

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 – 60 x 60 x 65mm (w,h,l)

Typical applications

- Web inspection – wood, paper, metallurgy
- Parts inspection or sorting – cotton, food
- General machine vision inspection

e2v.com/imaging

e2v

DiViINA LM1 GigE Vision line scan camera

e2v introduces the LM1 DiViINA line scan camera, the 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 monochrome image quality for mid-range applications.

They have been specifically designed to provide the best solution to machine vision system integrators that are under cost reduction pressure and at the same time are eager to maintain high CCD performance. The DiViINA family of cameras incorporate Pleora's iPort technology.

Detailed specification

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 delay, 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		
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		

Connections	
Power	HR10 6-pins
Inputs	HR10 5-pins
Gigabit Ethernet	RJ45
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
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 range

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
AViVA EM2	Monochrome	80	CL	512 to 4096	up to 12 bits
AViVA EM4	Monochrome	160	CL	512 to 4096	up to 12 bits
AViVA 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
ELiXA UC4/UC8	Colour	320	CL	4 x 4096	up to 12 bits
ELiXA 3V	Monochrome	320	CL	3 x 4096	up to 12 bits
ELiXA 4S	Monochrome	80	CL	4 x 4096	up to 12 bits
ELiXA+ 16k	Monochrome	819	CL	16384	up to 12 bits
ELiXA+ 16k	Monochrome	1638	CXP	16384	up to 12 bits

e2v.com/imaging



Issue 2 03/12

European regional sales offices

e2v 106 Waterhouse Lane Chelmsford Essex CM1 2QU England T +44 (0)1245 493493 F +44 (0)1245 492492	e2v 16 Burospace 91572 Bievres Cedex France T +33 (0)1 6019 5500 F +33 (0)1 6019 5529	e2v Industriestraße 29 82194 Gröbenzell Germany T +49 (0)8142 41057 0 F +49 (0)8142 284547
--	--	---

Americas

e2v
520 White Plains Road
Suite 450
Tarrytown NY 10591
USA
T +1 914 592 6050 or
T +1 800 342 5338
F +1 914 592 5148

Asia Pacific

e2v
11th Floor Onfem Tower
29 Wyndham Street
Central
Hong Kong
T +852 3679 3648/9
F +852 3583 1084

Product contact

e2v
Avenue de Rochepleine
BP 123
38521 Saint-Egreve Cedex
France
T +33 (0)4 7658 3000
F +33 (0)4 7658 3480