

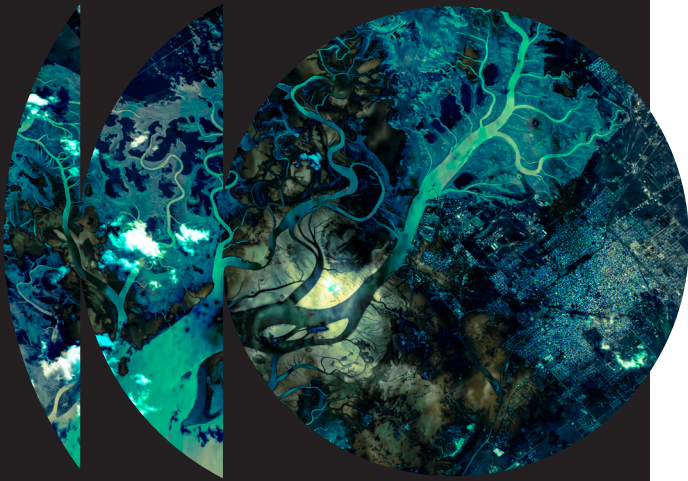


# PixelCam™ OEM Multispectral Cameras



## 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. New software enables recording, overlaying, and simultaneous viewing of different spectral bands. Users can overlay NIR images onto a color image, control intensity thresholds, and record image data.



## At a Glance

### VIS + NIR

**Spectral response:** 400-1000 nm

**Resolution:** 2 MP: 1600 x 1200 px;

4 MP: 2048 x 2048 px

**Sensor:** Si interline CCD; 7.4  $\mu\text{m}$  pixel pitch

**Spectral bands (examples):** \*4-band: RGB + NIR (760 nm long-wave pass)

\*6-band: RGB + 3xNIR (740/60 nm, 840/60 nm, 940/60 nm)

**Active area:** 4 MP: 15.15 mm (H) x 15.15 mm (V), 21.43 mm (diagonal)

**Frame rate overlocked:** 4 MP: 15 fps at full resolution

**Optical interface:** C mount

**Digital output:** GigE Vision®

**Dimensions (no lens or mount):** 4 MP: 52.5 mm (H) x 52.5 mm (W) x 79.4 mm (D); 2.07" (H) x 2.07" (W) x 3.13" (D)

**Weight:** 4 MP: 377 g (0.74 lb.)

*\*Custom spectral bands & mosaics available on request.*

## Benefits

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

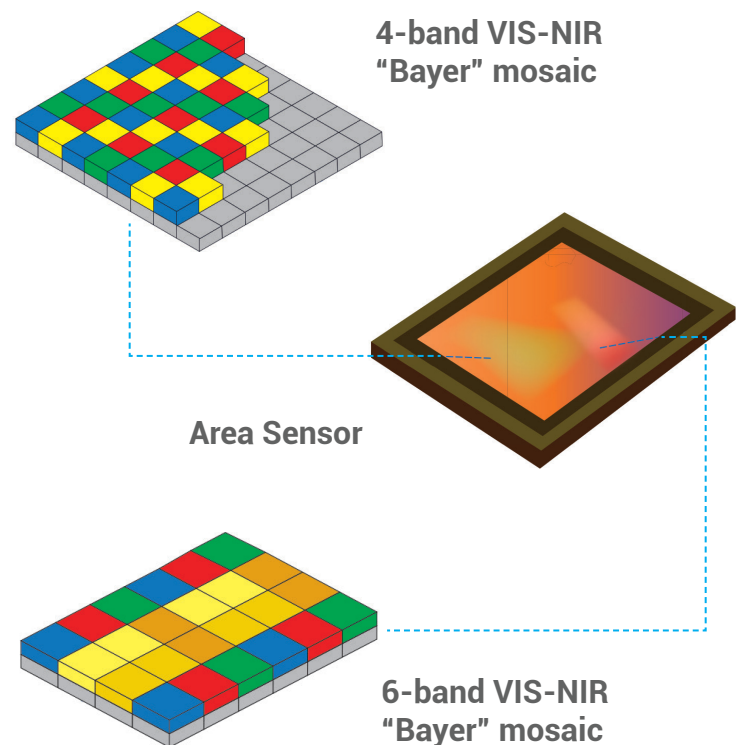
## OEM Customization

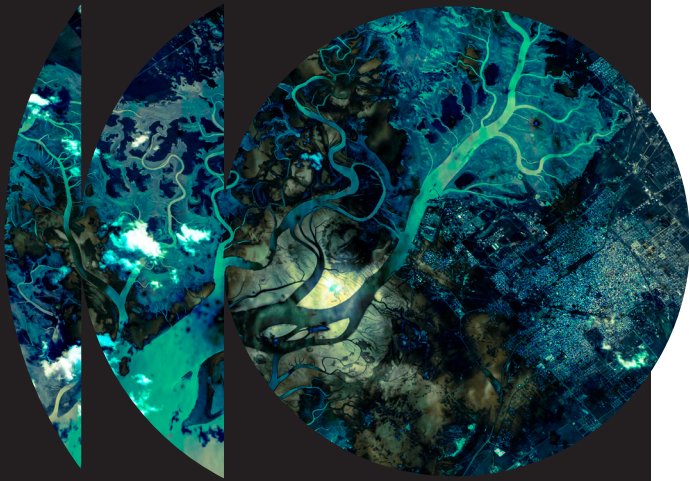
- Application-specific spectral bands
- Custom pixel-scale mosaic patterning
- Sensor, camera and housing options
- Mechanical and environmental requirements
- Proof-of-concept prototypes to high-volume production

## Applications

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

## Dichroic Filter Array





## At a Glance

### NIR + SWIR

**Spectral response:** 700-1700 nm

**Resolution:** 640 x 512 px

**Sensor:** InGaAs; 25  $\mu\text{m}$  pixel pitch

**Spectral bands (examples):** \*4-band:  
900/400 nm, 1200/100 nm, 1400/100 nm,  
1650/100 nm)

\*3-band: 900/400 nm, 1350/200 nm,  
1625/150 nm

**Active area:** 16.0 mm (H) x 12.8 mm (W) x  
20.5 mm (diagonal)

**Frame rate overlocked:** 30 fps

**Optical interface:** Ni-42

**Digital output:** Camera Link®, 14 bit

**Dimensions (no lens or mount):** 52.1 mm (H) x  
52.1 mm (W) x 64.7 mm (D); 2.1" (H) x 2.1" (W)  
x 2.6" (D)

**Weight:** 235 g (0.52 lb.)

*\*Custom spectral bands & mosaics available  
on request.*

## Spectral Response

