

AI Enabled Surveillance Drone Indian OEM

Challenge

- AI Based Automated Surveillance and tracking of objects & personnel
- Formation of Drones with Automated surveillance at multiple layers and altitudes
- Solution need to function on-board with limited power and computational capability

Solution

- AI solution with high accuracy and speed of detection for dynamic detection & tracking
- Highly optimized to perform on-board with limited power and computational infrastructure
- Able to run for more than 8 hrs on Drone battery
- Aerial human target detection, from an altitude of 10 m to 100 m, at a speed of 15 – 20 m/sec

Scope

- Design and development of AI Based solution that detects, and tracks ground based objects and personnel

Impact

- On-time delivery of the software solution enabled customer to integrate with their drone formation for field trial
- Versatile System that can be used for a range of applications including defense, security of large installations, managing relief supply in disaster zones



Illustration of Drone Based Relief Operations



Human detection from 100 metres