

PixelCam™ Multispectral Cameras



KNIGHT OPTICAL | MULTISPECTRAL CAMERAS | PIXELCAM™

PixelCam™ multispectral cameras offer live imaging of 3-9 spectral bands 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 to create robust sensors that extract high-contrast spectral information at specific wavelengths.



Benefits

- Custom VIS-NIR-SWIR Spectral Bands
- Portable Size, Weight, and Power Consumption
- Robust, High Reliability, and Scalable Production
- Simultaneous Multi-band Imaging

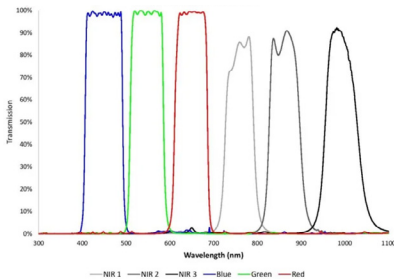
OEM Customisation

- 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

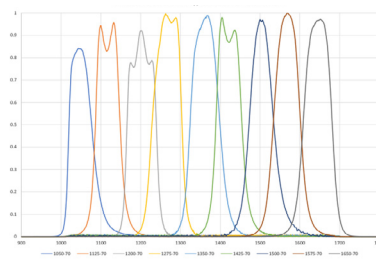
	04MCP400 (4 Band RGB+NIR) + 06MCP400 (6 Band RGB+3xNIR)	09MCP1000 (9 Band SWIR)
Spectral Response	400-1000nm	1000-1700nm
Resolution	2072 x 2072px	1280 x 1280px
Sensor	Si Interline CCD 7.4 um pitch	InGaAs Area CMOS 5.0um Pixel Pitch
Spectral Bands	4 Band: RGB + NIR 450/100, 550/100, 650/100, 750LP 6 Band: RGB + 3xNIR 450/100, 550/100, 650/100, 740/60, 840/60, 940/60	9 Band: SWIR 1050/70, 1125/70, 1200/70, 1275/70, 1350/70, 1425/70, 1500/70, 1575/70, 1650/70
Active Area	15.2mm (H) x 15.2mm (V), 21.4mm (Diagonal)	6.40mm (H) x 5.12mm (W)
Frame Rate Overclocked	15 fps at full resolution	> 90 fps at full resolution
Optical Interface	F Mount	C Mount
Digital Output	GigE Vision	GigE Vision
Dimensions (no lens or mount)	60mm (H) x 60mm (W) x 70.8 (D)	50mm (H) x 50mm (W) x 42.5 (D)
Weight	389g	139g

Spectral Response

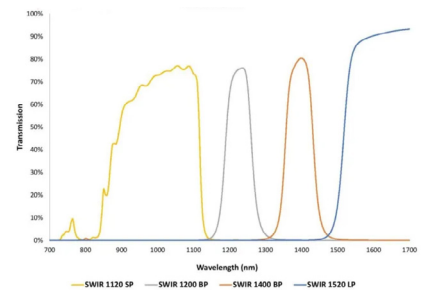
PixelCam™ 6-Band - RGB + 3xNIR



PixelCam™ 9-Band - VIS + NIR



PixelCam™ 4-Band - NIR + SWIR



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