



Marlin

F-145



- IEEE 1394a camera
- Modular design
- Robust housing
- Machine vision camera

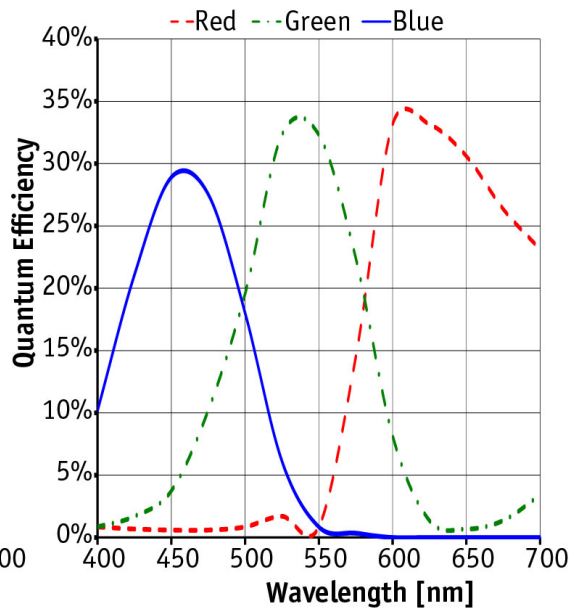
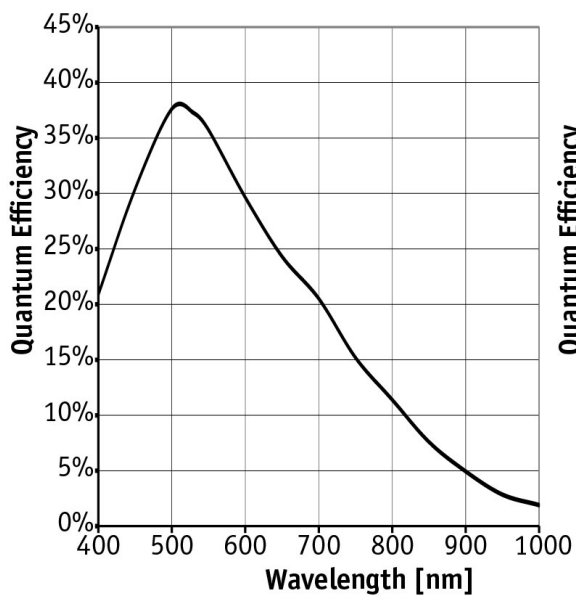
Compact, flexible, modular IEEE 1394a 1.4 Megapixel C-Mount camera

The Marlin F-145B/F-145C is equipped with a highly sensitive Sony ICX205 CCD sensor. It runs at 10 frames per second at full resolution and Format_7. Higher frame rates can be reached by using a smaller area of interest (AOI) and binning.

Specifications

Marlin	F-145
Interface	IEEE 1394a - 400 Mb/s, 1 port
Resolution	1392 (H) × 1040 (V)
Sensor	Sony ICX205
Sensor type	CCD Progressive
Sensor size	Type 1/2
Pixel size	4.65 μm × 4.65 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	10 fps
ADC	12 bit
Image buffer (RAM)	8 MByte
Output	
Bit depth	8-10 Bit
Monochrome pixel formats	Mono8, Mono16
RGB color pixel formats	RGB8
Raw pixel formats	Raw8
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 2 outputs
RS232	1
Operating conditions/dimensions	
Operating temperature	+5 °C to +45 °C

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Power requirements (DC)	8 V to 36 V
Power consumption	<3 W (@ 12 VDC)
Mass	<120 g
Body dimensions (L × W × H in mm)	72 × 44 × 29 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class B



Features

Marlin cameras are equipped with many useful real-time image pre-processing functions. They are performed by the FPGA inside the camera – with no additional CPU load on the host, so that an inexpensive system is sufficient.

- Programmable look-up table (LUT), white balance, hue, saturation
- Debayering
- Gain
 - Auto/manual
 - Manual gain control: 0 to 24 dB
- Exposure
 - Auto/manual
 - Exposure time: 38 μs to 67 s
- Color correction
- Shading correction



- Sub-sampling, 2x binning (b/w)
- Area of interest (AOI) with speed increase
- Sequence mode - changes the image settings on the fly
- Image mirror
- Deferred image transport
- SIS (secure image signature, time stamp for trigger, frame count)
- Storable user settings

Technical drawing





Applications

With its modular and flexible design and the real-time pre-processing functions, this Marlin camera fits for many applications:

- Machine vision
- Quality control
- Industrial inspection