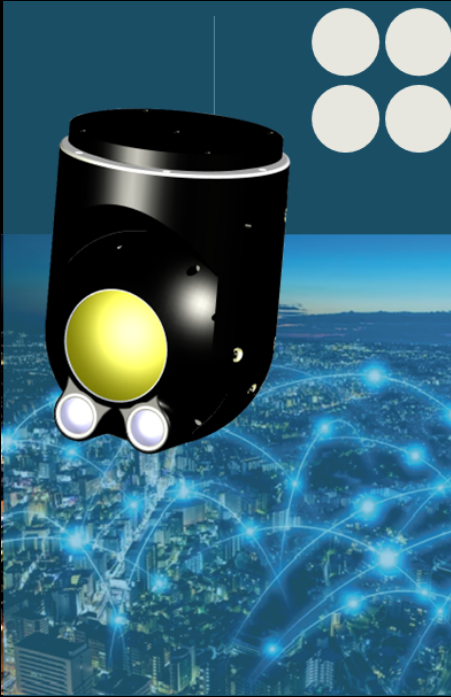


MIC

ISR Payload for the commercial market



The MIC (payload hereafter) Family are small day and night payloads for Commercial use such as Media, Precision Agriculture, Equipment and Infrastructure Control etc.

The payload contains 9Hz Un-cooled thermal camera and Day Camera.

The MIC consist of basic gyro, navigation and tracking and video analytics capabilities and it is designed for mounting on small drones and multirotor.

MIC

ISR Payload for the commercial market

Day and night Payload Commercial

- The payload observation channels are:
 - Day TV camera.
 - Un cooled IR – 9Hz , camera
- 2 or 3 gimbals, gyro stabilized.
- Inertial navigation system (INS) in pitch and roll / yaw.
- Automatic Video Tracker.
- Built in airborne computing and processing unit.

FOR (Field of Regard - nose mount)

Elevation: $+85^{\circ} \div -70^{\circ}$
 Azimuth: $\pm 175^{\circ}$

FOR (Field Of Regard - Belly mount)

Elevation: $+30^{\circ}$ to -90°
 Azimuth: $+180^{\circ}$ or $360^{\circ} \times N$ continuous

Day TV Sensor HD

Sensor Type: Sensor Type: 2 (two) Mp CMOS sensor
 (minimum 14 mega-pixel each one) or 4K
 HFOV ($\pm 15\%$): FOV 2° to WFOV 46°
 Digital Video output: HDMI or Ethernet
 Video standard: H.264/5

Thermal Imaging (TI) Channel - $\leq 9\text{Hz}$

Spectral range: 8-12 μm
 Detector: 640X480 pixels FPA or wider.
 Pitch $\leq 17\mu$
 Or
 1280X1024 pixels FPA or wider.
 Pitch $\leq 12\mu$
 Lens: Fix, dual FOV or continues Zoom
 Fields of view ($\pm 10\%$): NFOV 2.9° to WFOV 46°
 Gain control: Automatic, including Local AGC
 Controls: Zoom, Focus
 Digital Video output: HDMI or Ethernet
 Digital Video output: H.264/5

Built In Video Analytics Capabilities

- Objects Classification based on advanced video analytic (IR and Day channels)
- Tracker based on advanced video analytic (IR and Day channels)
- Automatic Video Motion Detection (VMD) of moving objects in the in the video frame

Physical Characteristics

Payload Weight (gr): 100 -2000 (TBR)

Options

- Air borne computer for image processing motion detection and Objects characteristics analysis algorithm.
- Ground Control Station (GCS) displaying the image overlaid with detections and additional graphical annotations, based on the detection algorithm and analytics results

