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**The Machine Vision and
Imaging Specialists**

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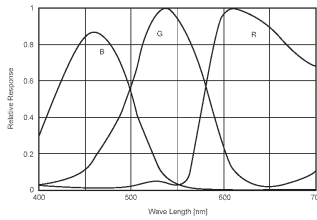
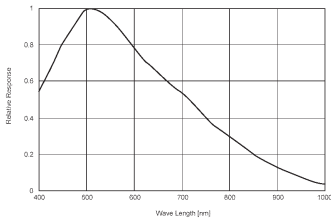
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AVT Marlin F-145B2 / F-145C2



Sensor specifications b/w; color
(extracted from the data sheet of the sensor -
excluding lens and filter)

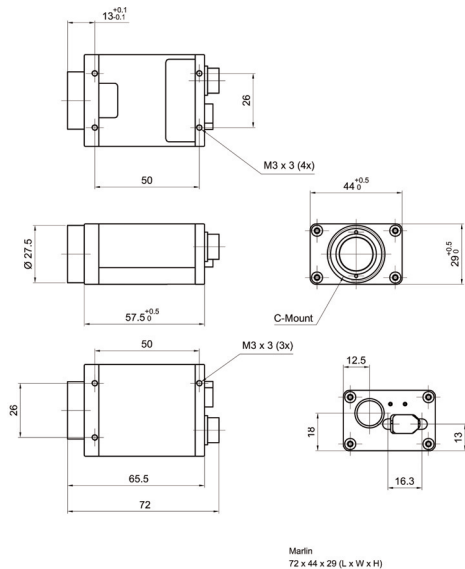
AOI height / pixel	Frame rate / fps
1040	10.3
960	11.0
768	13.0
600	15.5
480	17.9
240	26.1
120	33.5
60	39.3

Format_7 Raw8/Mono8

Pin	Descriptions	Use
1	Ground	GND for RS232 and ext. power
2	Power In (CCD only)	
3		
4	Input1/Trigger	TTL, Edge, progr.
5		
6	Output 1 /IntEna	Open emitter
7	Input Ground	Common ground for inputs
8	RS232 Rx/D	
9	RS232 Tx/D	
10	OutVCC	Common VCC for outputs
11	Input 2	TTL
12	Output 2	Open emitter



Connections



Dimensions

Camera Specifications

	MARLIN F-145B2 (b/w)	MARLIN F-145C2 (color)
Image device	Type 1/2 (diag. 8 mm) progressive scan SONY CCD	
Effective picture elements	1392 (H) x 1040 (V): mono	1392 (H) x 1040 (V) @ Raw8 1392 (H) x 1036 (V) @ YUV, RGB
Picture size	1280 x 960 pixels (Format_2); supporting all smaller fixed formats; up to 1392 x 1040 pixels (Format_7 Mode_1)	
Cell size	4.65 μm x 4.65 μm	
Resolution depth	8 bit / 10 bit (b/w only); 12 bit (ADC)	
Lens mount	C-Mount	
Digital interface	IEEE 1394 IIDC v. 1.3	
Transfer rate	100 Mbit/s, 200 Mbit/s, 400 Mbit/s	
Frame rates	Up to 10 Hz in Format_7; 7 Hz (RGB8)	
Gain control	Manual: 0-24 dB (0.0345 dB/step); auto gain (select. AOI)	
Shutter speed	20...67.108.864 μs (67 s); auto shutter (select. AOI)	
External trigger shutter	Trigger_Mode_0, Trigger_Mode_1, advanced feature: Trigger_Mode_15 (bulk); image transfer by command; trigger delay	
Smart features	Real-time shading correction; image sequencing; built in FIFO memory up to 3 frames; one user programmable look-up table; 2 configurable inputs, 2 configurable outputs; image mirror (L-R->R-L), binning, secure image signature (SIS), user profiles, serial port (IIDC V1.3)	
Power requirements	DC 8 V – 36 V via IEEE 1394 cable or 12-pin HIROSE	
Power consumption	Less than 3 watt (@ 12 V DC)	
Dimensions	72 mm x 44 mm x 29 mm (L x W x H); w/o tripod and lens	
Mass	<120 g (without lens)	
Operating temperature	+5 ...+ 45 °Celsius	
Storage temperature	-10...+ 60 °Celsius	
Regulations	EN 55022, EN 61000, EN 55024, FCC Class B; DIN ISO 9022, RoHS (2002/95/EC)	
Options	Removable IR cut filter; host adapter card, locking IEEE 1394 cable, AVT FirePackage / Direct FirePackage / Fire4Linux	