

OEM Options

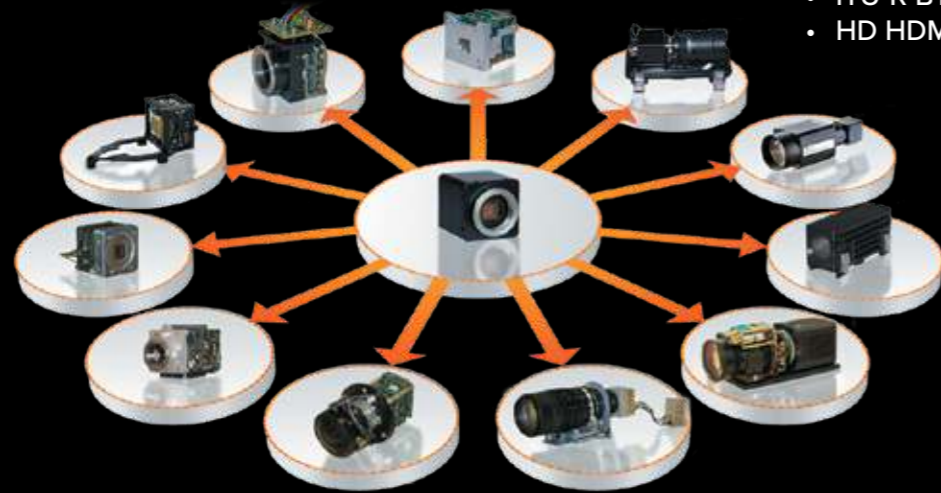
Our camera platforms provide our customers with flexible/modular solutions that meet their exact requirements. We build what you need and we also offer high quality, reliability, a very competitive price performance metric and fast delivery, making Raptor a very attractive solution for OEMs.

Sensor options:

- CCD, EMCCD, InGaAs, CMOS & Intensifier Tubes
- Monochrome, Colour
- Interline, Progressive scan, Mega Pixel, Full HD

Communication options:

- RS232
- RS485



Video output options:

- PAL
- NTSC,
- ITU-R BT.656-4
- HD HDMI

Digital output options:

- CameraLink
- GigE
- LVDS (RS644)
- USB 2.0/3.0
- Custom
- HD-SDI

Camera options:

- With or without camera housing (Mechanical re-design to customer specification)
- Remote heads
- Electronic re-design to customer specifications
- Flexible voltage supply
- Increased resistance to shock, vibrations and temperature (according to the housing specification)

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:



Leaders in digital camera solutions

EMCCD CCD SWIR



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SURVEILLANCE 2020

	SWIR	VIS-SWIR						UV, VIS, NIR	
	Owl 640	Owl 320 High Speed	Owl 640 'Mini'	Owl 640	Owl 640 Analogue	Night Owl 640	Owl 1280	Hawk 216 Analogue	Hawk 252
									
Sensor	InGaAs	InGaAs	InGaAs	InGaAs	InGaAs	InGaAs	InGaAs	CCD-216	CCD-252
Sensor Type	2/3" InGaAs	2/3" InGaAs	2/3" InGaAs	2/3" InGaAs	2/3" InGaAs	2/3" InGaAs	1" InGaAs	2/3" EMCCD	1" EMCCD
Active Pixels	640 x 512	320 x 256	640 x 512	640 x 512	640 x 512	640 x 512	1280 x 1024	769 x 288 (CCIR) / 769 x 244 (EIA)	1280 x 1024
Pixel Pitch (µm)	15 x 15	30 x 30	15 x 15	15 x 15	15 x 15	15 x 15	10 x 10	11.5 x 23 (CCIR) / 11.5 x 27 (EIA)	10.24 x 8.19
Active Area (mm)	9.6 x 7.68	9.6 x 7.68	9.6 x 7.68	9.6 x 7.68	9.6 x 7.68	9.6 x 7.68	12.8 x 10.24	8.83 x 6.62 (CCIR) / 8.83 x 6.59 (EIA)	8 x 8
Digitization (bit)	14	14	14	14	N/A	14	12	N/A	12
Readout Noise (Typical Value) LG = Low Gain HG = High Gain	HG: <30e-	HG: 202e-	LG: 174e- HG: 38e-	LG: 174e- HG: 36e-	LG: 174e- HG: 36e-	LG: 150e- HG: 16e-	LG: 160e- HG: 47e-	<1e-	EM Gain ON: <0.01e- EM Gain OFF: <60e-
Max. Full Resolution Frame Rate (Hz)	300	349	120	120	25 (CCIR) 30 (EIA)	120	60	25 (CCIR) 30 (EIA)	25/30
Peak Quantum Efficiency	>80% @ 1.5µm	>90% @ 1.3µm	>90% @ 1.3µm	>90% @ 1.3µm	>90% @ 1.3µm	>90% @ 1.3µm	>90% @ 1.3µm	>90% @ 550nm	95% @ 600nm
Spectral Response (nm)	900 - 1700	400 - 1700	400 - 1700	400 - 1700	400 - 1700	400 - 1700	400 - 1700	300 - 1100	300 - 1100
Cooling	Active	Active	None	Active	Active	Active	Active	Active, no fan	Active, no fan
Output	Camera Link	Camera Link	Camera Link	Camera Link	Analogue	Camera Link	Camera Link	Analogue	Camera Link
Lens Mount	C mount	C mount	C mount	C mount	C mount	C mount	C mount	C mount	C mount
Camera Power Consumption (Without TEC)	<4W	<6W	<2.5W	<4W	<6W	<4W	<8W	<8W	<20W
Operating Case Temperature* (°C)	-20 to 55	-20 to 55	-20 to 55	-20 to 55	-20 to 55	-20 to 55	-20 to 55	-20 to 55	-20 to 55
Dimensions (mm)	75 x 50 x 50	75 x 50 x 50	62 x 42 x 42	91 x 50 x 50	76 x 50 x 50	91 x 50 x 50	68 x 50 x 50	75 x 45 x 50	73 x 62 x 62
Weight (g)	250	250	170	282	282	250	247	230	350

All specifications correct at time of print. Other options available on request. More detailed and most recent specifications can be found in datasheets for each product on www.raptorphotonics.com.

Working with OEMs

Raptor's business model is based on volume demand from OEM customers. Understanding our customers' needs is vital when putting together a solution that matches their needs. The ability to be flexible and being able to offer a range of custom fittings means we can deliver unrivalled price performance solutions, with a pricing structure scalable with volume requirements. Our expertise includes:

- Sensors: CCD, EMCCD, InGaAs, CMOS & Intensifier Tubes
- Analogue and digital signal processing
- Digital design including PCI, USB, LVDS, CameraLink, GigE and SD-HDI
- FPGA (VHDL) development for imaging processing
- High speed analogue and digital design
- Low noise pre-amp circuit development
- High voltage and ultra fast pulse circuit design
- Embedded firmware development
- Application development in C++, C# and VB.

* Extended operating temperatures available on request.

- Mechanical and Optical design.
- Heat removal interfaces, e.g. heatsink-less conductive configurations
- Chassis mounting options
- Specific QC / testing to meet customer requirements



OEM options from board level camera to custom designs available in a range of sensors, interfaces and layouts

OEM Accreditations

Raptor's core business is targeted at the OEM market. Since our inception in 2006 we have focused on building our credentials / capabilities to meet our OEM customer needs. These include:

- Operating a quality management system, the company fully complies with the requirements of BS EN ISO 9001:2015
- Accustomed to designing to MilSpec standards including MIL-STD-810F and MIL-STD-704F
- RMAs of less than 2% – we deliver quality product
- Workmanship to class IPCa610
- ESD Compliant
- RoHS Compliant

We have also introduced our Raptor Certified Supply Chain to ensure that our suppliers conform to best practice guidelines e.g. Counterfeit goods inspections.



Key Facts

- **Established 2006.**
- **Made in the UK.**
- **Onshore US sales and technical support.**
- **Complete Turnkey manufacturing**
- **Strong Financial Performance - Financially Stable, strong growth Year on Year.**
- **Rapidly Expanding User Base. Includes DoD, MoD and other NATO customers.**