



## Pike F-100



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

## Description

Premium 1 Megapixel FireWire camera with very high frame rates

The Pike F-100B/C is equipped with a OnSemi KAI-1020 CCD sensor. At full resolution, it runs at 60 fps (Mono8/Raw8). Higher frame rates can be reached by a smaller AOI, binning (b/w), or sub-sampling. The camera includes extraordinary image pre-processing functions like the High SNR mode (up to 24 dB better signal-to-noise ratio).

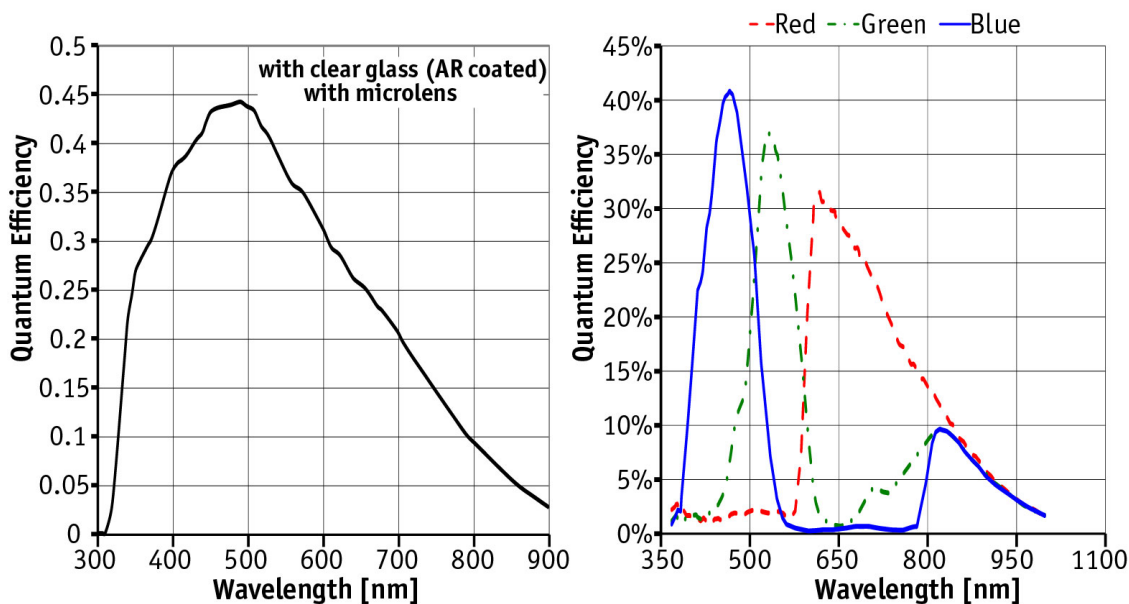
### Options

- 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-100
Interface	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain, fiber optic (GOF) optional
Resolution	1000 × 1000
Sensor	OnSemi KAI-1020
Sensor type	CCD Progressive
Cell size	7.4 µm
Lens mount	C-Mount
Max frame rate at full resolution	60 fps
ADC	14 bit
On-board FIFO	64 Mbyte
<b>Output</b>	
Bit depth	8-14 bit

Pike	F-100
Mono modes	Mono8, Mono12, Mono16
Color modes RGB	RGB8
Raw modes	Raw8, Raw12, Raw16
<b>General purpose inputs/outputs (GPIOs)</b>	
Opto-isolated I/Os	2 inputs, 4 outputs
RS-232	1
<b>Operating conditions/dimensions</b>	
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



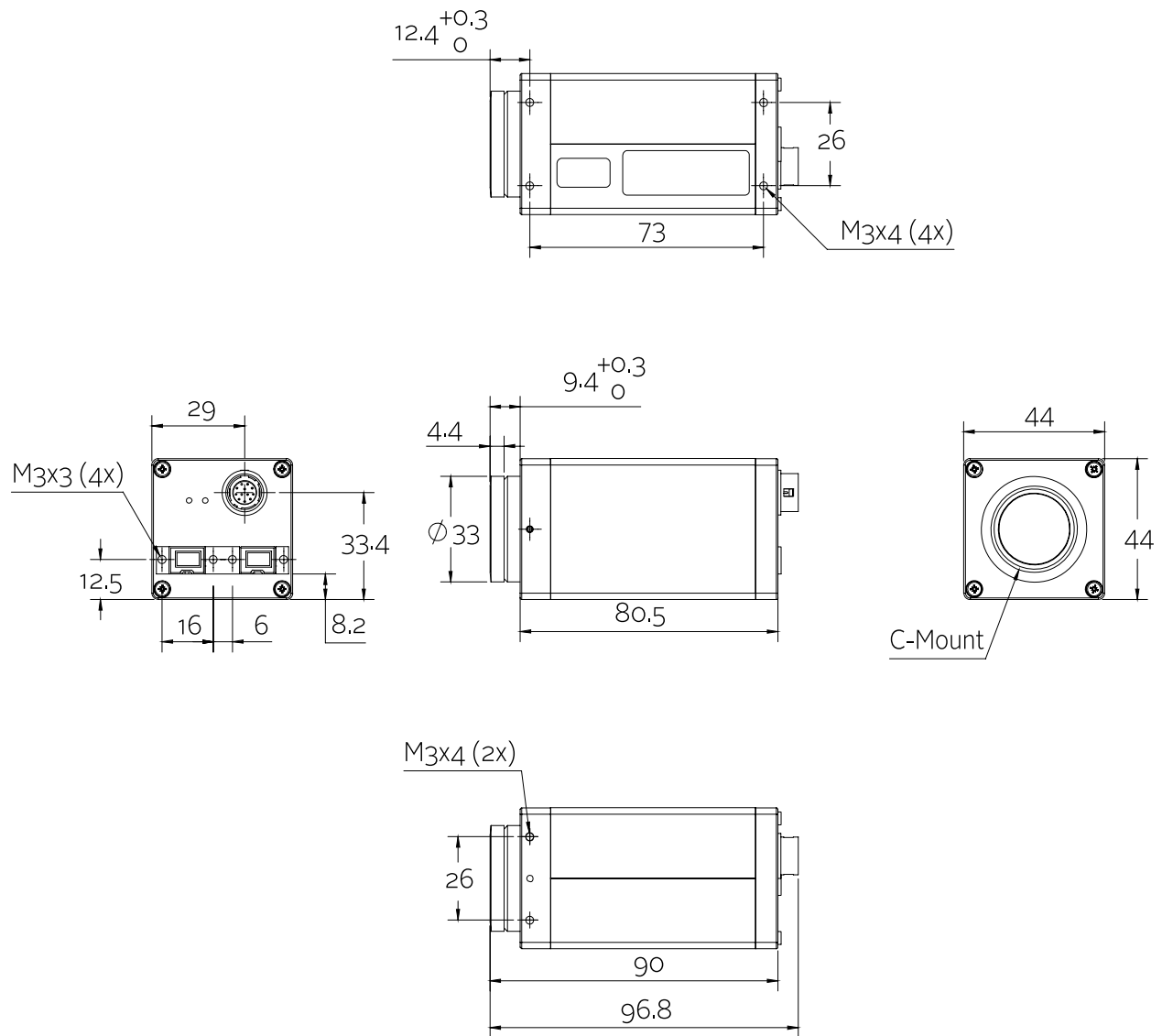
## Features

- 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 (43  $\mu$ s 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

## Technical drawing





## Applications

The Pike F-100B/C is a 1 Megapixel camera for sophisticated requirements. OEM customers profit from its modular design, which provides many opportunities for customization. For Healthcare and Life science applications, a light gray housing (medical design) is available (this applies to all cameras by Allied Vision Technologies).

Pike cameras are especially suited for:

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