

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

| | VIS+NIR | NIR+SWIR |
|---|---|--|
| Spectral response | 400-1000 nm | 700-1700 nm |
| Resolution | 4 MP: 2048 x 2048 px 16 MP: 4864 x 3232 px | 640 x 512 px |
| Sensor | Si interline CCD 7.4 µm pixel pitch | InGaAs 25 µm pixel pitch |
| Spectral bands <i>*Custom spectral bands & mosaics available on request</i> | *6-band: RGB + 3xNIR (740/60 nm, 840/60 nm, 940/60 nm) *9-band: VIS + NIR (410, 450, 530, 575, 610, 650, 720, 790, 850 nm) | *4-band: 900/400 nm, 1200/100 nm, 1400/100 nm, 1650/100 nm |
| Active area | 4 MP: 15.15 mm (H) x 15.15 mm (V), 21.43 mm (diagonal) 16 MP: 36.0 mm (H) x 23.9 mm (V), 43.2 mm (diagonal) | 16.0 mm (H) x 12.8 mm (V), 20.5 mm (diagonal) |
| Frame rate overlocked | 4 MP: 15 fps at full resolution 16 MP: 16 fps at full resolution | 30 fps |
| Optical interface | 4 MP: C mount 16 MP: F mount | Ni-42 |
| Digital output | 4 MP: GigE Vision® 16 MP: Camera Link® | Camera Link®, 14 bit |
| Dimensions (no lens or mount) | 4 MP: 52.5 mm (H) x 52.5 mm (W) x 79.4 mm (D) 16 MP: 91 mm (H) x 91 mm (W) x 104 mm (D) | 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 | 4 MP: 377 g 16 MP: 414 g | 235 g (0.52 lb.) |

Benefits

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

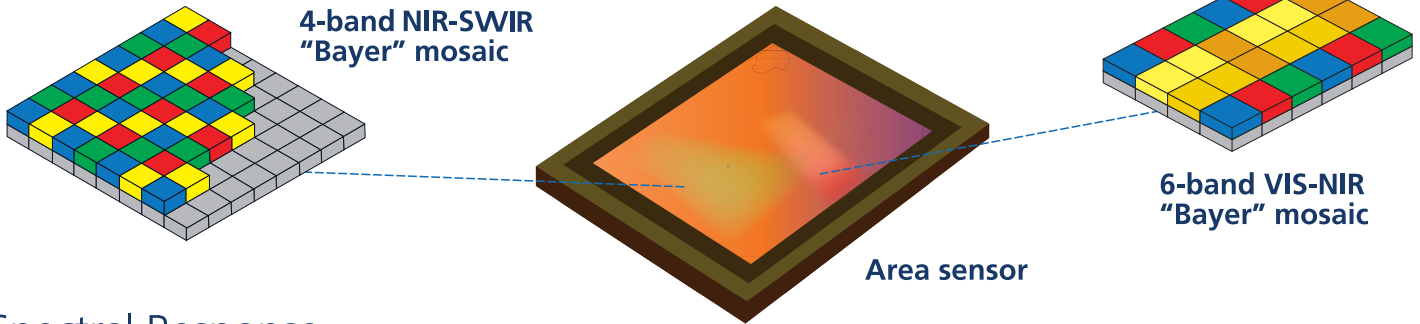
OEM Customization

- 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

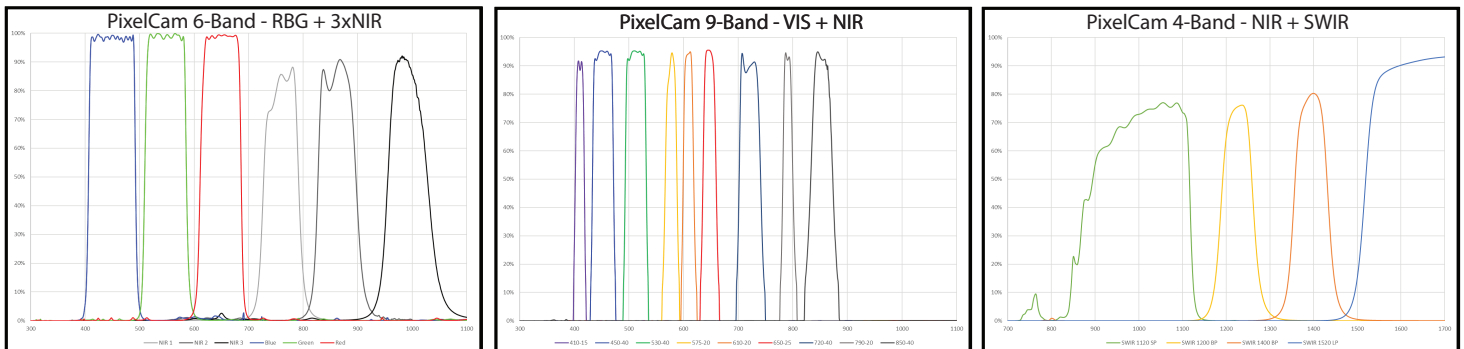
Applications

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

Dichroic Filter Array



Spectral Response



info@salvotechnologies.com · sales@salvotechnologies.com

US +1 888-725-8605

+1 727-544-3736

www.salvotechnologies.com · www.salvocoatings.com

10781 75th St N

Largo, FL 33777