AUTOMATIC DRONE DETECTION SYSTEMS

CEAD

Central European Aircraft Design

CADDS

CAMERA ARRAY – DRONE DETECTION SYSTEM

The **Camera Array - Drone Detection System** is the first system using an Array-Camera in combination with a Gimbal cam and a powerful image recognition platform. The image recognition is performed using powerful **Artificial Intelligence, internally trained to detect any kind of copter- drones.**

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FDDS

FLIR BASED - DRONE DETECTION SYSTEM

The **FLIR based - Drone Detection System** is a stand-alone video processing / FLIR / gimbal camera remote control – unit.
The artificial intelligence incorporated in this unit is capable to automatically recognize and interpret objects on the provided video feed.
The user interface allows the operator to define an "AUTO-SEARCH" function in order to search for: Drones, Persons, Vehicles...

CADDS Benefits:

- Cost-effective and simple design
- Simple to use without training
- Passive sensing system
- Recognition is independent from Drone's RF signal
- Simple scalable to cover larger drone protection sites
- Interconnectable with other systems

CADDS - BASIC:

Preliminary Performance Data			
Drone diameter		Identification Distance	
30 cm	12"	500 m	0,310 miles
60 cm	24"	1000 m	0,620 miles
90 cm	35"	1500 m	0,930 miles
120 cm	47"	2000 m	1,240 miles
150 cm	59"	2500 m	1,553 miles

CADDS - LONG RANGE

Preliminary Performance Data			
Drone diameter		Identification Distance	
30 cm	12"	750 m	0,470 miles
60 cm	24"	1500 m	0,930 miles
90 cm	35"	2250 m	1,400 miles
120 cm	47"	3000 m	1,864 miles
150 cm	59"	3750 m	2,330 miles

FDDS Benefits

- Works with all common gimbal cameras (e.G. L3 Wescam, FLIR, Trakka...)
- Plug-and-Play style unit
- Ruggedized and cost-effective
- Intuitive user interface - Touchscreen optimized
- Supplied as installation kit with EASA installation approval

Technical Data:

- Mass: 3,2kg
- Voltage: 9-32 VDC
- Power consumption: max 2 Amps @ 28 VDC

Function:

Step1: User selects objects of interest (e.g. Drones)
Step2: User defines search area and selects "START"
Step3: Camera searches the area automatically (steered by the FDDS)
Step3: Identified objects are shown on the map and on the objects list.

Calculated minimum performance					
Drone Diameter		15" class FLIR		20" class FLIR	
[cm]	[inch]	[meter]	[miles]	[meter]	[miles]
30	12	1200	0,75	1800	1,12
60	24	2400	1,49	3600	2,24
90	35	3600	2,24	5400	3,35
120	47	4800	2,98	7200	4,47
150	59	6000	3,73	9000	5,59

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CEA DESIGN GMBH | FLUGPLATZ 1 | 2542 KOTTINGBRUNN | AUSTRIA/EUROPE
TEL.: +43 677 63097222 | E-MAIL: OFFICE@CEAD.AT | WWW.CEAD.AT