



### **Description**

#### IEEE 1394 CMOS camera with IBIS5 CMOS sensor

The Marlin F-0131B is equipped with the global shutter CMOS sensor IBIS5. It runs at 25 fps (full resolution, Format\_7). Higher frame rates can be reached by a smaller AOI and sub-sampling. The F-0131B is only available in monochrome, optionally with enhanced NIR sensitivity (**F-0131B NIR**).

- Cypress IBIS5B/IBIS5B NIR
- Trigger
  - Edge mode, trigger level control, single trigger, bulk trigger, programmable trigger delay
- Options
  - Various IR cut/pass filters
  - CS-Mount
  - Angled head
  - Lateral cable exit
  - White medical housing



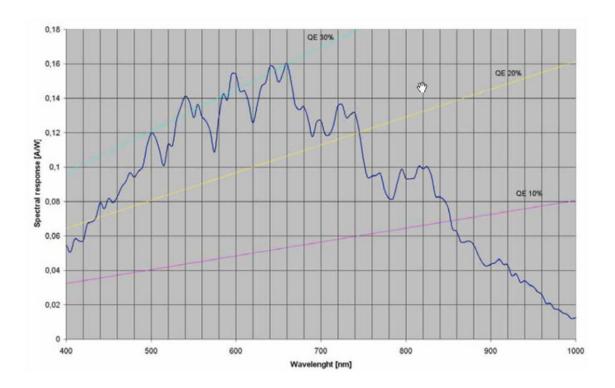
# **Specifications**

Marlin	F-131
Interface	IEEE 1394a - 400 Mb/s, 1 port
Resolution	1280 x 1024
Sensor	Cypress IBIS5B
Туре	CMOS Progressive
Sensor Size	Type 2/3
Cell size	6.7 μm
Lens mount	С
Max frame rate at full resolution	25 fps
A/D	10 bit
On-board FIFO	8 MB
	Output
Bit depth	8 bit
Mono modes	Mono8
Color modes YUV	-
Color modes RGB	<u>-</u>
Raw modes	<u>-</u>
	General purpose inputs/outputs (GPIOs)
TTL I/Os	0
Opto-coupled I/Os	2 inputs, 2 outputs
RS-232	1
	Power/Mass/Dimensions/Regulations
Power requirements (DC)	8 V - 36 V
Power consumption (12 V)	<3 W
Mass	<120 g
Body Dimensions (L x W x H in mm)	72 x 44x 29 mm including connectors, w/o tripod and lens
Regulations	CE, FCC Class B, RoHS

<u>Download Marlin technical drawing (click here)</u>



#### Sensor Response (monochrome)



#### **Smart features**

Due to its CMOS sensor, the F-131B functions differ from the other Marlin cameras:

- DSNU (dark signal non uniformity) correction
- Blemish correction
- Shading correction
- HDR mode (High dynamic range mode)
- Sub-sampling
- AOI (with speed increase)
- Gain
  - ∘ Manual gain control: 0 16 dB
- Exposure
  - Exposure time: 10 μs 67 s
- Image mirror
- Deferred image transport
- SIS (secure image signature, time stamp for trigger, frame count etc.)
- Storable user settings



## **Applications**

The Marlin F-131B is particularly suited for applications with high contrasts (e.g. shining and reflecting surfaces): Its IBIS5 CMOS sensor has no blooming and additionally features the HDR (High dynamic range) mode. The Marlin F-131B NIR provides enhanced near infrared sensitivity.

- Industrial inspection
- Scientific
- Security and Surveillance
- Surface inspection
- Welding applications