



Marlin

F-033

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

Description

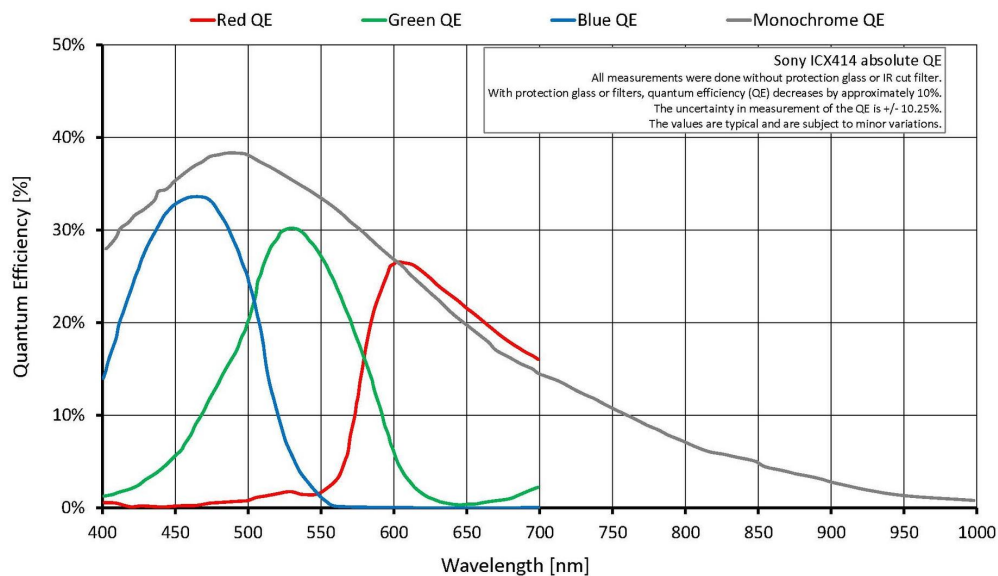
Compact, flexible, modular IEEE 1394a XGA C-Mount camera

The Marlin F-033B/F-033C is equipped with a sensitive Sony ICX414 CCD sensor. It runs at 73.06 frames per second at full resolution using Format_7. Higher frame rates can be reached by using a smaller area of interest (AOI) and binning.

Specifications

Marlin	F-033
Interface	IEEE 1394a - 400 Mb/s, 1 port
Resolution	656 (H) × 494 (V)
Sensor	Sony ICX414
Sensor type	CCD Progressive
Cell size	9.9 μm x 9.9 μm
Lens mount	C-Mount
Max frame rate at full resolution	73 fps
ADC	12 bit
Image buffer (RAM)	8 MByte
Output	
Bit depth	8-10 bit
Mono modes	Mono8, Mono16
Color modes RGB	RGB8
Raw modes	Raw8
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 2 outputs
RS-232	1

Marlin	F-033
Operating conditions/dimensions	
Operating temperature	+5 °C to +45 °C
Power requirements (DC)	8 V to 36 V
Power consumption (@12 V)	<3 W
Mass	<120 g
Body dimensions (L × W × H in mm)	72 × 44 × 29 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC



Features

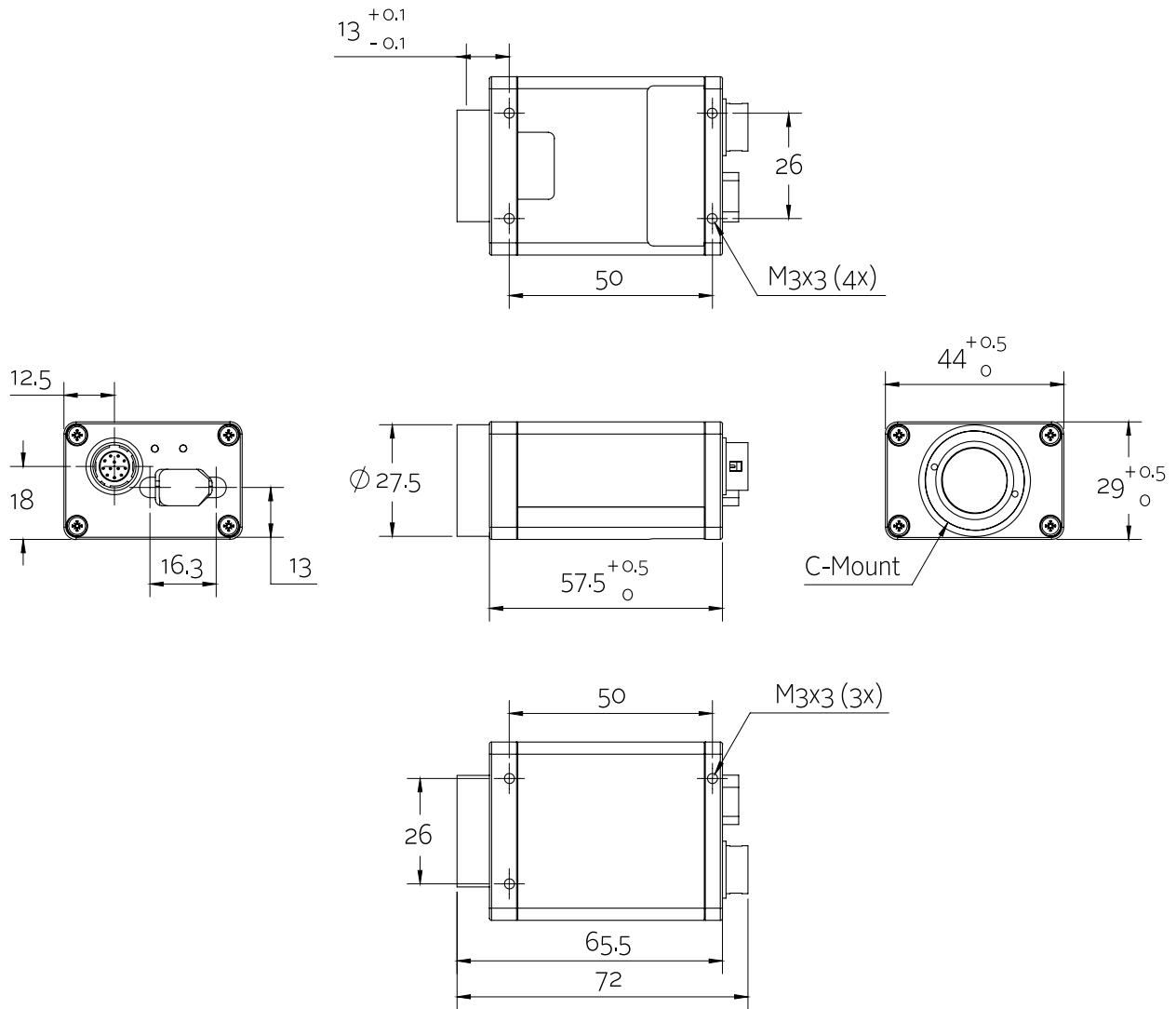
Marlin cameras are equipped with many useful real-time image pre-processing functions. They are performed by the FPGA inside the camera – with no additional CPU load on the host, so that an inexpensive system is sufficient.

- 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: 32 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
- Semiconductor inspection
- Industrial inspection