DRONE DETECTION SOLUTION

**EXPANDABLE BY MOBILE HOSTILE DRONE OPERATOR TRACKER & CATCHER SYSTEM** 

## **EBX-3500AS**

## AIRPORT DEFENSE SOLUTION

EBX-3500AS is robust end to end, stand-alone, modular and affordable hostile drone detection and identification solution comprises of;

- 360° 4xZones Hostile Drone Detection System
- Optional Mobile Hostile Drone's Operator Tracker & Catcher System
- Unified User Friendly Graphical Command and Control Center

### **NATIONAL THREAT**

The proliferation of nonmilitary drones poses a growing national security threat while criminals and terrorist increasingly use the technology for nefarious purposes. National security agencies recognize the misuse of this technology poses unique and sever security threat.

Terrorists and criminals may use drones to conduct illegal surveillance, carry out conventional, chemical, biological and radiological attacks on large open air venues or target sensitive facilities such as military compounds, airports, borders and energy plants to disrupt national critical infrastructures.







### **EBX-3300AS**

360° 4xZONES HOSTILE DRONE



#### **COMMAND & CONTROL CENTER**

- User Friendly Graphical Interface.
- Easy to operate Training free.
- Real-time Unified Command center.
- Threat characteristic classification and display (such drone type).
- Zone/Sector threat detection.

# COVERAGE AREA & ALERT SIMULATION

Covering up to 3,500 meters (~ 2 miles) from both ends of any airport runway and up to 1,000 meters (~3,000 ft) in any direction around the runway operating.

EBX-3500AS covers the 2.4 and 5.8 GHz band within LOS and it can be optionally extended to support the 900 & 433 MHz bands to detect custom made drones.

COMPREHENSIVE OFF-THE-SHELF PRODUCT PORTFOLIO TO TARGET FULL RANGE OF DRONE TREATS INCLUDING CUSTOM MADE SOLUTIONS.

# AIRPORT DEFENSE SOLUTION

Detecting 99% of drones (DJI, Yuneec, Hubsan and more) using an Al-enabled, industry-leading RF detection library with 0% false alerts comparing to other RF systems with shorter range or radar systems suffering from false alerts alarms. EBX-3500AS hostile detection libraries are upgradeable & expandable to support future hostile drone's footprint.

EBX-3500AS requires no authorization or licensing from aviation or airport authorities and it coexists harmonically with airport communication and other safety systems within the airport (oppose to radar based systems).

The system was designed to accommodate new features, functionalities and modules such as upcoming FRIEND OR FOE functionality.

EBX-3500AS minimal installation footprint is achieved by simple deployment of two electronic devices at both ends of the runway.







# HOSTILE DRONE DETECTION SYSTEM OPERATIONAL AND TECHNICAL SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Core Technology	Detection and classification using passive RF scanning and an Al-enabled pattern recognition fingerprint library
Detection Library Coverage	$\sim$ 99% of COTS drones by market volume, as detailed in attached library coverage document
Detection Frequencies	2.4 GHz, 5.8 GHz Optional: Additional frequency ranges between 70 MHz - 6 GHz with software and antenna upgrade
Detection Sectors	Each sensor has three sectors:  Outward Inward Sideways
Maximum Detection Distance	Typical range for detecting a US DJI Phantom 4 with typical environmental RF noise, for each unit:  Outward: Up to 3.5 km (2 miles)  Inward: Up to 3.5 km (2 miles)  Sideways: Up to 1 km (3,000 ft)
Average Detection Time	< 5 seconds after drone enters range
Concurrent Detection Capability	Yes; may depend on model
Operation - User Interface	Access via browser, using ApolloShield server, on-premise or in the cloud
Fingerprint Library Updates	Via network interface / via cloud-based database connection
Alarms and Notifications	Default: Via the User Interface Optional: SMS, Email, VMS, more APIs - network access required
Mounting	Mounting on a standard pole / mast, Expected mast outer diameter: 35 mm
Dimensions and weight (per sensor; 2 sensors per kit, one for each end of the runway)	RF Processing Unit:  39 x 34 x 18 cm, 9.6 kg  (15.4 x 13.4 x 7.1 in, 21.2 lbs)  Antenna Kit:  35 x 35 x 20 cm, 2.4 kg  (13.8 x 13.8 x 7.9 in, 5.3 lbs)  Entire kit incl. pelican case:  76 x 48 x 30 cm, 28 kg  (29.9 x 18.9 x 11.8 in, 61.7 lbs)
Power Supply	110/220 VAC Power Optional: 12/24/48/custom VDC Optional: active PoE+ (IEEE802.3at)
Power Consumption	160 W Optional: 25 W
Housing Type, Operating Temperature and Environmental Conditions	Weatherproof portable chassis All-weather (IP42 equivalent), -10 - +40°C
	Optional: Ruggedized version - IP67 equivalent, -20 - +50°C



# MOBILE HOSTILE DRONE'S OPERATOR TRACKER & CATCHER SYSTEM

Optionally; the Hostile Drone Detection System can be expanded by MOBILE HOSTILE DRONE'S OPERATOR TRACKER & CATCHER SYSTEM. Due to its small foot print, the system can be installed on various civil or law enforcements vehicles, locking on hostile drone Remote Control Signal to pinpoint the location of the hostile drone's operator and hence to remove it.



For more information on our mission critical intelligence solutions, please contact us at: <a href="mailto:support@ebipax.com">support@ebipax.com</a>

