

# CMS4 Series

## 4Mpx Multispectral Cameras

SILIOS Technologies' CMS4 Sensors and Cameras are based on the *COLOR-SHADES*® pixelated filter technology.

These snapshot multispectral cameras capture 4.2Mpx raw images made of nine 682x682 pixels spectral sub-images.



### CMS4-C (430-700nm)

#### COLOR dedicated

##### Applications

- Color measurements
- Color process control
- Waste sorting (papers, plastic bottles, ...)
- Fruits & vegetables aspect control

...

### CMS4-V (550-830nm)

#### VEGETATION dedicated

##### Applications

- Vegetation index measurement (NDVI, MCARI, MSR, SAVI, TVI, ...)
- Field mapping for modern agriculture monitoring
- Fertilization and irrigation optimization
- Environmental monitoring

...

### CMS4-S (650-930nm)

#### SECURITY dedicated

##### Applications

- Surveillance
- Authentication
- Forensics
- Oximetry
- Defense

...



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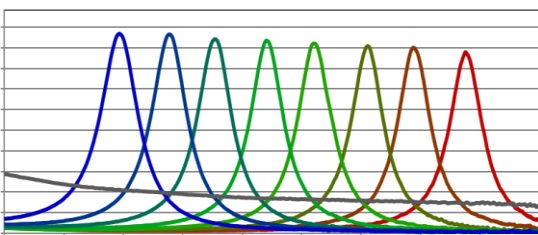
# CMS4 Series

## 4Mpx Multispectral Cameras

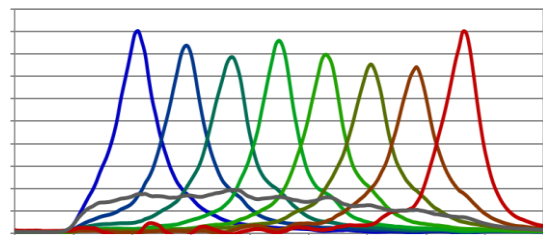


	Wavelength range (nm)
CMS4-C	430-700 nm
CMS4-V	550-830 nm
CMS4-S	650-930 nm

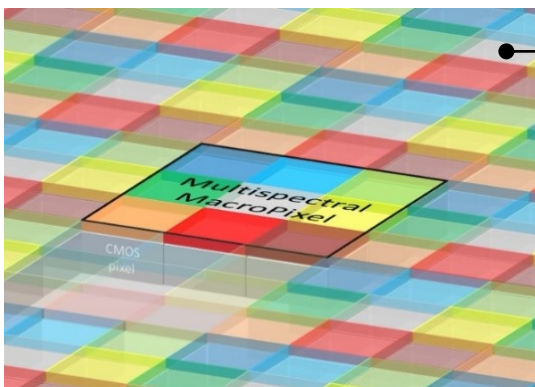
	Camera
Number of Bands	9 (8 colors + 1 B&W)
Bandwidth (FWHM)	30 to 50 nm
Imager Type	CMOS sensor
Spatial Resolution	2048 x 2048 full picture (4.2 Mpx)
Frame Rate	Camera : 65 FPS (10 bits) / COLOR SHADES Lab : 20 FPS (10 bits)
Pixel Pitch	5.5 microns
Bit Depth	10
Interfaces	USB3.0



Typical transmission bands (filter)...

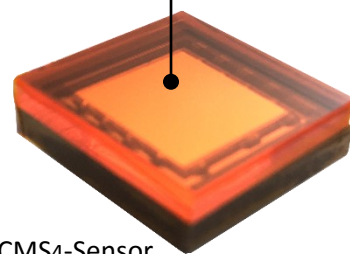


... corresponding typical QE (sensor)



Pixelated Multispectral Filter

Hybrid assembly



CMS4-Sensor



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