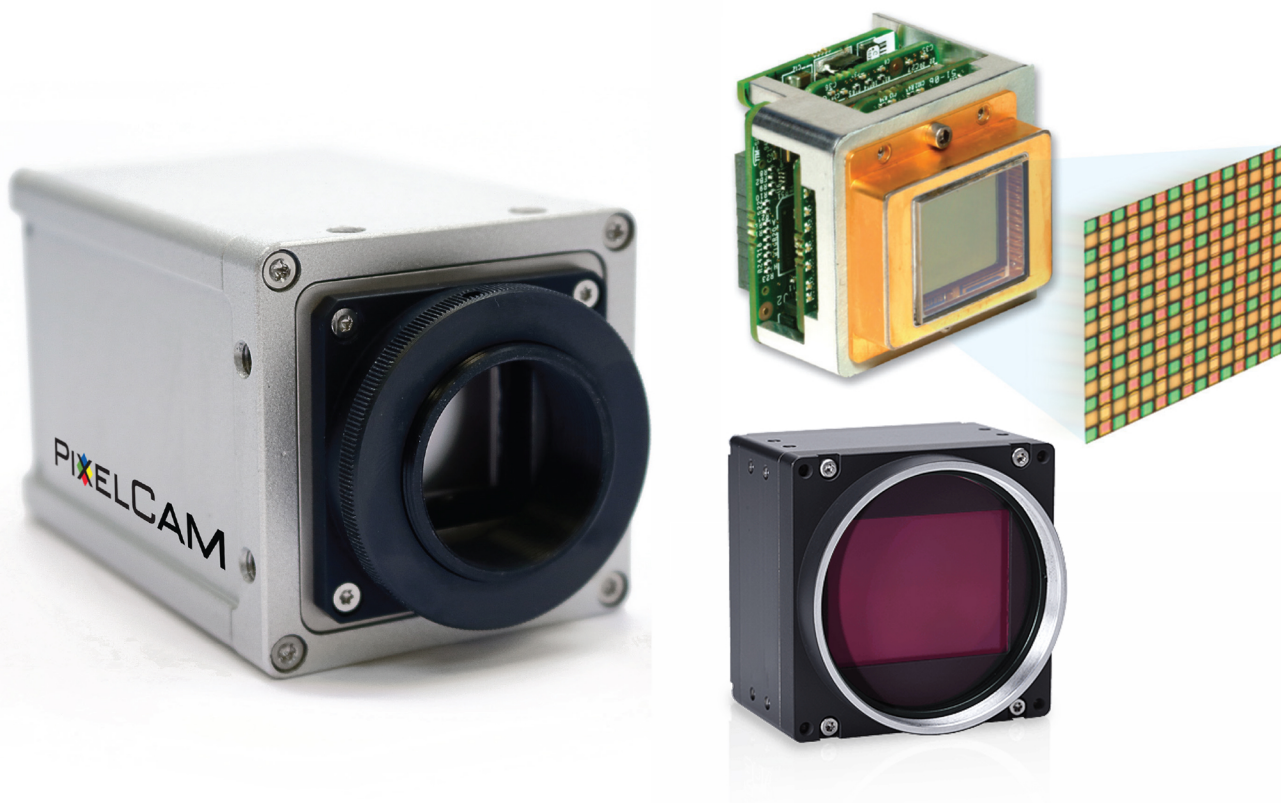




PixelCam™

OEM Multispectral Cameras

Snapshot Multispectral Imaging

PixelCam™ multispectral cameras provide live imaging of 3-9 spectral bands, off-the-shelf or custom, at video rates. Simultaneous multi-channel "snapshot" acquisition delivers rich, real-time data without scene change or pixel shift. Custom dichroic filter arrays are integrated into the focal plane array at wafer-level to create robust linear and area sensors that extract high-contrast spectral information at specific visible and infrared wavelengths. This breakthrough technology enables easy integration into handheld, mobile and aerial cameras – all with the same frame rate, size, weight and power consumption as monochrome cameras.

Summary

	4MP VIS + NIR	56MP VIS + NIR	Commercial / Scientific SWIR	Security & Defense SWIR
Spectral Response	400nm - 1000nm	400 - 1000nm	0.9 μ m - 1.7 μ m (900nm - 1700nm)	0.9 μ m - 1.7 μ m (900nm - 1700nm)
Resolution	2072 x 2072 pixels	8424 x 6032 pixels	1280 x 1024 pixels	640 x 512 pixels
Sensor	Si Interline CCD 7.4 μ m Pixel Pitch	Si Area CMOS 4.6 μ m Pixel Pitch	InGaAs 5 μ m Pixel Pitch	InGaAs 15 μ m Pixel Pitch
Filter Resolution	14.8 μ m Pixel Pitch Binned 2x2	13.8 μ m Pixel Pitch Binned 3x3	15 μ m Pixel Pitch Binned 3x3	15 μ m Pixel Pitch Binned 3x3
Spectral Bands *Custom Spectral Bands Available on Request	4 Band: RGB + NIR 450/100, 550/100, 650/100, 750LP	9 Band 410/15, 450/40, 530/40, 575/20, 610/20, 650/25, 720/40, 790/20, 850/40	4 Band 1120SP (900 - 1120nm), 1220/70, 1380/80, 1530LP	4 Band 1120SP (900 - 1120nm), 1220/70, 1380/80, 1530LP
	6 Band: RGB + 3xNIR 450/100, 550/100, 650/100, 740/60, 840/60, 940/60			
Active Area	15.2mm (H) x 15.2mm (W) 21.4mm Diagonal 4/3" Optical Format	27.75mm (H) x 37.75mm (W)	6.4mm (H) x 5.12mm (W) 8.2mm Diagonal	7.68mm (H) x 9.6mm (W)
Frame Rate (Overclocked)	17 fps at Full Resolution	23.7 fps at Full Resolution	94.4 fps at Full Resolution	120 fps at Full Resolution
Optical Interface	C-Mount	M58 x 0.75	C-Mount	C-Mount
Digital Output	GigE Vision	GigE Vision	GigE Vision	Mini Camera-Link
Dimensions (Without lens or mount)	60mm (H) x 60mm (W) x 70.8mm (D)	70mm (H) x 70mm (W) x 70mm (D)	50mm (H) x 50mm (W) x 42.7 (D)	50mm (H) x 50mm (W) x 69.4mm (D)
Weight	389 grams	380 grams	138 grams	282 grams

Applications

- Aerial mapping
- Biomedical imaging
- Machine vision
- Product screening
- Remote sensing
- Surveillance and authentication
- Unmanned systems

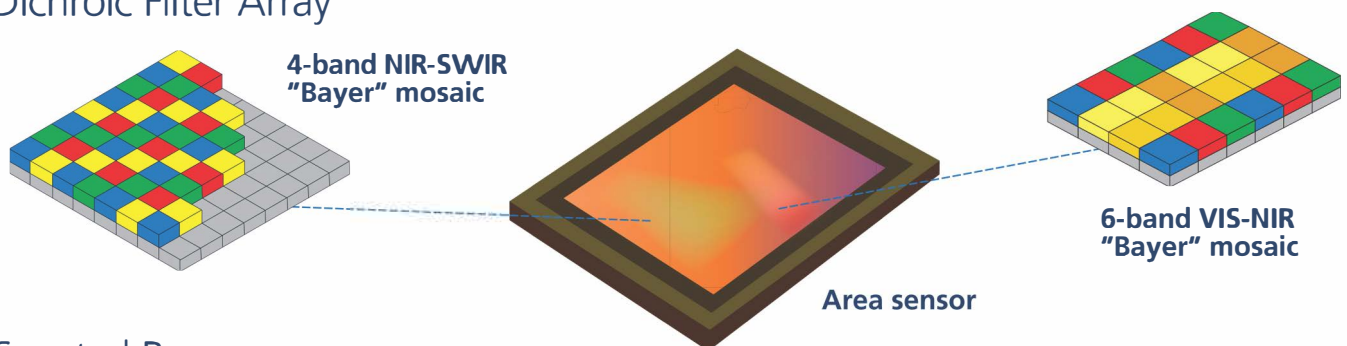
Benefits

- Simultaneous multi-band imaging
- Custom VIS-NIR-SWIR spectral bands
- Portable size, weight and power consumption
- Robust, high reliability, scalable production

OEM Customization

- Application-specific spectral bands
- Custom pixel-scale mosaic patterning
- Sensor, camera and housing options
- Mechanical and environmental requirements
- Proof-of-concept prototypes to high-volume production

Dichroic Filter Array



Spectral Response

