

UltraForce® 275

COMPACT ELECTRO-OPTICAL AIRBORNE GIMBAL



APPLICATIONS

COUNTER DRUG
HOMELAND SECURITY
PATROL
SURVEILLANCE
RECONNAISSANCE
SEARCH AND RESCUE

FEATURES

Lightweight high stiffness composite body
Internal IMU
Continuous zoom 3-5 μm thermal imagers
High Definition color camera with 20x zoom
4 axis active stabilization
Laser options
Optimized usability
EASA Certified installations
All European system, single LRU HD system
It's all FLIR inside

BENEFITS

Reduced weight for increased mission range
For precise geo-location
Large format 640 x 512 infrared camera with continuous zoom lens 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
Provides stable imagery by compensating for aircraft movement and vibration, critical for long range imaging
Covertly mark targets and determine their distance and location
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
The system can be delivered with EASA Form 1 certification
All European content, single LRU for ease of installation and integration, digital HD output for all video channels, and IMU for precise geo-location
FLIR controls the entire supply chain for the critical technology inside its Ultra class gimbals, ensuring fast service and long-term support



WFOV



NFOV



UltraForce® 275

OVERVIEW

Gimbal size	275 mm (D) x 378.5 mm (H)
Gimbal weight	14 kg typical
Environmental	RTCA DO-160E

THERMAL IMAGING PERFORMANCE

Sensor type	3rd gen. 640 x 512 3-5 µm focal plane array
FOVs	Continuous zoom 35.5° x 28.7° to 1.83° x 1.47°
Ezoom	2x
Image enhancements	Non uniformity correction Bad pixel replacement Automatic gain control Histogram equalization STACE™ (digital image enhancement)

DAYLIGHT IMAGING PERFORMANCE

Sensor	High Definition CCD
Resolution	1920 x 1080
Fields of view	Continuous optical zoom 20x
Ezoom	Up to 4x continuous

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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OUTPUTS

Video	1080P/720P HD-SDI (all video channels), 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, Laser Illuminator, Control Unit (IFU)

INTERFACES

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

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STACE™
Digital Image Enhancement

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