



# Marlin

## F-033



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

## 基本描述

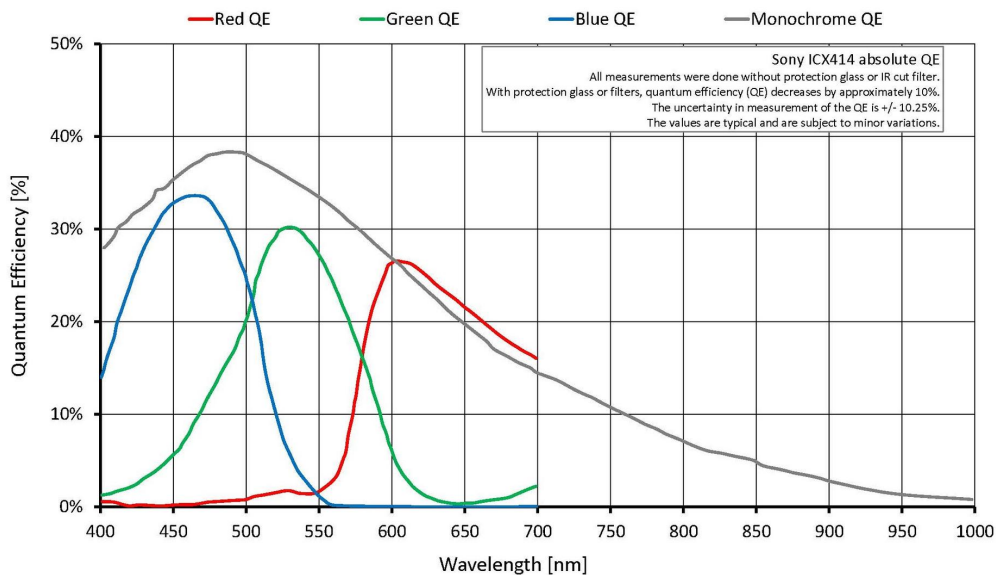
Compact, flexible, modular IEEE 1394a XGA C-Mount camera

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.

## 性能参数

|           |                               |
|-----------|-------------------------------|
| Marlin    | F-033                         |
| 接口        | IEEE 1394a - 400 Mb/s, 1 port |
| 分辨率       | 656 (H) × 494 (V)             |
| 传感器       | Sony ICX414                   |
| 传感器类型     | CCD Progressive               |
| 传感器尺寸     | Type 1/2                      |
| 像元尺寸      | 9.9 μm × 9.9 μm               |
| 标准镜头接口    | C-Mount                       |
| 最大满帧帧率    | 73 fps                        |
| ADC       | 12 bit                        |
| 缓存 (RAM)  | 8 MByte                       |
|           | 输出                            |
| Bit位数     | 8-10 bit                      |
| 黑白像素格式    | Mono8, Mono16                 |
| RGB彩色像素格式 | RGB8                          |
| 原始像素格式    | Raw8                          |
|           | 通用输入输出(GPIOs)                 |
| 光耦 I/Os   | 2 inputs, 2 outputs           |

|                     |  |
|---------------------|--|
| Marlin              | F-033  |
| RS232               | 1  |
| 工作条件/尺寸             |  |
| 工作温度                | +5 °C to +45 °C                                      |
| 电源要求 (DC)           | 8 V to 36 V  |
| 功耗                  | <3 W (@ 12 VDC)                                      |
| 重量                  | <120 g   |
| 尺寸(L × W × H in mm) | 72 × 44x 29 (including connectors)                   |
| 符合规范                | CE: 2014/30/EU (EMC), 2011/65/EU (RoHS); FCC Class B |



## 特性

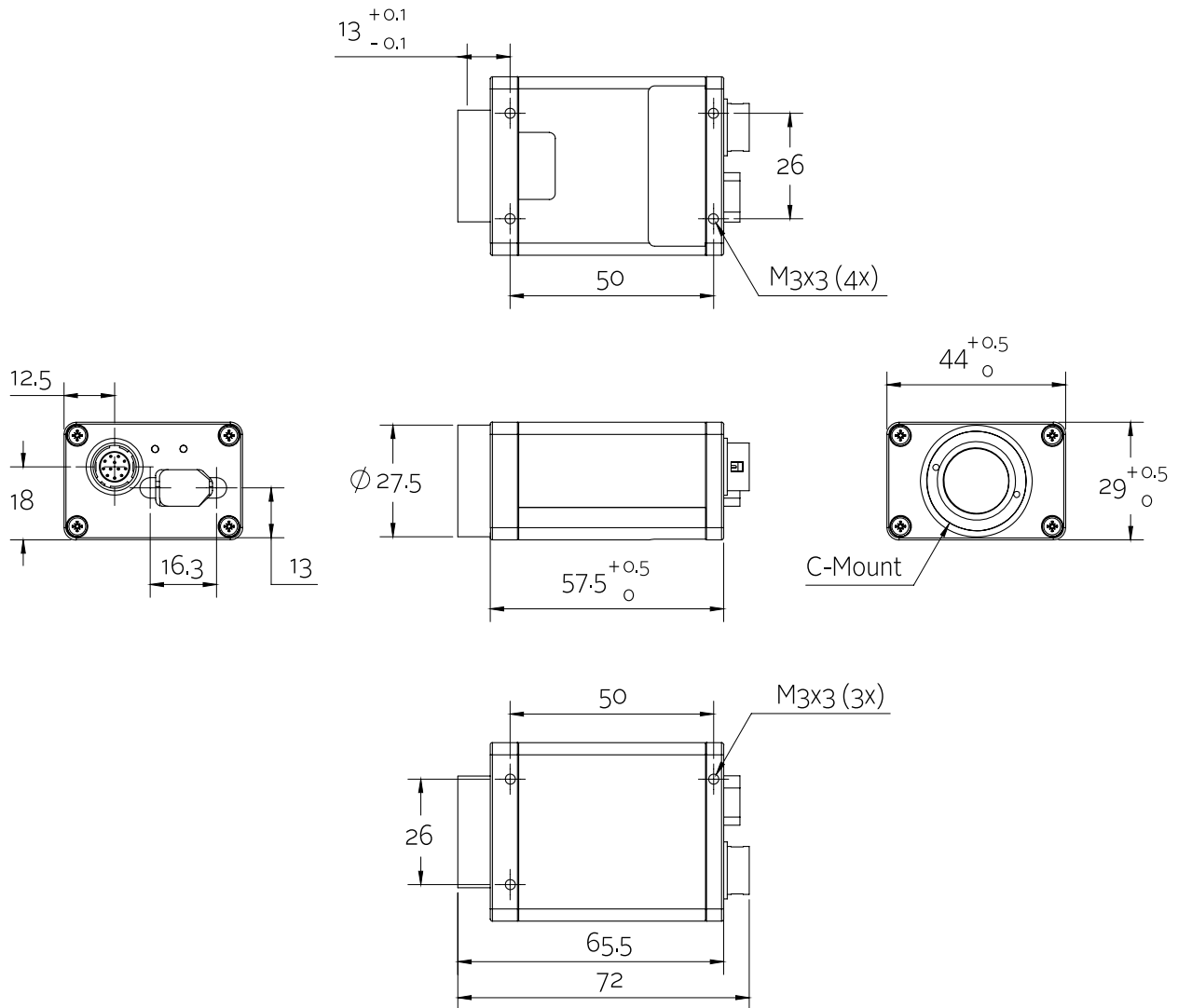
Marlin cameras are equipped with many useful real-time image pre-processing functions. They are performed by the FPGA inside the camera – with no additional CPU load on the host, so that an inexpensive system is sufficient.

- 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  $\mu$ 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

## 外形尺寸





## 应用场景

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