

EXTENDED RANGE
PERFORMANCE

UltraForce® 350

COMPACT ELECTRO-OPTICAL AIRBORNE GIMBAL
40% INCREASE IN INFRARED OPTICAL MAGNIFICATION

UltraForce 350



APPLICATIONS

- COUNTER DRUG
- HOMELAND SECURITY
- PATROL
- SURVEILLANCE
- RECONNAISSANCE
- SEARCH AND RESCUE



FEATURES

- Lightweight high stiffness composite body
- Multiple Fields of View (FOV) 3-5 μ m thermal imagers
- Daylight color camera with 26x zoom
- Spotter options
- Laser options
- 4-axis active stabilization
- EASA Certified installations
- Simplified integrations
- Optimized usability
- It's all FLIR inside

BENEFITS

- Reduces weight for increased mission range.
- Large format 640 x 512 infrared camera with extended performance optics allows for positive target analysis at safe stand-off ranges in all weather conditions.
- Maximizes standoff range and target acquisition during daytime surveillance missions; the low light function extends operation into dawn or dusk.
- Identify targets at longer stand-off ranges during daytime surveillance missions; low light camera option provides extended operation into dawn and dusk.
- Covertly determine target distance and location.
- Outstanding stability ensures stable imagery by compensating for aircraft movement and vibration, critical for long range imaging.
- The system can be delivered with EASA Form 1 certification.
- Two Line Replaceable Unit (LRU) configuration and universal mounting interface with integrated quick disconnect is compatible with existing FLIR products.
- Backlit and NVG compatible remote controller for 24/7 operation in the modern cockpit; integrated multi-mode auto-tracker to track moving or stationary targets.
- FLIR controls the entire supply chain for the critical technology inside its Ultra class gimbals, ensuring fast service and long-term support.





UltraForce® 350

OVERVIEW

Gimbal size	350 mm (D) x 485 mm (H)
Gimbal weight	28 kg
Environmental	RTCA DO-160E

THERMAL IMAGING PERFORMANCE

Sensor type	3rd gen 640 x 512 3-5 µm focal plane array
Image Enhancements	Non Uniformity Correction Bad Pixel Replacement AGC (Automatic Gain Control) Histogram Equalization Digital Details Enhancement (Tunable)
FOVs	
Wide	17.3° x 13.6°
Medium	5° x 4°
Narrow	1.2° x 0.9°
Ezoom	2x

DAYLIGHT IMAGING PERFORMANCE

Sensor	Super HAD Color
Resolution	740 000 pixels (PAL) 630,000 pixels (NTSC)
Fields of view	42° to 1.6° optical continuous zoom
Low light level	Without IR cut-off filter
Ezoom	2x

SPOTTER SCOPE OPTION

Sensor type	Color CCD
Field of view	11.9° to 0.54° continuous zoom
Sensitivity	1.5 Lux

COLOR

Sensor type	Color CCD
Field of view	11.9° to 0.54° continuous zoom
Sensitivity	1.5 Lux

LLTV

Sensor type	EMCCD
Field of view	15.8° to 0.72° continuous zoom
Sensitivity	<100 µLux

GIMBAL SPECIFICATIONS

LOS Pan range	360 degrees continuous
LOS Tilt range	+20 / -120 degrees
AZ/EL slew rate	Up to 60°/s
Stow	Magnetically held in stow position

ELECTRONICS CONTROL UNIT

Hand Controller Unit	0.8 kg, 230 mm Height
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INTERFACES

ARINC 429, RS232/422 and other interfaces to support navigation systems, moving maps, radars, searchlights, and GPS

OUTPUTS

Video	RS-170, NTSC, PAL, CCIR
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POWER

Power requirements	22-30 VDC < 150 W
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OPTIONS

Auto-tracker, Laser Range Finder, Laser Pointer, longwave infrared camera, Control Unit (IFU)

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