

CMS : MULTI-SPECTRAL CAMERAS

COLOR SHADES® Technology inside



SILIOS Technologies' CMS-Cameras are based on the *COLOR SHADES*® multispectral technology. The C, V and S ranges of cameras are delivered in snapshot configuration. The output signal is built of 8 interleaved colored pictures plus 1 wideband picture, over specific wavelength ranges, to address a wide spectrum of applications.



CMS-C (430-700nm)

COLOR dedicated

Applications

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

CMS-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
- ...

CMS-S (650-930nm)

SECURITY dedicated

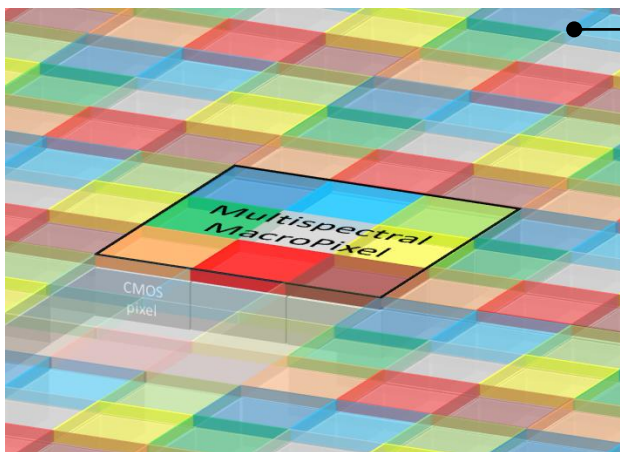
Applications

- Intrusion detection
- Authentication
- Forensics
- Rescue
- Defense
- ...

Specifications

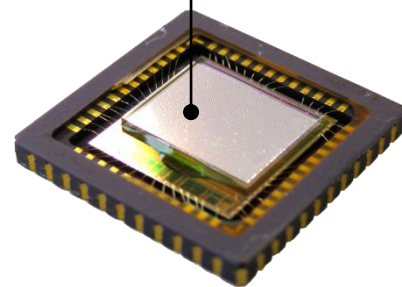
| | Wavelength range (nm) |
|-------|-----------------------|
| CMS-C | 430-700 nm |
| CMS-V | 550-830 nm |
| CMS-S | 650-930 nm |

| | Camera |
|--------------------------|------------------------|
| Number of Bands | 9 (8 colors + 1 B&W) |
| Average Bandwidth (FWHM) | 40 nm |
| Imager Type | CMOS sensor |
| Spatial Resolution | 1280x1024 full picture |
| Frame Rate | up to 60 full frame/s |
| Pixel Pitch | 5.3 microns |
| Bit Depth | 10 |
| IO port | USB3.0 / GigE |

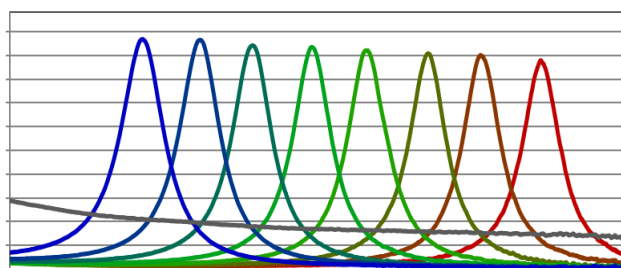


Pixelated Multispectral Filter

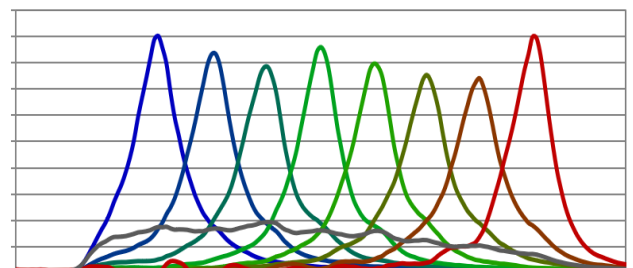
Hybrid assembly



CMS-Sensor



Typical transmission bands (filter)...



... and their corresponding typical QE (sensor)

COLOR SHADES®



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