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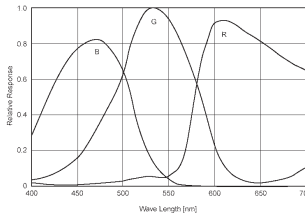
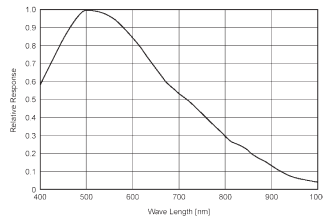
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AVT Marlin F-033B / F-033C



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

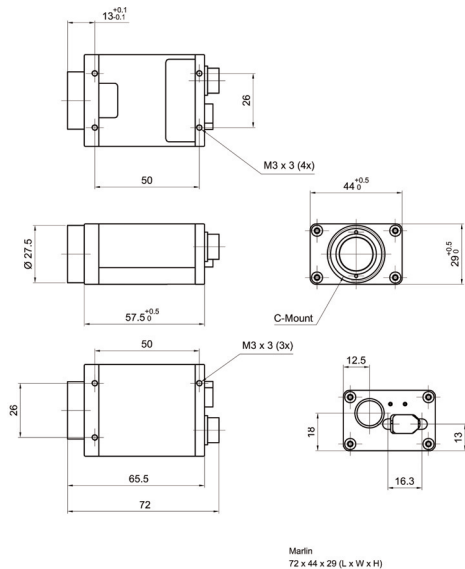
AOI height / pixel	Frame rate / fps	TF/ms
494	74.15	13.49
480	76.02	13.15
400	88.79	11.26
320	106.71	9.37
240	133.71	7.48
120	215.48	4.64
20	439.41	2.28

Format_7 Raw8/Mono8



Connections

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 TxD	
9	RS232 RxD	
10	OutVCC	Common VCC for outputs
11	Input 2	TTL
12	Output 2	Open emitter



Dimensions

Camera Specifications

	MARLIN F-033B (b/w)	MARLIN F-033C (color)
Image device	Type 1/2 (diag. 8 mm) progressive scan, SONY CCD	
Effective picture elements	656 (H) x 494 (V): mono	656 (H) x 494 (V) @ Raw8 (492 @ YUV)
Picture size	640 x 480 pixels (Format_0); 656 x 492 pixels (Format_7 Mode_0);	640 x 480 pixels (Format_0); 656 x 492 pixels (Format_7 Mode_0); 656 x 494 pixels (Format_7 Mode_1)
Cell size	9.9 µm x 9.9 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 74 Hz in Format_7	68 Hz (YUV 4:1:1); up to 51 Hz (YUV 4:2:2); 33 Hz (RGB8)
Frame control	Manual: 0-24 dB (0.035 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 17 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	