

DiViINA LM1

GigE Vision
Line Scan Camera



The right balance, low cost and leading edge Gigabit Ethernet interface

Key Features

- ❖ Wide sensor range: 1024 to 4096 pixels, 10µm or 14µm
- ❖ Cost effective and easy to use
- ❖ Interface: High reliability Gigabit Ethernet
- ❖ Interoperability: GigE Vision and GenICam fully compliant, supporting iPort Technology and compatible with third-party vision system
- ❖ Line rate: up to 35.7kHz
- ❖ Bit depth: 8 bits
- ❖ Mechanics: 60x60x65mm (w,h,l)

Typical Applications

- ❖ Web inspection
i.e. wood, paper, metallurgy
- ❖ Parts inspection or sorting
i.e. cotton, food
- ❖ General machine vision inspection

e2v brings to the market Diviina line scan camera family, their new cost effective industrial inspection camera that features the proven quality of 1024, 2048 and 4096 pixel sensors, running at 40MHz and outputting 8 bits on Gigabit Ethernet. The Diviina cameras are easy-to-use and robust, with user friendly levels of functionality providing the perfect image quality for mid-range applications. They have been specifically designed for machine vision system integrators looking for cost effective solutions for mid-range applications, but who remain eager to maintain high end CCD performance. Diviina family incorporates Pleora's iPort Technology.

Detailed Specifications

Sensor Characteristics				
Resolution	pixels	1024	2048	4096
Pixel Size (Square)	µm	10 or 14	10 or 14	10
Maximum Line Rate	kHz	35,7	18,1	9,5

Functionalities (Programmable by Control Interface)				
Gain	0 to 35 dB (0.035 dB steps)			
Offset	0 to 63 LSB			
GPIO	2 inputs TTL/LVDS delayer, rescaler, general purpose counter			
Trigger Mode	Free Run, External Trigger			

Radiometric Performances				
Bit Depth	bits	8		
Spectral Range	nm	250 - 1100		
Non-linearity	%	< 1		
Dynamic Range	dB	58		

Networking features				
GigE-based	1 Gb/s, long reach: 100m point-to-point			
GigE Vision Protocol	Zero-loss packet resend technology, delivery of all packets Comprehensive data transfer diagnostics Multicast capabilities			

Mechanical and Electrical Interface				
Size (w x h x l)	mm	60 x 60 x 65		
Lens Mount	M42 x 1			
Optional Lens Adaptor	C, F			
Sensor Alignment	µm	< ± 200		
Power Supply	V	Single 12 to 24		
Power Dissipation	W	6		
Operating Temperature	°C	0 to 65 (front face)		
Storage Temperature	°C	-40 to 70		
Regulatory	RoHS, CE compliant			

Connectors				
Power	HR10 6-pin			
Inputs	HR10 5-pins			
Gigabit Ethernet	RJ45			

Software Package:				
eBUS Driver Suite	eBUS Universal Driver (Filter Driver) eBUS Optimal Driver Driver Installation Tool			
iPORT PureGEV Suite	SDKs Software tools Documentation Sample applications			



Overview of e2v's Line Scan Camera offer

Commercial Name	M/C	Max Data Rate M Pixels/s	Interface	Resolution	Bit Depth
AViVA EM1	Monochrome	120	GigE	2048 to 4096	up to 12 bits
Aviiva EM2	Monochrome	80	CL	2048 to 4096	up to 12 bits
AViVA EM4	Monochrome	160	CL	2048 to 4096	up to 12 bits
Aviiva UM4	Monochrome	160	CL	8192	up to 12 bits
AViVA UM8	Monochrome	320	CL	12 288	up to 12 bits
AViVA SC2	Colour	60	CL/LVDS	4096	up to 12 bits
AViVA UC2	Colour	62	GigE	4096	up to 12 bits
DiViINA LM1	Monochrome	40	GigE	1024 to 4096	8 bits
DiViINA LM2	Monochrome	40	CL	1024 to 4096	8 bits
ELiIXA UC4/UC8	Colour	320	CL	4 x 4096	up to 12 bits
ELiIXA 3V	Monochrome	320	CL	3 x 4096	up to 12 bits
ELiIXA 4S	Monochrome	80	CL	4 x 4096	up to 12 bits

www.e2v.com © copyright e2v technologies 2009

Sales offices

European regional sales offices

e2v ltd
106 Waterhouse Lane
Chelmsford - Essex CM1 2QU
England
T +44 (0)1245 493 493
F +44 (0)1245 492 492
enquiries@e2v.com

e2v sas
16 Burospace
91572 Bièvres Cedex
France
T +33 (0)1 60 19 55 00
F +33 (0)1 60 19 55 29
enquiries-fr@e2v.com

e2v gmbh
Industriestraße 29
82194 Gröbenzell
Germany
T +49 (0)8142 410 570
F +49 (0)8142 284 547
enquiries-de@e2v.com

Americas

e2v inc
520 White Plains Road
Suite 450
Tarrytown- NY 10591
USA
T +1 (914) 592 6050
F +1 (914) 592 5148
enquiries-na@e2v.com

Asia Pacific

e2v ltd
11/F, Onfem Tower
29 Wyndham Street, Central
Hong Kong
T +852 3679 364 8/9
F +852 3583 1084
enquiries-ap@e2v.com

Product Contact

e2v
Avenue de Rochepleine - BP 123
38521 Saint-Egrève Cedex
France
T +33 (0)4 76 58 30 00
F +33 (0)4 76 58 34 80
hotline-cam@e2v.com