

Machine Vision Inspection has Never Been so Accurate



KEY BENEFITS

- » New generation of sensors – 512 pixels 14µm, 1024 pixels 14µm, 2048 pixels 14µm, 4096 pixels 10µm
- » Excellent dynamic range >66dB
- » High sensitivity CCD sensor
- » Up to 12 bits depth
- » Line rate up to 124k lines/s
- » Flat field correction
- » Easy configuration
- » Interface – CameraLink
- » Mechanics – compact and accurate, compatible with all the AViVA range

TYPICAL APPLICATIONS

- » Web inspection – metallurgy, wood, paper, textile...
- » Process control – pick and place, positioning
- » Print inspection
- » Sorting – food, postal, parcel, checks...
- » Surface inspection – wafers, PCB...
- » Document archiving, data archiving



The EM2 is designed to be the best choice for mid-range applications, with resolution from 512 to 4k pixels. The brand new electronics and CCD design give excellent results in term of image quality and signal to noise ratio. Coupled with features such as automatic FFC, LUT, or automatic tap balance, it is an ideal choice for demanding inspection applications.

The EM2 benefits from Teledyne e2v's long experience in imaging, and the proven qualities of the AViiVA family; ease-of-use, reliability, and high precision mechanical design.

DETAILED SPECIFICATION

SENSOR CHARACTERISTICS

Resolution	pixels	512	1024	2048	4096
Pixel size (square)	µm	14	14	14	10
Maximum line rate	kHz	126	70	37	19

FUNCTIONALITIES (PROGRAMMABLE BY CONTROL INTERFACE)

Gain range	32dB	
Offset	-4096 to 4096 LSB	
Exposure time	Up to 6.55 ms	
Trigger mode	Free run, external trigger	
Regulatory	RoHS, CE and FCC compliant	

RADIOMETRIC PERFORMANCES

Bit depth	bits	8, 10 or 12
Spectral range	nm	250–1100
Non-linearity	%	< +/- 1
Dynamic range	dB	> 66

MECHANICAL AND ELECTRICAL INTERFACE

Size (w x h x l)	mm	60 x 56 x 43 W/t HS 93 x 56 x 43 W/HS
Lens mount		C, F, T2, M42 x 1
Sensor alignment	µm	better than ±100
Power supply	V	single 12 to 24
Power dissipation	W	< 11
Operating temperature	°C	0 to 60 (front face)
Storage temperature	°C	-40 to 70

CONNECTORS

Power	HR10 6-pin
Control & data: Camera Link	MDR 26-pin