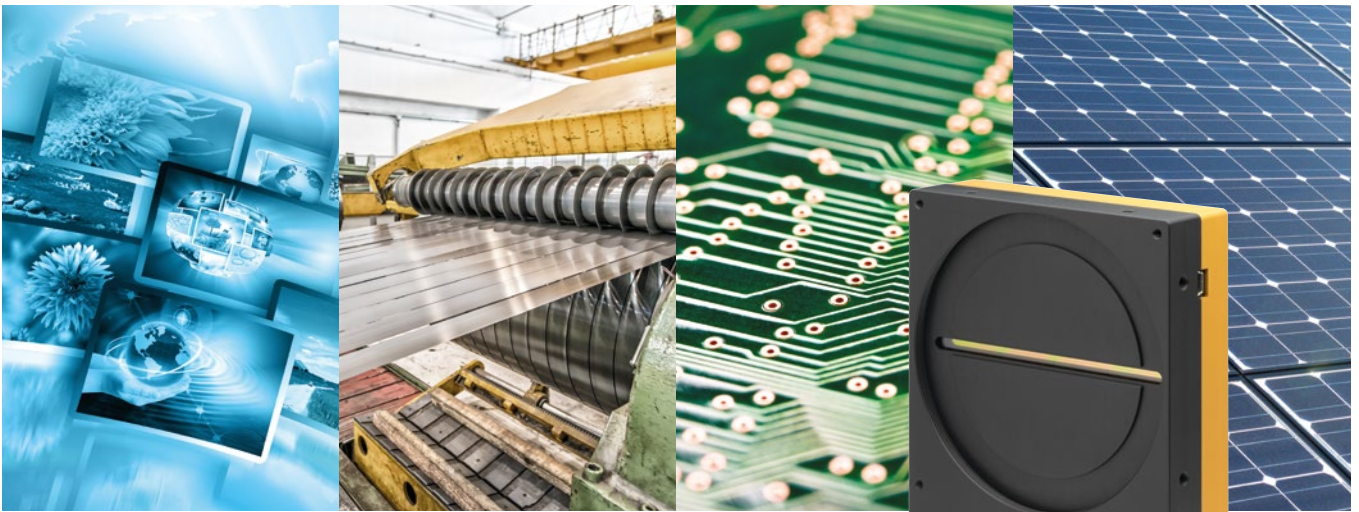


The power and speed of vision



Key benefits

- 11,008 pixels, 5µm x 5µm pixel size
- Four active CMOS lines
- Ultra-fast line rate up to 200kHz
- Compatible with full exposure control
- One order of magnitude increase in sensitivity versus a standard Charge Coupled Device (CCD)
- CoaXPress interface
- Power consumption <18W



Applications

- Flat panel display inspection
- Printed circuit board inspection
- Solar cell inspection
- High quality raw material
- High resolution document scanning
- Surface inspection



Teledyne e2v's next generation of line scan cameras are setting new, high standards for line rate and image quality. Due to Teledyne e2v's recently developed multi-line CMOS technology, the cameras provide high line rates and combine high response with extremely low noise levels. This delivers high signal to noise ratio even when short integration times are required or when illumination is limited.

The 5µm pixel size is arranged in four active lines, ensuring optimal spatial resolution in both scanning and sensor directions with off-the-shelf lenses. An outstanding data rate in excess of 1.6 Gpixels per second, delivered via a new CoaXPress interface, allows for extremely high throughput and opens up an array of new possibilities for the next generation of inspection systems for demanding applications such as flat panel display, PCB and solar cell inspection.

Sensor characteristics

Resolution – pixels	11,008
Pixel size – square µm	5
Max line rate – kHz	200
Number of active lines	4
Camera interface	CoaXPress

Functionalities

Maximum analogue gain – dB	12
Offset correction – (LSB)	-4,096 to +4,096
Trigger Mode	Time (free run) and triggered
Flat field correction	yes
Scan direction	yes

Typical performances

Bit depth – bits	8/10/12
Spectral range – nm	300 – 1,100
Dynamic range – dB	73
PRNU – %	<3
Non Linearity – %	<1

Mechanical and electrical interface

Size – W x H x L mm	100 x 156 x 36
Lens mount	M95 x 1
Sensor alignment – µm	± 100
Sensor flatness – µm	± 35
Power supply – V	Power over CoaXPress: 24
Power consumption – W	<18

Connectors

Control & data	CoaXPress 4x6Gb/s
Power, control & data	4 x 6Gjb/s

General features

Operating temperature – °C	0 to 55
Storage temperature – °C	-40 to 70
Regulatory	CE, FCC and RoHS compliant

Part number	No. of lines	Pixel size (µm x µm)	Mono/Colour	Interface	Max line rate
EV71YC4MCP1205-BA0	4	5 x 5	Mono	CoaXPress	200