

# AViVA<sup>®</sup> SC2

Line scan camera



## Open the door to smarter colour imaging

### Key features

- 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
- Colour 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

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# e2v

# AViiVA SC2 Line scan camera

The e2v AViiVA SC2 is the right choice for those looking for a cost effective colour 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 AViiVA family a success, whilst integrating flat field correction to compensate for lens and light source non-uniformities. It includes

## 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
Colour correction		Coefficient input
Regulatory		RoHS, CE and FCC compliant

contrast expansion functions and embeds balance and colour space correction.

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

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

## Overview of e2v's line scan camera range

Commercial name	M/C	Max data rate M pixels/s	Interface	Resolution	Bit depth
AViiVA EM1	Monochrome	120	GigE	512 to 4096	up to 12 bits
AViiVA EM2	Monochrome	80	CL	512 to 4096	up to 12 bits
AViiVA EM4	Monochrome	160	CL	512 to 4096	up to 12 bits
AViiVA UM4	Monochrome	160	CL	8192	up to 12 bits
AViiVA UM8	Monochrome	320	CL	12 288	up to 12 bits
AViiVA SC2	Colour	60	CL/LVDS	4096	up to 12 bits
AViiVA UC2	Colour	62	GigE	4096	up to 12 bits
DiViINA LM1	Monochrome	40	GigE	1024 to 4096	8 bits
DiViINA LM2	Monochrome	40	CL	1024 to 4096	8 bits
ELiIXA UC4/UC8	Colour	320	CL	4 x 4096	up to 12 bits
ELiIXA 3V	Monochrome	320	CL	3 x 4096	up to 12 bits
ELiIXA 4S	Monochrome	80	CL	4 x 4096	up to 12 bits
ELiIXA+ 16k	Monochrome	819	CL	16384	up to 12 bits
ELiIXA+ 16k	Monochrome	1638	CXP	16384	up to 12 bits

Contact us online at:  
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