

# GOSHAWK 350

## Airborne Observation Systems



### Features

- 6 different payloads to match complete operational requirements
- Continuous zoom thermal imager variant
- Video autotracker (option)
- Supports all-weather, day or night missions
- Searchlight slaving interface
- Eyesafe laser rangefinder
- Superb stabilisation
- Small dimensions
- Low-mass
- High-performance sensors
- Comprehensive symbology overlay



We make it visible.

# GOSHAWK 350

## Description

The GOSHAWK 350 Airborne Observation System is the system of choice where small dimensions, low-mass, high-reliability and payload sensor variety and modularity are the requirement as proven to UAV manufacturers worldwide. It is used on low to medium height UAV platforms, light aircraft and helicopters to improve mission effectiveness and enhance public safety. It is the proud tradition of the GOSHAWK Product Family to support surveillance and law enforcement operations through advanced multi-sensor imaging technology.

## Multi-sensor payloads

Payload configurations are available with up to three high-performance sensors simultaneously, covering a span of requirements to provide the operator with high-resolution picture performance during all operational conditions.

## Modular system

Selectable turret options for the required operating environment, payload options covering a variety of sensor configurations and functionality options in the Platform Control Unit (PCU) or Control Electronics Unit (CEU) provide excellent modularity. A PCU/CEU with a video autotracker card included is available. Various communication channels (RS 232, RS 422) ensure easy and effective interfacing to the host vehicle in UAV applications or a ruggedised Laptop Control Unit (LCU) in manned aircraft applications. Other interfaces include moving map displays, GPS, searchlights, real-time digital video down links, and monitors.

Technical Data		
Turret	Unmanned version	Piloted version
Stabilisation accuracy	< 30 $\mu$ radian	< 30 $\mu$ radian
Temperature range (operational/non-operational)	-30°C to +50°C / -40°C to +60°C	-45°C to +55°C / -45°C to +60°C
Altitude (operational/non-operational)	4000 m (13000 ft) / 6000 m (20000 ft)	7600 m (25000 ft) / 9100 m (30000 ft)
Air speed (operational/non-operational)	155/240 knots	160/280 knots
Anti-icing heaters	Yes	Yes
EMI/EMC (MIL-STD-461C)	CE03, RE02, CS01, CS02, CS06, RS02	CE01, CE03, RE02, CS01, CS06, RS02, RS03 (200 V/m)
Mass	< 14 kg	< 16 kg
Dimensions	500 mm H x 350 mm (dia)	500 mm H x 350 mm (dia)
Design	Aluminium gimbal with composite shells	Aluminium gimbal with aluminium shells
Electronics unit	Platform Control Unit (PCU)	Control Electronics Unit (CEU)
Temperature range (operational/non-operational)	-30°C to +55°C / -40°C to +60°C	-30°C to +55°C / -40°C to +60°C
Mass (autotracker option)	5.3 kg (< 6 kg)	< 8.5 kg
Dimensions (W x H x L) (autotracker option)	234 x 129 x 217 mm (256 x 129 x 217)	256 x 160 x 250 mm

### Sensor options available:

- Day/night payloads house a choice of Thermal Imagers (TI) from the medium to long wave IR spectrum with 2 FOV optics as well as a medium wave TI with continuous zoom optics. They are complimented with a colour zoom TV camera and eyesafe laser rangefinder.
- Day payloads house a choice of colour zoom TV cameras from a 1/2 inch format 3-CCD broadcast quality colour camera with a 40 x zoom lens to a 1/6 inch format 1-CCD colour camera with a 25 x zoom lens for daytime observation providing clear crisp images. These sensors are complimented with a B/W TV camera and eyesafe laser rangefinder.

### High-Reliability Turret

Superior image quality is achieved in a low-mass optimal turret in the 410 mm diameter category. It is the first turret in its class to be manufactured from composite materials. The low-mass, high-rigidity turret structure provides the foundation for superior line-of-sight stabilization and superb environmental survivability.

### Applications

- Law enforcement
- Search and rescue
- Paramilitary/military reconnaissance
- Border/coastal patrol
- Public safety (fire & rescue)

Payload	
<b>Thermal imager</b>	<b>Yes</b>
Spectral band	3–5 $\mu\text{m}$
Fields of view	2.0° H to 15° H continuous, Integral Stirling, Cycle
<b>Camera</b>	
Camera type	Sony FCB 780
Sensor format	1/6 inch 1-CCD
Resolution	480 TV lines
Fields of view	2.0° H to 45° H
Zoom ratio	25 x optical, 12 x digital
<b>Laser rangefinder</b>	
Type	LP 16
Laser type	Erbium glass
Wavelength	1.54 $\mu\text{m}$
Measuring range	80 m to 20.000 m
Accuracy	$\pm 10$ m
Resolution	5 m
Firing rate	1 shot every 6 seconds

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