

Multispectral Camera with RGB and NIR

Our line of multispectral cameras are USB3 Vision-compliant offering wide software compatibility. The cameras incorporate high performance CMOS sensors from CMOSIS, which have been modified with our proprietary pixelated filter array technology. With the modified sensors, these cameras simultaneously capture images at 4 distinct bands at the frame rate of the camera. There is no need to add filters, filter wheels, or tunable filters in the optical path. All of the spectral information is captured simultaneously by the modified sensor. Our multispectral camera with RGB and NIR bands has 4 bands of spectral discrimination. The first three bands are sensitive to red, green, and blue, respectively. The fourth band is sensitive to near-infrared light (NIR). The multispectral camera with RGB and NIR bands greatly outperforms competitors products based on dye-based color filter arrays. The level of cross-talk between bands is much lower, especially between the NIR and the color bands. Power is supplied by the USB3 cable simplifying setup. Compact and light, these cameras are well-suited for a variety of applications where color and NIR imaging must be performed simultaneously.



FEATURES:

- Snapshot Camera - Capture all bands simultaneously
- High Performance CMOS Sensor
- High Frame Rates
- Red, Green, Blue with NIR or Mono option
- USB3 Vision compliant
- Small and Lightweight

SPECIFICATIONS:

- Lens Mount: C-mount
- Pixels Per Channel 512 X 512 (pixels x pixels)
- Interface USB3 Vision
- Pixel Size (H X V) 5.5 X 5.5 ($\mu\text{m} \times \mu\text{m}$)
- Maximum Bit Depth 12 bit
- Maximum QE 65 %
- Shutter Global Shutter
- Dynamic Range 60 dB
- Sensor Type CMOS Sensor
- Dark Noise 13 e⁻ (RMS)
- Capture Method Area Snapshot
- Dark Current 125 e⁻/s (25 degrees C)
- Sensor Model CMV4000
- Power Requirement USB 3.0 interface
- Sensor Format 1 inch
- Width 52 mm
- Sensor Size 4 MP
- Height 46 mm
- Number of Channels 4 bands
- Depth 53 mm

