



AVIIVA® UM2
Line Scan Camera



User friendly and low cost, to meet your requirements

Key Features

- Sensor Range: 512 to 4096 pixels, 10 or 14 μm
- Interface: GigE Vision and GenICam Compliant
- Mechanics: Compact and Accurate
- Excellent Dynamic Range: 67 dB
- Data Rate: up to 62 Mpixels/s
- Flat Field Correction
- Bit Depth: 8, 10 or 12 bit
- High Sensitivity CCD sensor
- Fully Configurable by the User with CommCam Software

Typical Applications

- Web Inspection (textile, paper...)
- Parts Inspection or Sorting (food, pharmacy, container, wood...)
- Surface Inspection (flat panel display, Printed Circuit Board, DVD, Semiconductors...)
- OCR and Bar Codes Reading (document scanning, postal sorting...)

AVIIVA® UM2 Line Scan Camera

The new AVIIVA Gigabit Ethernet UM2 GE line scan camera is designed with our three concepts: accuracy, versatility and easy implementation with the same compact housing design: 56 x 60 x 39.4 mm of the AVIIVA SM2 family. This housing incorporates the same sensors, from 512 to 4096 pixels (10 μ or 14 μ) with the same precise sensor alignment. e2v's detector manufacturing process guarantees excellent PRNU values, a significant element of differentiation among camera competitors.

One of the major advantage of the new GigE camera family is the ultimate concept design of the e2v camera, with a wider gain range (36 dB), an automatic calibration (tap balance and Flat Field Correction), low noise electronics and a fully upgradeable camera via Gigabit Ethernet interface.



Detailed Specifications

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			

Radiometric Performances at Maximum Pixel Rate		
Bit Depth	bits	8, 10 or 12
Spectral Range	nm	250 - 1100
Non-linearity	%	< 1
Dynamic Range	dB	67

Connectors	
Power	HR 10A-7R-6PB
Control & Data	HR 10A-7R-5SB
Gigabit Ethernet	RJ45-9 pins

Functionalities (Programmable by Control Interface)	
Gain	0 to 33 dB (0.035 dB)
Offset (Contrast Expansion)	On all the dynamic
Exposure Time (internal)	Up to 6553 ms
Clock Selection	15.625 or 31.25 MHz
Trigger Mode	Timed, Trigger Width, Trigger Controlled
Flat Field Correction	Auto, Manual
Regulatory	RoHS, CE and FCC compliant

Mechanical and Electrical Interface		
Size (w x h x l)	mm	56 x 60 x 39.4
Optional Lens Mount		C, F, T2, M42 x 1
Sensor Alignment	μm	Better than ± 100
Power Supply	V	Single 12 to 24
Power Dissipation	W	< 9
Operating Temperature	°C	0 to 45 (front face)
Storage Temperature	°C	-40 to 75

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 to 4096	up to 12 bits
AVIIVA SM2	Monochrome	60	CL/LVDS	512 to 4096	up to 12 bits
AVIIVA SC2	Color	60	CL/LVDS	4096	up to 12 bits
AVIIVA UM2	Monochrome	60	GE	512 to 4096	up to 12 bits
AVIIVA UC2	Color	60	GE	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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