CUSTOM BAYER MATRICES FOR MULTI-SPECTRAL IMAGING

Standard **BAYER MATRIX** allows to produce colored images with 3 different “color filters” Red, Green, Blue.

SILIOS Technologies’ Custom **COLOR SHADES® MATRIX FILTERS** (pixelated filters) allow to generate 4, 9 or 16 different colored images.

The pixelated filter is aligned and assembled onto the commercial imager (hybridization).

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

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

- **16 interleaved images**
  - Resolution: $N/4 \times M/4$
**Example 1**

Spectral characteristics: 8 bands in the range [550-800nm] + 1 panchromatic
Resolution: 1.3 Mp (1280x1024)
Pixel pitch: 5.3 microns

**Example 2**

Spectral characteristics: 4 bands in the range [450-750nm] (Blue, Green, Red, NIR)
Resolution: 1.3 Mp (1280x1024)
Pixel pitch: 5.3 microns