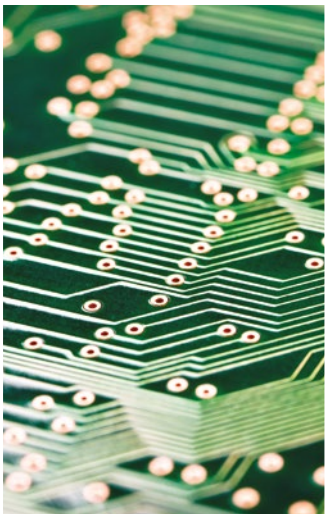
TELEDYNE e2v
Everywhereyoulook™
Part of the Teledyne Imaging Group

ELiiXA+ 16K
Monochrome and color
Line scan camera

The Power and Speed of Vision


KEY BENEFITS

- Ultra high resolution up to 16,384 pixels, 5µm x 5µm pixel size
- Available in monochrome (four active CMOS lines) or color (two active CMOS lines)
- CMOS lines arranged in dual line filter configuration
- Line rate up to 140kHz in monochrome model and 50kHz in color model
- CameraLink and CoaXPress interface
- Power consumption <12W for CameraLink and <16W for CoaXPress

APPLICATIONS

- Printing inspection
- High resolution document scanning
- Flat panel display inspection
- Printed circuit board inspection
- High quality raw material
- Surface inspection
- Solar cell 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 an unmatched 200,000 lines per second and combine high response with extremely low noise levels. This delivers a 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 in the monochrome model and two active lines in the color model.

SENSOR CHARACTERISTICS

	Mono	Color
Resolution – pixels	16,384	
Pixel size – square µm	5	
Max line rate – kHz	140	50
Number of active lines	4	2
Camera interface	CameraLink/ CoaXPress	CoaXPress

FUNCTIONALITIES

Maximum analog gain – dB	12	
Maximum digital gain – dB	20	8
White balance gain – dB	-	8
Offset correction – LSB8bit	-255 to 255	
Trigger mode	Time (free run) and triggered	
White balance	-	yes
Flat field correction	yes	
Scan direction	yes	

TYPICAL PERFORMANCES

Bit depth – bits	8/10/12	8
Spectral range – nm	300 – 1,100	
Dynamic range – dB	70	65
PRNU – %	<1	
Non linearity – %	<1	

ELiiXA+ 16k can also be operated in binning mode to achieve 8k resolution.

MECHANICAL AND ELECTRICAL INTERFACE

	Mono	Color
Size – W x H x L – mm	100 x 156 x 36	
Lens mount	F, T2, M42 x 1	
Sensor alignment – µm	± 100	
Sensor flatness – µm	50	
Power supply – V	Single 12 to 24	
Power consumption – W	<16	<19

CONNECTORS

Inputs	2 x MDR CameraLink or 4 x BNC for CXP
Power, control & data	Hirose 6 pins

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/ COLOR	INTER-FACE	MAX LINE RATE
EV71YC4MCL1605-BA1	4	5 x 5	Mono	CameraLink	50
EV71YC4MCL1605-BH1	4	5 x 5	Mono HDR	CameraLink	50
EV71YC4MCP1605-BA0	4	5 x 5	Mono	CoaXPress	100
EV71YC4MCP1605-BA1	4	5 x 5	Mono	CoaXPress	140
EV71YC4MCP1605-BH0	4	5 x 5	Mono HDR	CoaXPress	100
EV71YC4CCP1605-BA0	2	5 x 5	Color	CoaXPress	47.5