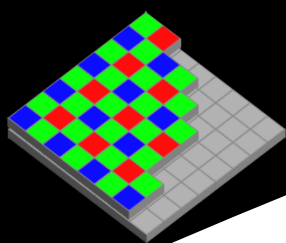
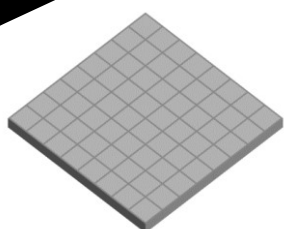


Custom Sensors & Cameras

For Multispectral Imaging



RGB Sensors & Cameras are made by deposition of 3 different "color filters" Red, Green, Blue on monochrome sensors in the format of a **BAYER MATRIX** in order to produce colored images.

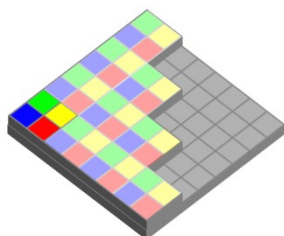


Standard imager
Resolution : $N \times M$

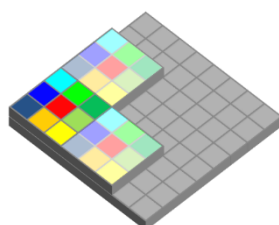
SILIOS' **COLOR SHADES®** Technology allows to generate pixelated filters with any organization of pixels (snapshot or push-broom configuration) and with any wavelength from VIS to SWIR.

This custom pixelated filter is aligned and assembled onto the commercial monochrome imager (hybridization) to generate a custom multispectral VIS/NIR/SWIR sensor.

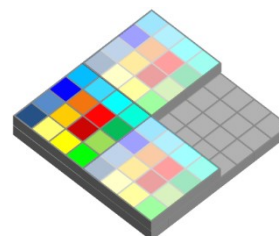
SNAP SHOT



Ex: 4 interleaved images
Resolution : $N/2 \times M/2$

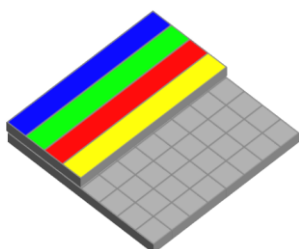


Ex: 9 interleaved images
Resolution : $N/3 \times M/3$



Ex: 16 interleaved images
Resolution : $N/4 \times M/4$

PUSH BROOM



Ex: 4 interleaved spectral lines
for push broom camera system

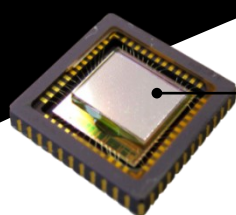


SILIOS Technologies
ZI Peynier-Rousset
Rue Gaston Imbert prolongée
13790 Peynier (France)

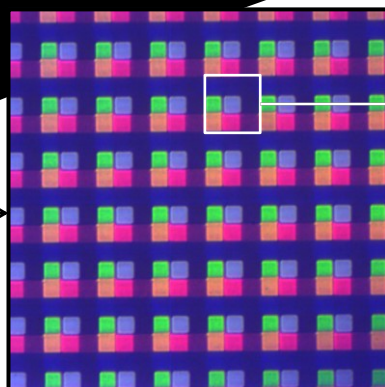
Tel : +33 (0)4 42 53 89 60
Fax : +33 (0)4 42 53 89 59
Email : contact@silios.fr
www.silios.com

Custom Sensors & Cameras

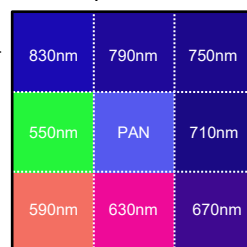
For Multispectral Imaging



Multi-spectral Sensor



Macro-pixel



5.3 microns

Example 1

Spectral characteristics :

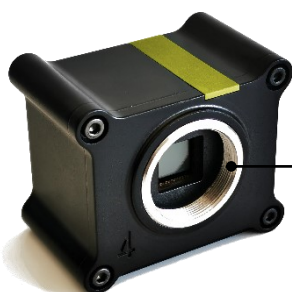
Resolution :

Pixel pitch :

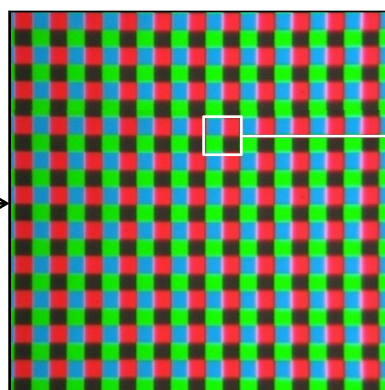
8 bands in the range [550-830nm] + 1 panchromatic

1.3 Mpx (1280x1024)

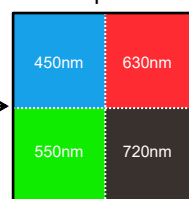
5.3 microns



Multi-spectral Camera



Macro-pixel



5.5 microns

Example 2

Spectral characteristics :

Resolution :

Pixel pitch :

4 bands in the range [450-720nm] (Blue, Green, Red, NIR)

4.2 Mpx (1280x1024)

5.5 microns



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