

Come into a Smarter Imaging World



KEY BENEFITS

- » Sensor range – 512 to 4096 pixels, 10µm or 14µm
- » Interface – Camera Link, LVDS
- » Mechanics – compact and accurate
- » Excellent dynamic range – 67dB
- » Data rate – up to 60 MHz (scalable)
- » Flat field correction
- » Bit depth – 8, 10 or 12 bits
- » High sensitivity CCD sensor
- » Fully configurable by the user with CommCam software

TYPICAL APPLICATIONS

- » Web inspection – printing, textile, paper...
- » Parts inspection or sorting – food, pharma, container...
- » Surface inspection – semiconductor, PCB, DVD, flat panel display...
- » OCR and barcode reading – document scanning, postal sorting...
- » 3D metrology



The Teledyne e2v AViVA SM2 takes advantage of all the features that made the AViVA M2 a success, but integrates flat field correction to compensate for lens and light source non-uniformities.

Teledyne e2v manages the camera's entire manufacturing process; from sensor to the camera. The result is a camera that is able to work at up to 12 bits, with dedicated electronics that offer an excellent dynamic range. Teledyne e2v's sensor manufacturing process also guarantees excellent PRNU values.

The camera's programmable settings let you work at different integration times. Gain, offset and an external clock and trigger enables the synchronization of several cameras.

DETAILED SPECIFICATION

SENSOR CHARACTERISTICS AT MAXIMUM PIXEL RATE

Resolution	pixels	512	1024	2048	4096
Pixel size (square)	µm	14	10 or 14	10 or 14	10
Maximum line rate	kHz	98	53	28	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 or 60 MHz per taps
Trigger mode	Free run, external trigger
Flat field correction	Auto, manual
Output format	One or two taps
Regulatory	RoHS, CE and FCC compliant

RADIOMETRIC PERFORMANCES AT MAXIMUM PIXEL RATE

Bit depth	bits	8, 10 or 12
Spectral range	nm	250-1100
Non-linearity	%	< 2
Dynamic range	dB	66

MECHANICAL AND ELECTRICAL INTERFACE

Size (w x h x l)	mm	56 x 60 x 39.4
Optical lens mount		C, 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	MDR 26-pin
LVDS	D-SubHD 44-pin