

AVIIVA® SC2 Line Scan Camera



Open the **door** to **smarter** color imaging

Key Features

- Sensor Size: 4096 Pixels,
10 µm, Monoline RGB Pattern Sensor
- Interface: Camera Link, LVDS
- Mechanics: Compact and Accurate
- Excellent Dynamic Range: 67 dB
- Data Rate: up to 60 MHz (scalable)
- Flat Field Correction
- White Balance Correction
- Color Space Correction
- Bit Depth: 8, 10 or 12 bits, 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)

e2v manages the entire manufacturing process, from the sensor to the camera. The result is a camera able to work up to 12 bits, with dedicated electronics that offer an excellent dynamic range. e2v's detector manufacturing process guarantees excellent PRNU values, a significant element of differentiation from competitors.

This smarter AVIIVA SC2 is the right alternative to those looking for a cost effective color line scan camera. AVIIVA SC2 takes advantage of all the features that made the success of the AVIIVA family. This smarter AVIIVA SC2 integrates flat field correction to compensate for lens and light source non-uniformities. It includes contrast expansion functions and embeds balance and color space correction.



Detailed Specifications

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

Radiometric Performances 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

Functionalities (Programmable by Control Interface)

Gain	-2 to 28 dB (0.035 dB 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 FFC compliant

Mechanical and Electrical Interface

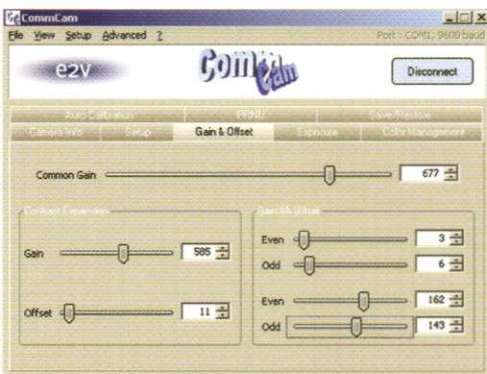
Size (w x h x l)	mm	56 x 60 x 40.1
Optional Lens Mount		F, T2, M42 x 1
Sensor Alignment	µm	Better than + 50
Power Supply	V	Single 12 to 24
Power Dissipation	W	< 7
Operating Temperature	°C	0 to 65 (front face)
Storage Temperature	°C	-40 to 75

Connectors

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



Configuration Setting Software



Overview of e2v Line Scan Camera Offer

Commercial Name	M/C	Max Data Rate M Pixels/s	Interface	Resolution	Bit Depth
AVIIVA M2	Monochrome	60	CL/LVDS	512-1024-2048-4096	up to 12 bits
AVIIVA SM2	Monochrome	60	CL/LVDS	512-1024-2048-4096	up to 12 bits
AVIIVA SC2	Color	60	CL/LVDS	4096	up to 12 bits
AVIIVA UM2	Monochrome	60	GigE	512 to 4096	up to 12 bits
AVIIVA UC2	Color	60	GigE	4096	up to 12 bits
AVIIVA M4	Monochrome	160	CL	2048-6144-8192	up to 10 bits
AVIIVA UM8	Monochrome	320	CL	12288	up to 12 bits

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