SILIOS TECHNOLOGIES

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The MICRO-OPTICS SUPPLIER

# About us

**SILIOS Technologies**
Domaine : micro-optique
Fondée en 2001
8 personnes à ROUSSET (Aix-en-Provence)

Essaimage de :

**Ion Beam Services**
Domaine : semi conducteurs
Fondée en 1987
60 personnes à ROUSSET (Aix-en-Provence)
10 personnes à BATHGATE (Scotland)

# Clean Room Virtual Tour

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**Area :** 600 m²

**Class :** 100 down to 1 (FS209)

5 down to 3 (ISO)

# *COLOR SHADES®* technology

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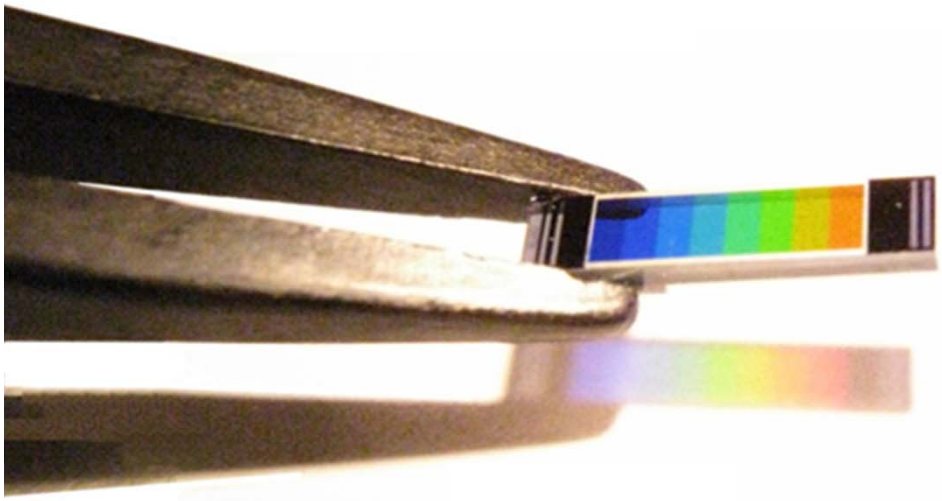
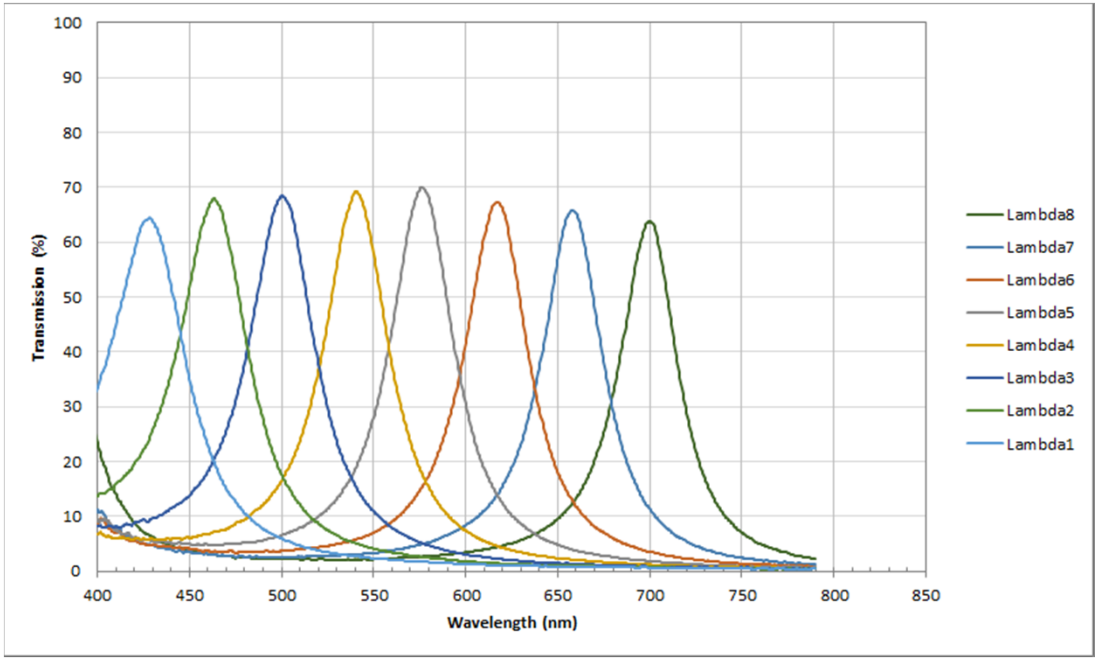
*COLOR SHADES®*
by SILIOS TECHNOLOGIES



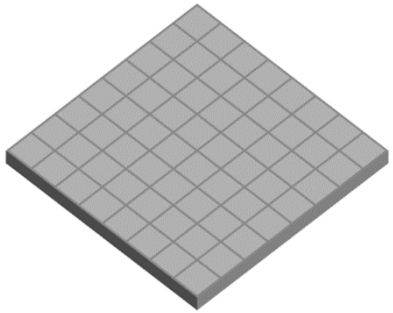
**<u>Multispectral Filters Manufacturing Technology</u> for the VISIBLE & NIR Domain (between 400nm and 1000nm).**

**High Degree of Freedom in the chip geometry.**

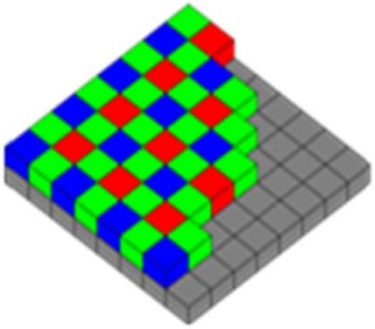
| | |
|---|---|
| **Tmax :** | **40% to 70%** |
| **FWHM :** | **20nm à 40nm** |
| **Max Spectral Range :** | **300nm (shiftable)** |



# Pixelated Filter (Custom Bayer Matrix)



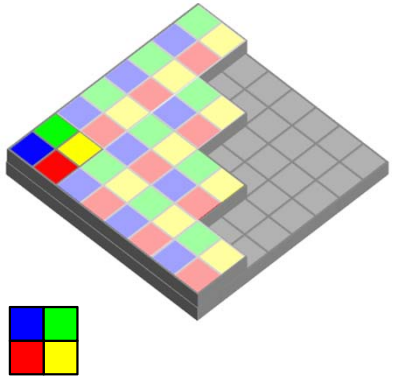
Monochrome standard imager
Resolution : N x M



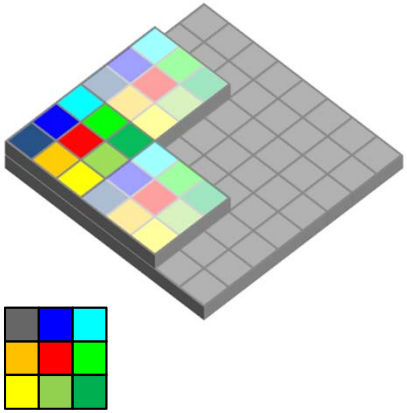
Standard RGB imager
Resolution : N x M
(after demosaicing)

**Regular Color Imaging (RGB).**

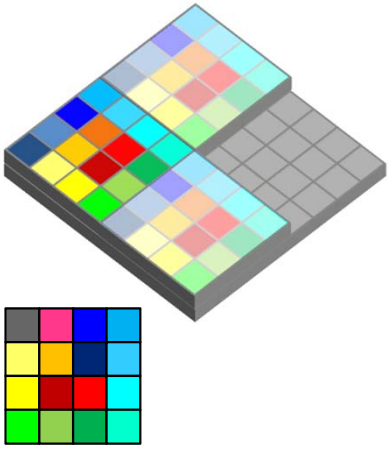
**SILIOS multispectral approach : filtering at the pixel scale**



4 interleaved images
Resolution : N/2 x M/2



9 interleaved images
Resolution : N/3 x M/3



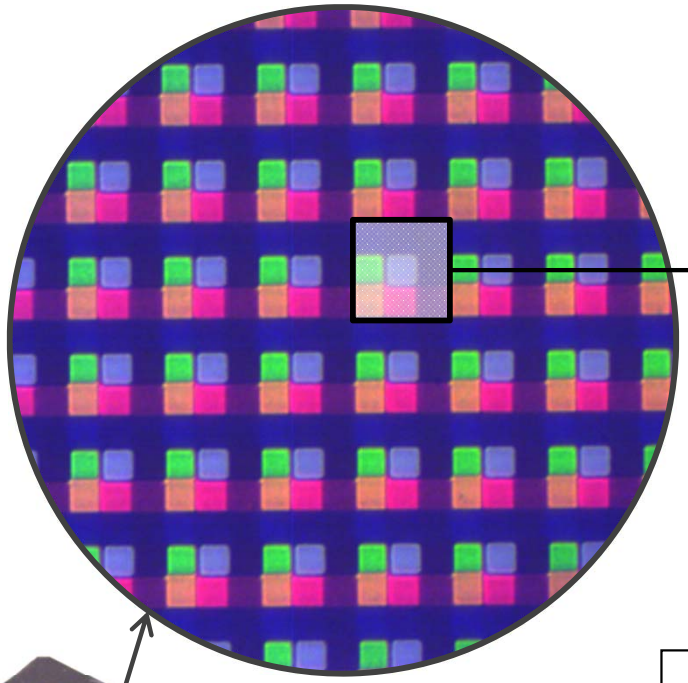
16 interleaved images
Resolution : N/4 x M/4

**Multispectral Imaging.**

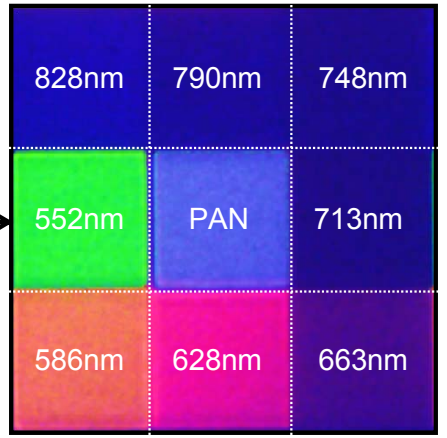
**Supply of a set of 4, 9 or 16 sub-images filtered @ different λ.**

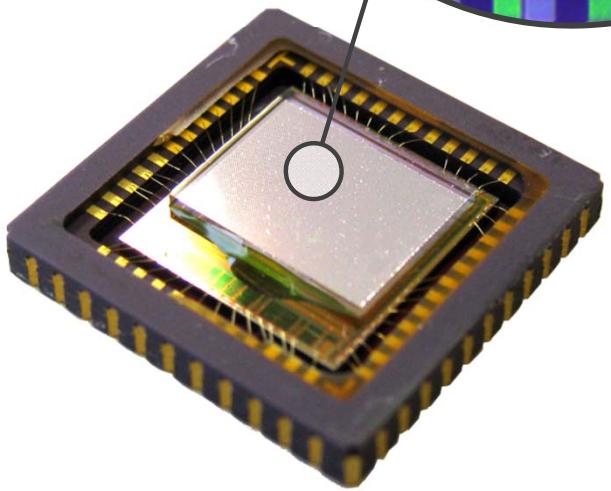
**Custom Bayer Matrix**

# 2D Multispectral Sensor

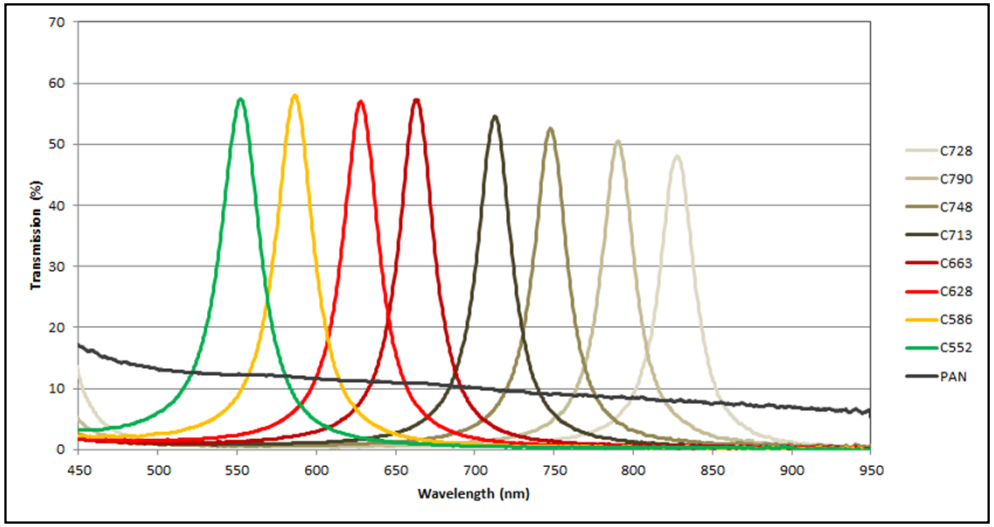


Macro-pixel



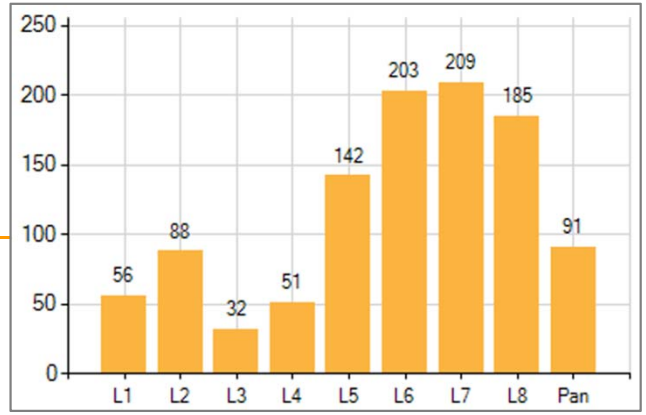
CMS multispectral Sensor
(e2V Ruby based)



# Data retrieved from the raw image

Raw image

False color image




Macro-pixel spectrum

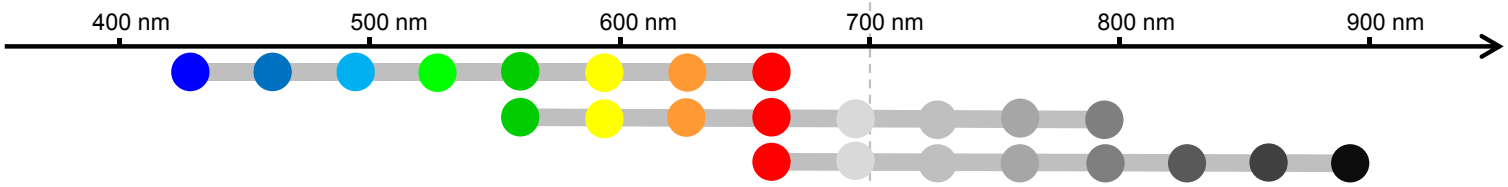
# The CMS Camera Range

## 8 colors + 1 B&W

**CMS-C** (400-700nm)
**COLOR** dedicated

**CMS-V** (550-800nm)
**VEGETATION** dedicated

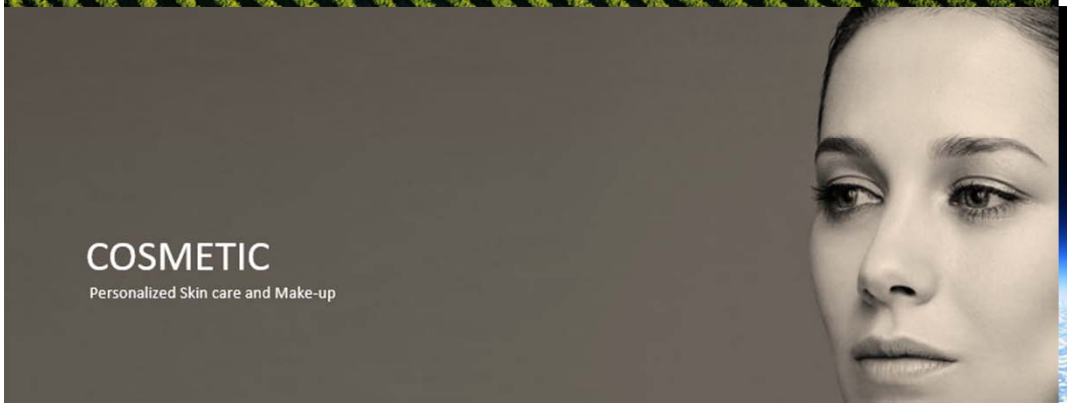
**CMS-S** (650-900nm)
**SECURITY** dedicated




**Visible** | **Near infra-red**

# Applications



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