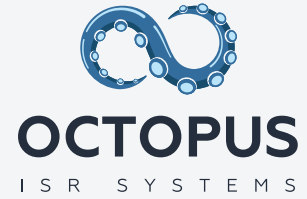

MULTI-MISSION EO/IR SURVEILLANCE SYSTEM

EPSILON 175

SUPERIOR IMAGE STABILIZATION AND LONG-RANGE IMAGING



EPSILON 175 MAIN FEATURES:



EXCEPTIONAL IMAGING PERFORMANCE

720p HD video at 30 fps with full processing



IMPROVED MWIR PERFORMANCE

15x continuous optical zoom MWIR with 1.5° nFOV



NON-ITAR

For maximum exportability



ENVIRONMENTALLY PROTECTED

Fully sealed, dry gas filled structure



DIRECT DRIVE STABILIZATION

Ruggedized brushless motors with specialized bearings



MOST POWERFUL IN CLASS ONBOARD PROCESSOR

With Onboard Target tracking, Scene steering & Moving Target Indicator



INTEGRATED HIGH PRECISION GPS/INS

Providing platform location, target location and slant range



METADATA

MISB compliant video stream with KLV metadata



RELIABLE OPERATION

Mature design proven in demanding environments



ARTILLERY FIRE ADJUSTMENT

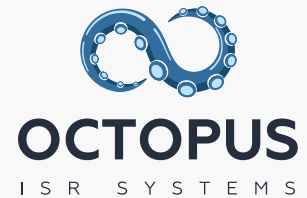
Integrated software for artillery fire correction



SUPER RUGGED DESIGN

Precision machined aluminium structure
(no 3D printed parts used)

EPSILON 175



THERMAL IMAGER		
Sensor type	640 x 512, MWIR (cooled)	
Wavelength	3-5 μm staring array	
Sensitivity	<25mK	
FOVs	26.8° - 2.0°(h) x 21.5° - 1.6° (v)	
Zoom ratio	15x optical (+4x digital)	
Lens	18 - 275 mm, F5.5	
COLOR ZOOM CAMERA		
Sensor type	Global shutter CMOS	
Resolution	1280×720px	
FOVs	62.9° - 2.2°(h) x 37.9° - 1.3° (v)	
Optical zoom	45x (for SD video quality)	
Digital zoom	4x	
LASER RANGE FINDER		
Max. range	Up to 15.0km (static applications), up to 10.0km (dynamic appl.)	
Accuracy	Better than 1.5m	
Classification	Class I (eyesafe)	
LASER POINTER		
Power	50mW	
Wavelength	830nm	
Classification	Class IIIb	
INTERNAL NAVIGATION SYSTEM		
IMU and GPS	Fully integrated, tightly coupled for Geo Pointing and real time Target GEO location	
Accuracy	0.3° RMS heading / 0.1° RMS roll/pitch	
Navigation data computing frequency	400Hz	
System support	MGRS and decimal degree system support	
Additional Options	Moving Map Software	
SYSTEM PERFORMANCE		
System type	2 axis mechanical stabilization / 3 axis electronical stabilization	
Az. Coverage	360°	
El. Coverage	-80° to +10°	
Encoder resolution	0.01°	
Stabilization bandwidth	100 Hz	
Gyro noise	6 uRad	
Stabilization	<75 μrad RMS	
Motors	Direct drive	
SYSTEM INTERFACES		
Analog video	NTSC/PAL	
Digital Video	Ethernet	
Control	RS232 / Ethernet	
Interface connector	Axon Micro-D	
GPS antenna connector	SMA	
ENVIRONMENTAL		
Rating	IP64 [sealed and dry gas filled structure]	
Operating temperature	-40°C to 55°C	
POWER REQUIREMENTS		
Voltage	22-26 VDC	
Consumption	35W typical / 150W peak	
DIMENSIONS, WEIGHT & MOUNTING		
Size	175 mm x 220 mm (6.88" x 8.66")	
Weight	2.6 kg (5.73 lbs)	
Mounting	Belly mount compatible	
OTHER FEATURES		
• Automatic object tracking (onboard)	• Adjustable bitrate and resolution	
• Moving Target Indicator (onboard)	• DHCP or static IP addressing	
• Onboard video recording (32Gb)	• Unicast and Multicast video stream	
• H.264 Internal Encoder	• Field upgradable firmware	
• Picture-in-Picture dual video	• Electronic video enhancement	
IR SENSOR DRI ACCORDING TO JOHNSONS CRITERIA		
	Human target [1,7x0,5m]	NATO target [2,3x2,3m]
Detection	8600m	12400m
Recognition	2900m	7000m
Identification	1400m	3500m



MWIR PERFORMANCE



MOVING MAP SOFTWARE



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