ICS Options

Our Integrated Camera Systems platforms provide our customers with a flexible / modular solution that meet their exact requirements. We build what you need and we also offer high quality, reliability and fast delivery, making Raptor a very attractive solution for the defence market.

Sensor options:

- CMOS, CCD, InGaAs
- · Visible, NIR and SWIR



Video output options:

- · CCIR / PAL
- EIA / NTSC
- HD-SDI
- OLED
- Compact Display Monitor
- Media Recorder



- · Range of optimized fixed and motorized lenses available
- With or without camera housing (Mechanical re-design to customer specification)
- Electronic re-design to customer specifications
- · Flexible voltage supply
- Increased resistance to shock, vibrations and temperature
- Integrated OLED
- Mounting options: Picatinny Rail, Weaver or NATO

Customer Support

Understanding your instrumentation solutions, your product roadmap and your business model will enable us to offer you the best camera solution. We would be delighted to hear from you.

For further information, datasheets or to schedule a demo of any of our cameras please refer to our website, contact your local distributor or reach out to us directly:





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Leaders in digital camera solutions

Low Light Visible SWIR









INTEGRATED CAMERA SYSTEMS 2023

Integrated Camera Systems

	Hand-held or rail mounted systems			
	Vis-SWIR Monocular 14mm	Vis-SWIR Monocular 50mm		
Image representation @ 95m distance				
Sensor Technology	InGaAs	InGaAs		
Spectral Range	600-1700nm	600-1700nm		
Focal Length	14mm	50mm ¹		
Field of View (H) Degrees	37.8°	11°		
F#	F1.75	F1.5		
Video Output	OLED, CCIR (25Hz) or EIA (30Hz)	OLED, CCIR (25Hz) or EIA (30Hz)		
Power Requirement	4 x AA Lithium / Ext 12V	4 x AA Lithium / Ext 12V		
Operating Temperature	-20°C to +55°C	-20°C to +55°C		
Storage Temperature	-30°C to +60°C	-30°C to +60°C		
Size / Weight	155mm x 90mm x 64mm / 750g	180mm x 90mm x 64mm / 950g		
Protective Housing Integrity	IP67	IP67		
Features	Comes with an integrated 1550nm laser	Comes with up to x3 "hot swappable" lenses including 12.5mm, 50mm and 100mm		
Status	Production Ready	Production Ready		

Note 1: This monocular has a C Mount so is available with a range of Vis-SWIR lens options from 25mm - 100mm

Integrated Surveillance & Defence Solutions

Raptor develops and manufactures total eletro-optical systems, with custom options including sensors, electronic layout, optimised lenses, OLED, power source, and ruggedized housing. We build our solutions to MilSpec standards and ISO9001:2015 ensuring high quality and reliability. We understand your systems need to work first time, every time.

Our systems are engineered to work 24/7/365 in all environments including harsh weather, extreme temperatures and battlefield conditions. We offer Low Light Visible as well as Short-Wave InfraRed (SWIR) solution with SWaP considerations.

Raptor has over ten years' experience in building camera based solutions for global defence customers. Our knowledge and experience is second to none, and our cutting edge technology enables our customers to remain ahead of hostile forces.

Applications Include:Visible and SWIR night

- vision

 Advanced Long-range Day/
- Night Observation
- Multi-Band Laser See Spot for JTAC and JFO
- Image through Haze, dust and smoke
- Situational Awareness
- Battlefield Counter Surveillance
- Short-Range Recognition and Identification
- Covert Surveillance
- Rapid Deployment



Tripod or rail mounted systems							
ICS100 Vis-SWIR	ICS Vis-SWIR						
InGaAs	InGaAs						
600-1700nm	600-1700nm						
100mm	30-300mm	50-500mm	100-1000mm				
5.5°	24.4°-2.44°	14.7°-1.47°	17.3°-0.73°				
F1.5	F2.85-F4.5	F5	F10				
CCIR (25Hz) or EIA (30Hz)	CCIR/EIA or HD-SDI,		DI,				
Ext 12V	9V to 28V DC						
-30°C to +60°C	-20°C to +60°C						
-40°C to +70°C	-40°C to +70°C						
110mm x 110mm x 245mm / 1.7Kg	Lens Dependent						
IP67	IP67						
Can be tripod mounted or available with mounting rail.	Night vision, Can be tripod mounted or available with mounting rail.						
Production Ready	Made to Order						

All specifications correct at time of print. Other options available on request. For more detailed specifications for each product, please contact sales@raptorphotonics.com

Compact SWIR Beacon

Raptor's SWIR Beacon is the latest component added to the company's growing range of integrated systems portfolio. It is a SWIR combat ID beacon for covertly marking blue force personnel and vehicles, from the ground or airborne. When operated it emits no visible signature and is undetectable by conventional night vision equipment.





Key Facts

- Established 2006
- Made in the UK
- Onshore US sales and Technical support
- Complete Turnkey Manufacturing
- Rapidly expanding user base includes DoD, MoD and other NATO customers.









