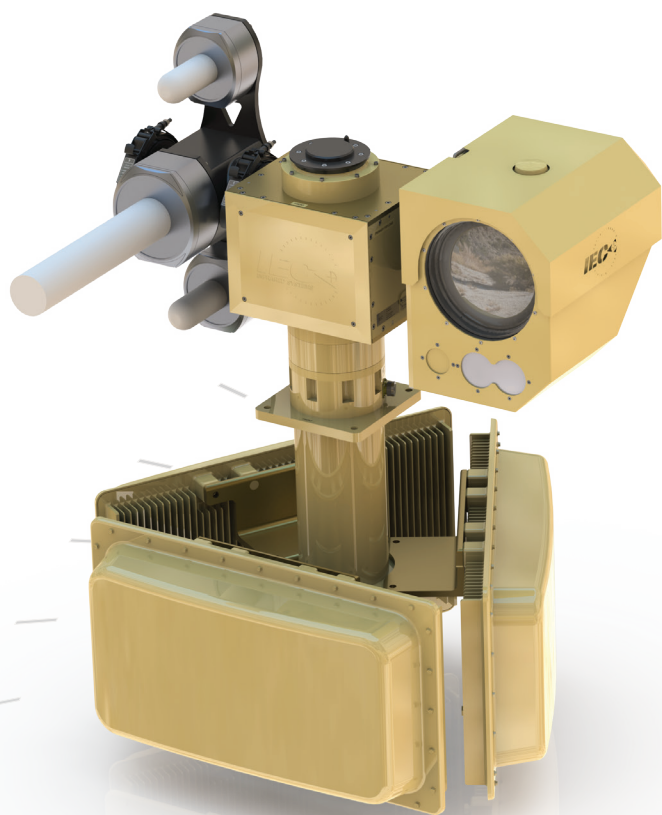


Lycan Counter UAS

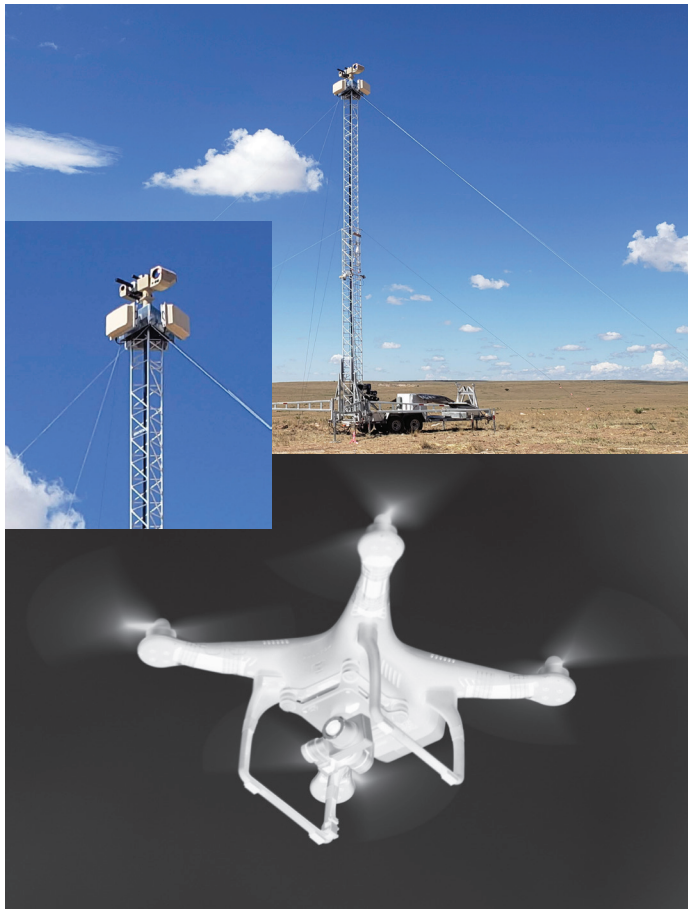
Transforming Counter Drone Detection, Tracking & Mitigation



- ⊕ *MWIR 40mm-825mm Continuous Zoom*
- ⊕ *Line Replaceable Unit Configuration*
- ⊕ *Tools Free/Cable Free Payloads Swap Out in Seconds*
- ⊕ *360° Panoramic Image Creation*
- ⊕ *Optical Target Tracking*
- ⊕ *Multiple RF and GPS Jamming*
- ⊕ *RF Detection*
- ⊕ *Long-Range 360° Detection (10m-5km) with Heuristic Target Prioritization*
- ⊕ *Optical Tracking to 4km*

LYCAN CUAS

Specifications



Thermal Detectors

- 640x512 MWIR cooled InSb 15 μ m
or
- 1280x720 cooled InSb 10 μ m
- Spectral range 3-5 μ m
- NETD <22 millikelvin

Thermal Optics

- 40mm-825mm f/4 MWIR continuous optical zoom auto focus
14.36° to 0.67° HFOV
or
- 80mm-1200mm f/4 MWIR continuous optical zoom auto focus
6.87° to 0.46° HFOV

DJI P4 Drone optical tracking
3-4km

Visual Detector

- 1920x1080 CMOS
- Spectral range 300-750 nanometers
- Minimum sensitivity 0.00015 lux

Visual Optics

- 15mm to 500mm continuous zoom
57.8° to 1.7° HFOV
or
- 20mm to 800mm continuous zoom
21° to .55° HFOV

Multi-Mode Optical Tracking

- AI clutter mitigation for target classification

Ground/Air Surveillance Radar

- DJI P4 Drone detection and tracking
10m-5km
- Pulse Doppler technology
- (3-4) 120°/panel w/ 20° VFOV S band
500m-5km range for DJI P4
- (4) 90°/panel w/ 20° VFOV X band
10m-700m range for DJI P4
- Simultaneous multiple beams
- 2Hz update rate

RF Detection

- Library based drone classification
- Detection up to 2km radius
- Logs data for forensic analysis
- Assigns a persistent UID allowing for quick identification and situational awareness

Mitigation

- Operational Bands
433MHz, 915 MHz, 868Mhz
- Frequency 2400-2500Mhz WiFi
RF Power 10.0 W
(EIRP) Effective Isotropic Radiated Power 158W
- Frequency 5725-5825Mhz WiFi
RF Power 5.0 W
(EIRP) Effective Isotropic Radiated Power 79W
- Frequency 1562Mhz-1588Mhz GPS
RF Power 10.0 W
(EIRP) Effective Isotropic Radiated Power 158W
- DJI P4 jamming to 5km

Positioner

- Pan Travel: 360° continuous rotation
- Tilt Travel: Minimum +/- 90° Tilt
Optional -90° to +180° Tilt
- Pan/Tilt Speed: Slow speed down to 0.002°/sec
High speed up to 100°/sec
- System Weight: 350lbs
dependent on payload configuration and options

Environmental

- Temperature
Operational: -40° C to +60° C
Storage: -46° C to +85° C

