



Marlin F-080



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

Robust housing, modular design

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

Marlin F-080 with Sony ICX204 runs 20.0 frames per second at 0.8 MP resolution.

Acclaimed bestseller digital IEEE 1394 machine vision camera

The Marlin is Allied Vision's classical most-sold IEEE 1394 machine vision camera. Since 2004, many thousand Marlins are part of various different image processing applications. Due to its modular design (angled head, side-entry connectors, Modular Concept), it fits with almost every application.

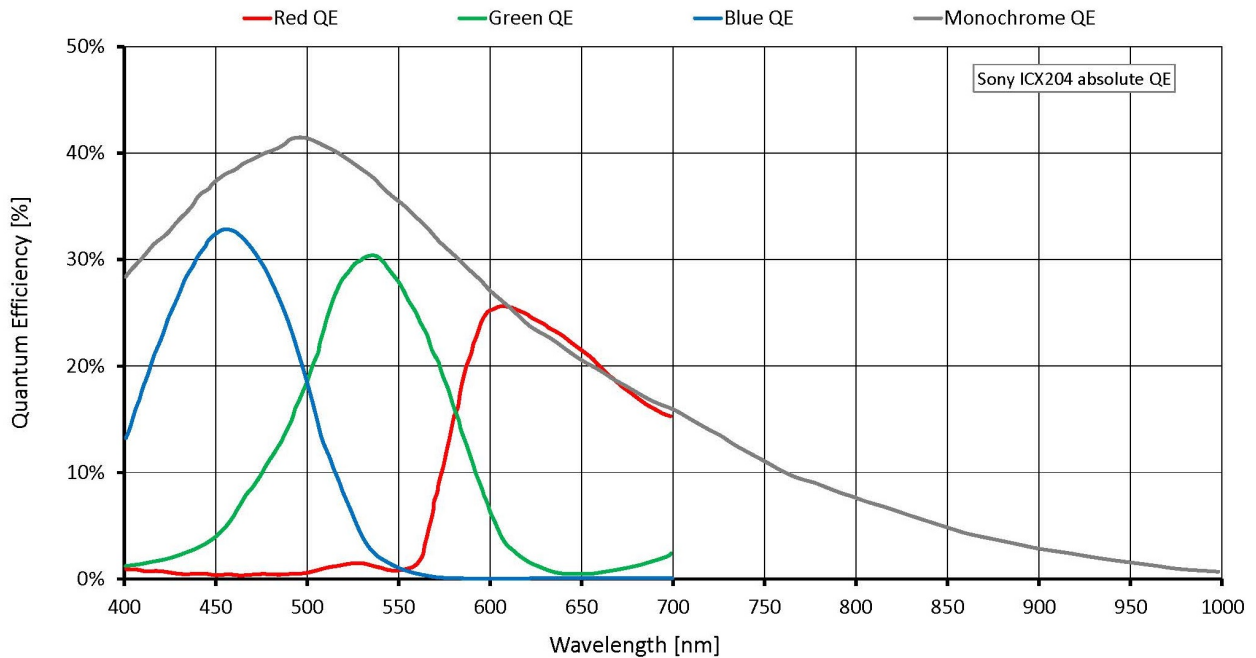
- IEEE 1394a (400 Mb/s)
- Sony CCD sensors (1/3, 1/2, 1/1.8), 2/3 CMOS sensor
- 7 models (VGA to 2 Megapixel)
- Options
 - Various IR cut/pass filters
 - CS-Mount
 - Angled head
 - Lateral cable exit
 - White medical housing

Specifications

| Marlin F-080 | |
|---------------------|-------------------------------|
| Interface | IEEE 1394a - 400 Mb/s, 1 port |
| Resolution | 1032 (H) × 778 (V) |

| Marlin F-080 | |
|---|---|
| Sensor | Sony ICX204 |
| Sensor type | CCD Progressive |
| Sensor size | Type 1/3 |
| Pixel size | 4.65 μm \times 4.65 μm |
| Lens mount (default) | C-Mount |
| Max. frame rate at full resolution | 20 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 $^{\circ}\text{C}$ to +45 $^{\circ}\text{C}$ |
| Power requirements (DC) | 8 V to 36 V |
| Power consumption | <3 W (@ 12 VDC) |
| Mass | <120 g |
| Body dimensions (L \times W \times H in mm) | 72 \times 44 \times 29 (including connectors) |
| Regulations | CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class B |

Quantum efficiency



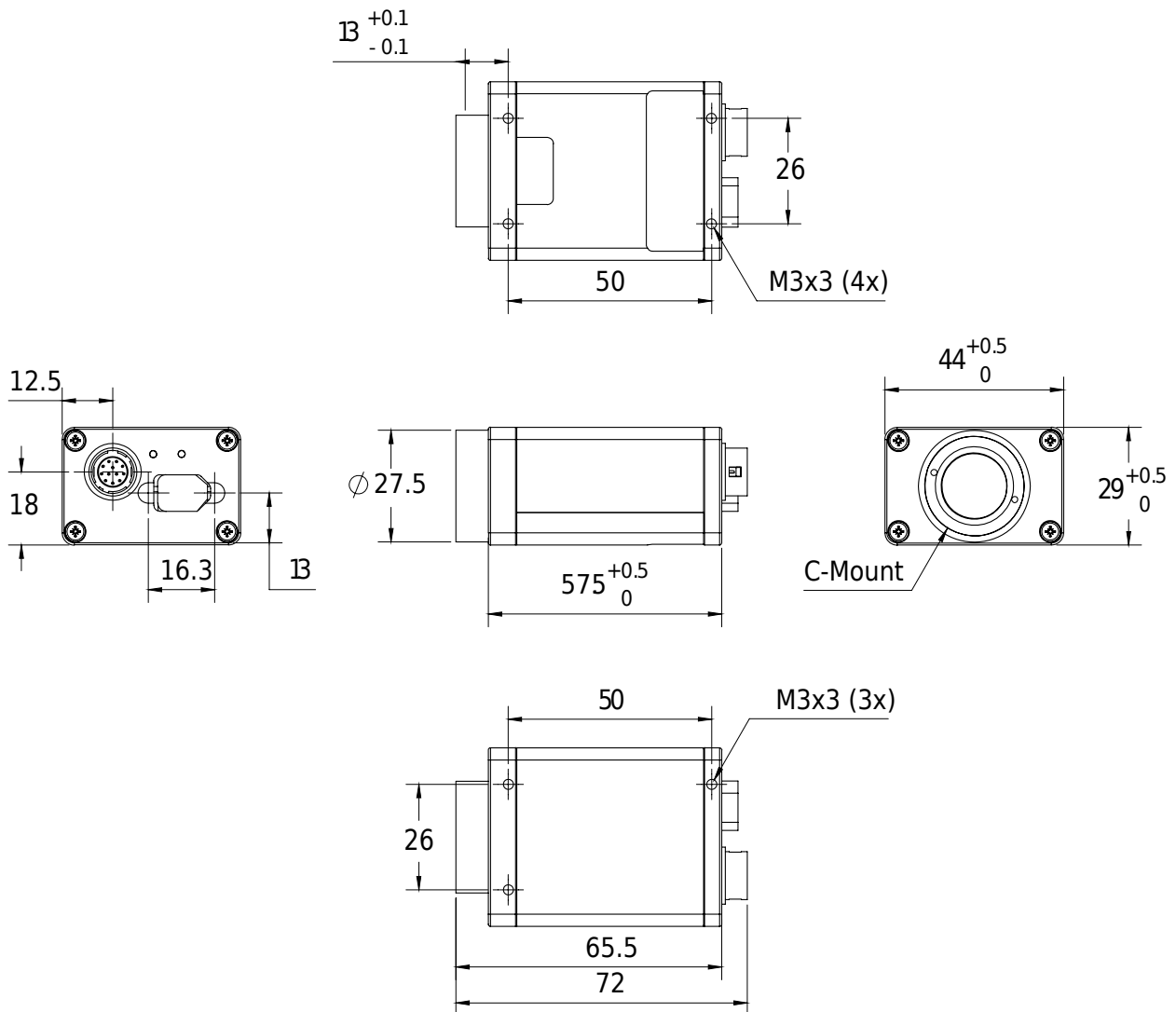
Features

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: 50 μ s 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