

Multispectral Camera for Precision Agriculture

Our line of multispectral cameras are USB3 Vision-compliant offering outstanding software compatibility. The cameras incorporate high performance CMOS sensors that are modified with Spectral Devices proprietary pixelated filter array technology. These versatile cameras simultaneously capture images at up to 16 distinct bands at the frame rate of the camera. No need for additional 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 for Precision Agriculture has 4 bands of spectral discrimination. The first band (580 nm) represents an image characteristic of live vegetation. The second band (660 nm) represents the NDVI red image. The third band (735 nm) represents the 'red edge' image. The fourth band (820 nm) represents the NDVI NIR image. With these four images a number of analyses can be performed including NDVI and SAVI. Power is supplied through the USB3 cable simplifying setup. Compact and light, these cameras are well-suited for a variety of agricultural applications where vegetation measurements are performed.



FEATURES:

- Snapshot Operation
- High Frame Rate
- Compact and Lightweight
- Capture Bands Simultaneously
- High Performance CMOS Sensor
- Low Power Requirement
- 580 nm, 660 nm, 735 nm & 820 nm
- USB3 Vision & GenICam Compliant
- 28 mounting points

SPECIFICATIONS:

- Lens Mount: C-mount
- Interface: USB3 Vision
- Maximum Bit Depth: 12 bit
- Shutter: Global Shutter
- Sensor Type: CMOS
- Capture Method: Area
- Sensor Model: CMV4000
- Sensor Format: 1-inch
- Number of Channels: 4 bands
- Pixels Per Channel: 512 x 512
- Pixel Size (H x V): 5.5 x 5.5 (µm)
- Dynamic Range: 60 dB
- Dark Noise: 13 e⁻ (RMS)
- Dark Current: 125 e⁻/s (25 ° C)
- Power Requirement: USB 3.0 interface
- Size: 56 mm x 50 mm x 52 mm (WxHxD)
- Weight: 200 g
- Case: 6061 Aluminium
- 12 x ¼-20 mounting points
- 12 x M3 mounting points
- 4 x 4-40 mounting points
- Compatible with 30 mm cage optics

