

# Open the Door to Smarter Color Imaging



## KEY BENEFITS

- » Sensor size – 4096 pixels, 10µm, Monoline RGB pattern sensor
- » Interface – Camera Link, LVDS
- » Mechanics – compact and accurate
- » Excellent dynamic range – 67dB
- » Data rate – up to 60 MHz (scalable)
- » Flat field correction
- » White balance correction
- » Color space correction
- » Bit depth – 8, 10 or 12 bit, serial RGB, 8 bits parallel RGB
- » High-sensitivity CCD sensor
- » Fully configurable by the user with CommCam software

## TYPICAL APPLICATIONS

- » Web inspection – printing, ceramic...
- » Parts inspection or sorting – labels, plastics, minerals, wood, waste management/recycling
- » Surface inspection – PCB, film scanning, document scanning



The Teledyne e2v AViVA SC2 is the right choice for those looking for a cost-effective color line scan camera. This camera is able to work up to 12 bits, with dedicated electronics that offer an excellent dynamic range. The camera benefits from all the features that made the AViVA family a success, whilst integrating flat field correction to compensate for lens and light source non-uniformities. It includes contrast expansion functions and embeds balance and color space correction.

Teledyne e2v manages the camera's entire manufacturing process; from sensor to the camera. Teledyne e2v's imaging manufacturing process guarantees excellent PRNU values, a significant element of differentiation from our competitors.

## DETAILED SPECIFICATION

### SENSOR CHARACTERISTICS AT MAXIMUM PIXEL RATE

Resolution	pixels	4096 or 1365 x RGB pattern
Pixel size (square)	µm	10
Maximum line rate	kHz	14
Anti-blooming		x 100

### FUNCTIONALITIES (PROGRAMMABLE BY CONTROL INTERFACE)

Gain	-2 to 28dB (0.035dB Steps)
Offset (contrast expansion)	On all the dynamic
Exposure time	Up to 32 ms
Clock selection	20 to 60 MHz
Trigger mode	Free run, external trigger
Flat field correction	Auto, manual
White balance	Auto, manual
Color correction	Coefficient input
Regulatory	RoHS, CE and FCC compliant

### RADIOMETRIC PERFORMANCE AT MAXIMUM PIXEL RATE

Bit depth	bits	8, 10 or 12 in serial RGB 8 in parallel RGB
Spectral range	nm	400-700
Non-linearity	%	< 1
Dynamic Range	dB	66

### MECHANICAL AND ELECTRICAL INTERFACE

Size (w x h x l)	mm	56 x 60 x 40.1
Optional Lens mount		F, T2, M42 x 1
Sensor alignment	µm	better than ±50
Power supply	V	single 12 to 24
Power dissipation	W	< 7
Operating temperature	°C	0 to 65 (front face)
Storage temperature	°C	-40 to 75

### CONNECTORS

Power	HR10 6-pin
Control & data: Camera Link LVDS	MDR 26-pin D-SubHD 44-pin