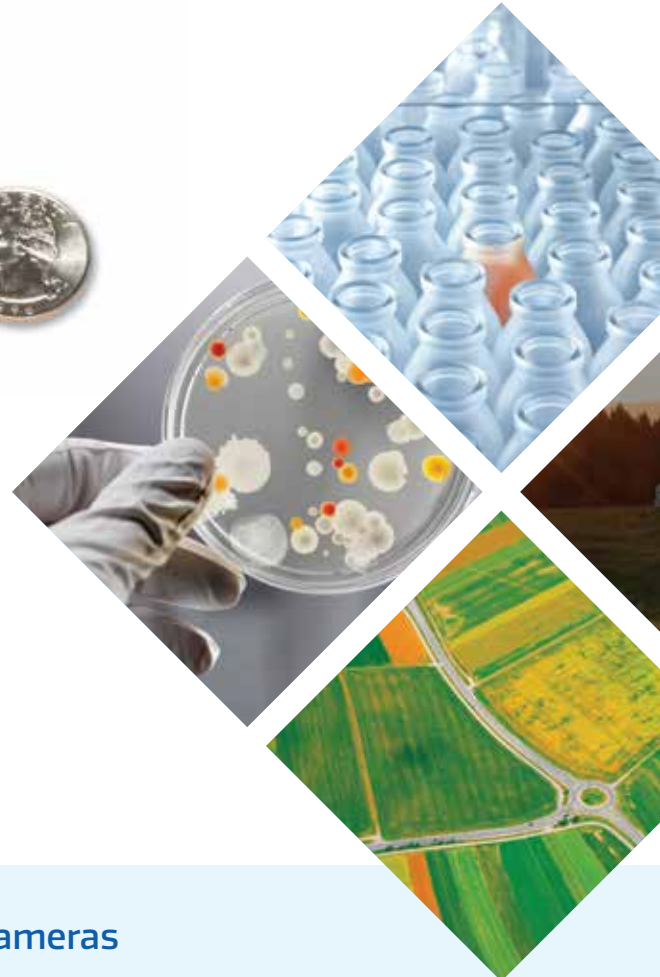


PixelCam™

OEM Multispectral Cameras

PIXELTEQ

micro-patterned filters | sensors | cameras



Compact OEM multispectral cameras

PixelCam multispectral cameras provide 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 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.

PixelCam cameras are fabricated to user-defined wavelengths. The unique combination of high-speed multi-band imaging and small form factor supports a variety of dedicated applications including agriculture, biomedical, machine vision, surveillance & authentication, and unmanned systems. Customized OEM multispectral camera modules are engineered from the wafer-level to deliver scalable volume production and easy integration into handheld and portable devices. Standard PixelCam camera modules are available for 3- and 4-band SWIR (Short Wave Infrared), delivering intuitive colored infrared imaging.

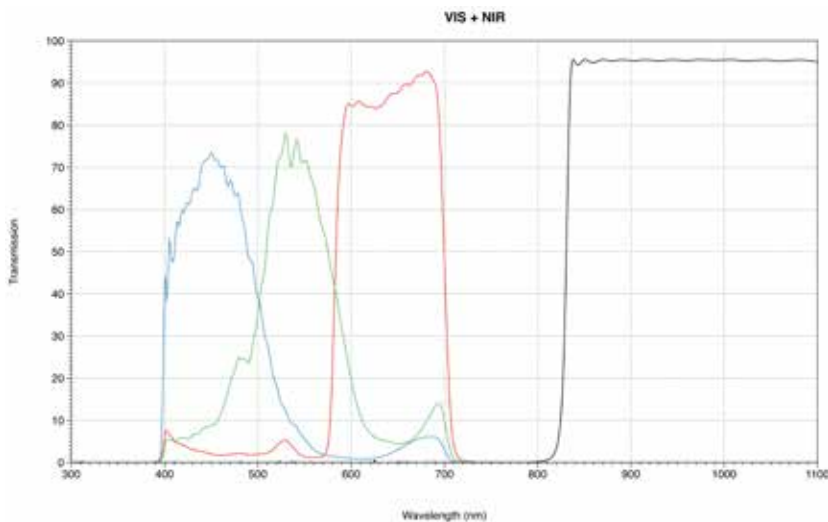
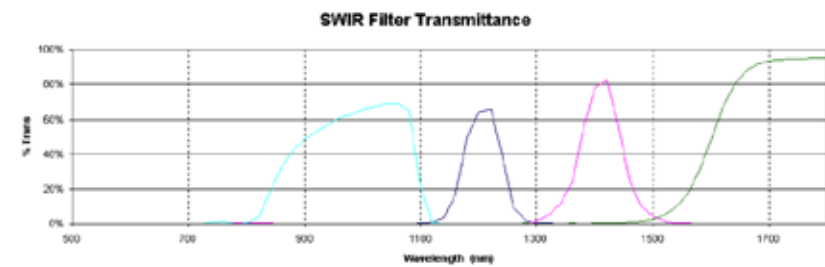


pixelteq.com

Summary

| | VIS-NIR | NIR-SWIR |
|-------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Spectral response | 400-1000nm | 700-1700nm |
| Resolution | 1920 x 1080 px | 640 x 512 px |
| Sensor | Interline CCD, 7.4µm pixel, binned to 14.8µm pitch | InGaAs 15µm pixel pitch, |
| Spectral bands (examples) | RGB + NIR (830nm Long-Wave Pass) | 4-band: 900-400, 1200-100, 1400-100, 1650-100nm 3-band: 900-400, 1350-200, 1625-150nm <small>custom spectral bands & mosaics available on request</small> |
| Active area | 14.208mm x 7.992mm (16.3mm diagonal) | 16.0 x 12.8mm (20.5mm diagonal) |
| Frame rate (continuous mode) | 33fps | 30fps |
| Optical interface | C mount | C mount |
| Digital output | CameraLink, 12 bit | CameraLink, 14 bit |
| Dimensions (no lens or mount) | 46 H x 46 W x 43 mm D (1.8" H x 1.8" W x 1.7" D) | 52.1 H x 52.1 W x 64.7 mm D (2.1" H x 2.1" W x 2.6" D) |
| Weight | 160g | 235g |

Spectral response



Product specifications and data subject to change without notice.

Benefits

- Simultaneous multi-band imaging
- Custom VIS-NIR-SWIR spectral bands
- Portable size, weight & power consumption
- 30 frames/second snapshot acquisition
- Robust, high reliability, scalable production

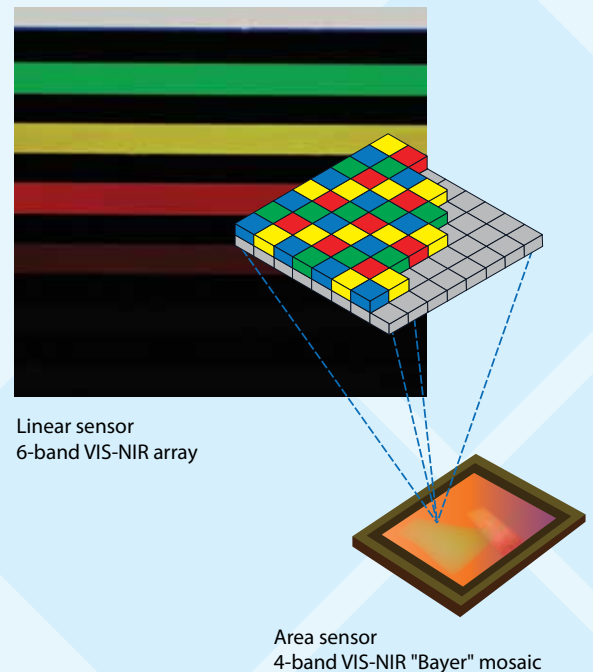
OEM Customization

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

Applications

- Aerial mapping
- Biomedical imaging
- Machine vision
- Product screening
- Remote sensing
- Surveillance & authentication
- Unmanned systems
- Water quality measurement

Dichroic Filter Array



Contact an Application Engineer to discuss your specific application.

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