Allied Vision

FireWire

Pike
F-032

- Versatile 1394b camera
- Advanced feature set
- Many variants
- High frame rates

Description

Fast VGA camera, high quality, 1394b FireWire, 208 fps

The Pike F-032B/C is a very fast VGA camera with premium image quality and a fast FireWire 1394b interface. It is equipped with a OnSemi KAI-0340 CCD sensor. At full resolution, it runs 208 fps. Higher frame rates can be reached by a smaller AOI, binning (b/w), or sub-sampling. The Pike F-032B/C is an excellent motion analysis camera.
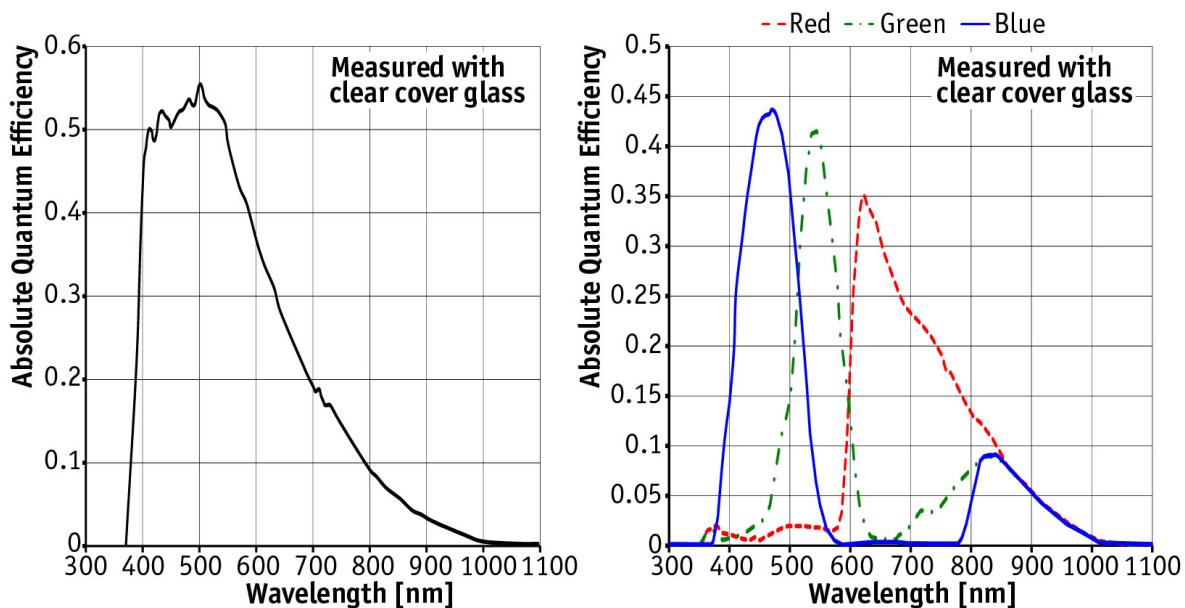Options

- 1394b connectors: 2 x copper (daisy chain) or 1 x GOF, 1 x copper, Hirose power: out
- Various IR cut/pass filters, various lens mounts
- Angled head, white medical housing

Specifications

Pike	F-032
Interface	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain, fiber optic (GOF) optional
Resolution	640 × 480
Sensor	OnSemi KAI-0340
Sensor type	CCD Progressive
Cell size	7.4 µm
Lens mount	C-Mount, CS-Mount
Max frame rate at full resolution	208 fps
ADC	14 bit
On-board FIFO	64 Mbyte
Output	
Bit depth	8-14 bit bit

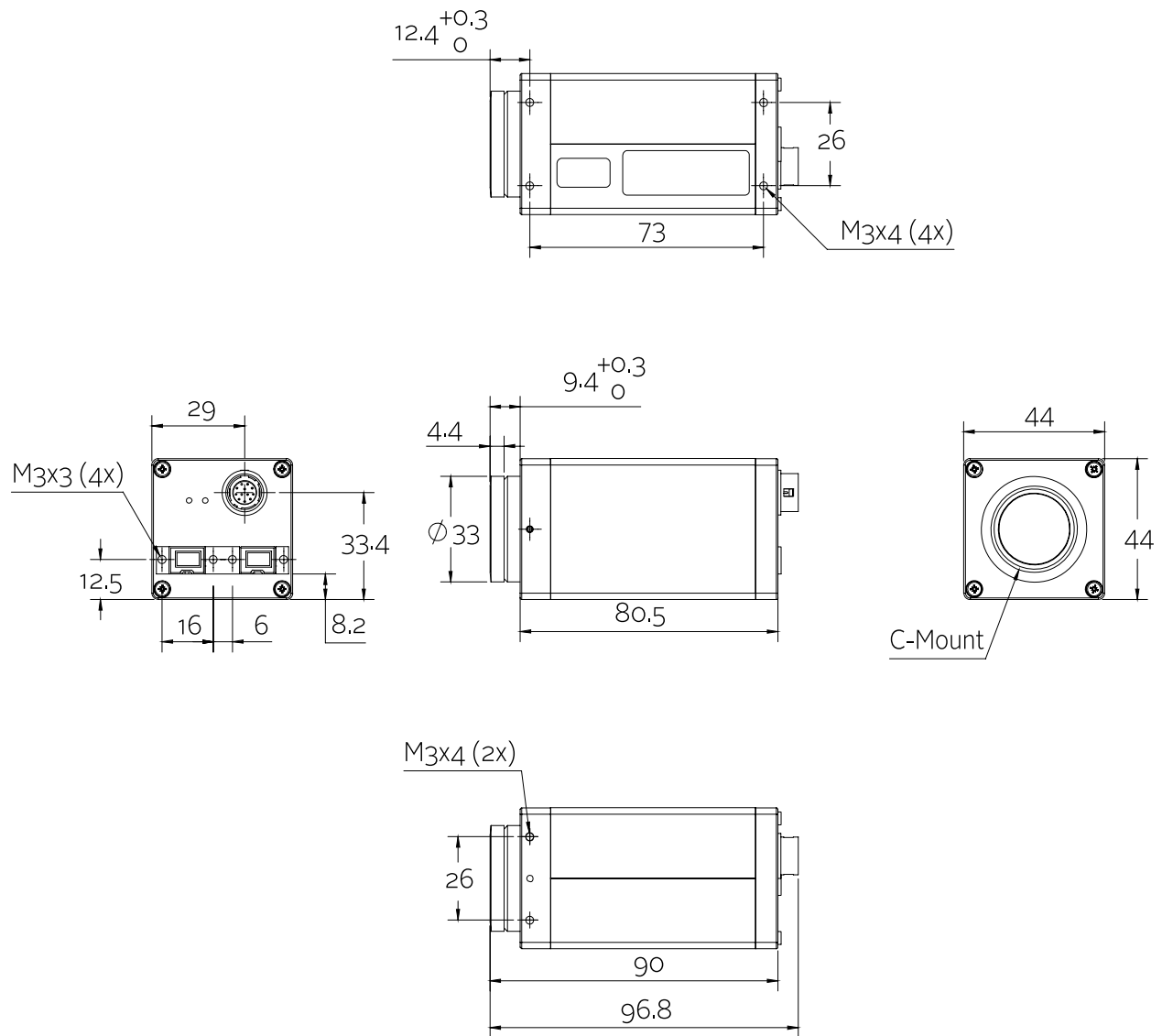| Pike	F-032
Mono modes	Mono8, Mono12, Mono16
Color modes RGB	RGB8
Raw modes	Raw8, Raw12, Raw16
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 4 outputs
RS-232	1
Operating conditions/dimensions	
Power requirements (DC)	8 V - 36 V
Power consumption (@12 V)	4 W
Mass	250 g
Body dimensions (L × W × H in mm)	96.8 × 44 × 44 mm including connectors, w/o tripod and lens
Regulations	CE, FCC Class B, RoHS

Features

- High SNR mode (up to 24 dB better signal-to-noise ratio)
- Low-Noise Binning Mode
- Smear reduction
- Shading correction
- ROI, separate ROI for auto features
- Binning
- Decimation

- Auto gain (manual gain control: 0 to 22 dB)
- Auto exposure (18 μs to 67 s)
- Auto white balance
- LUT (look-up table)
- Hue, saturation, color correction
- Reverse X
- Deferred image transport
- Trigger programmable, level, single, bulk, programmable delay
- Sequence mode (changes the camera settings on the fly)
- SIS (secure image signature, time stamp for trigger, frame count etc.)
- Storable user sets

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Technical drawing

12.4 +0.3 0

26

73

M3x4 (4x)

29

M3x3 (4x)

33.4

12.5

16   6   8.2

9.4 +0.3 0

4.4

⌀ 33

80.5

44

44

C-Mount

M3x4 (2x)

26

90

96.8

Applications

The Pike F-032B/C combines a very high frame rate of 208 fps with elaborate image pre-processing functions and a fast 1394b FireWire port. The modular design of the Pike provides many opportunities for customization.
 This Pike camera is especially suited for:

- Applications which require high frame rates and outstanding image quality
- OEM applications (modular concept)
- Sports, motion studies
- 3D recordings of still and moving objects
- 3D scanning
- Science and research
- Healthcare
- Multimedia and entertainment
- ITS (Intelligent traffic solutions)
- Long cable lengths, 400 meters and more (fiber version)