MULTI-MISSION EO/IR SURVEILLANCE SYSTEM

EPSILON 140LC







EPSILON 140LC MAIN FEATURES:



EXCEPTIONAL IMAGING PERFORMANCE

720p HD video at 30 fps with full processing



IMPROVED LWIR PERFORMANCE

<30mK sensitivity sensor with 25mm F1.0 IR lens



NON-ITAR

For maximum exportability



ENVIRONMENTALLY PROTECTED

Fully sealed, dry gas filled structure



DIRECT DRIVE STABILIZATION

Ruggedized brushless motors with specialized bearings



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

Advanced Magnesium structure (no 3D printed parts used)



MOST POWERFUL IN CLASS ONBOARD PROCESSOR

With Onboard Target tracking, Scene steering

EPSILON 140LC

THERMAL IMAGER	
Sensor type	640 x 512, LWIR (uncooled)
Wavelength	7.5 - 13.5 μm
Sensitivity	<30mK and <60 mK versions
FOVs	25° (h) x 18,9° (v)
Zoom ratio	4x digital
Lens	25 mm, F1.0
COLOR ZOOM CAMERA	

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	Av

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
DVOTEN DEDERMANDE	

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	<100 µrad RMS	
Motors	Direct drive	

SYSTEM INTERFACES	
Analog video	NTSC/PAL
Digital Video	Ethernet
Control	RS232 / Ethernet
Interface connector	15 pin high density Dsub IP67
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	17W typical / 75W peak	

DIMENSIONS, WEIGHT & MOUNTING		
Size	140 mm x 195 mm (5.5" x 7.7")	
Weight	1.27 kg (2.80 lbs)	
Mounting	Nose or belly mount compatible	
	OTHER FEATURES	
Automatic object tracking (onboard)	Adjustable bitrate and resolution	
 Onboard video recording (32Gb) 	DHCP or static IP addressing	
H.264 Internal Encoder	Unicast and Multicast video stream	
Picture-in-Picture dual video	Field upgradable firmware	
Electronic video enhancement	Sky Up functionality	

IR SENSOR DRI ACCORDING TO JOHNSONS CRITERIA		
	Human target [1,7x0,5m]	NATO target [2,3x2,3m]
Detection	833m	1127m
Recognition	260m	352m
Identification	156m	211m

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IMPROVED LWIR PERFORMANCE



MOVING MAP SOFTWARE





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