



## Pike F-145



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

## Description

IEEE 1394b camera with Sony ICX285 sensor – 30 frames per second

The Pike F-145B/F-145C is equipped with one of the finest sensors, Sony's EXview HAD CCD ICX285. Furthermore, various real-time pre-processing functions enhance its exceptional image quality. At full resolution, it runs 30 frames per second. Higher frame rates can be reached by using a smaller area of interest (AOI), binning (b/w), or sub-sampling.

Options:

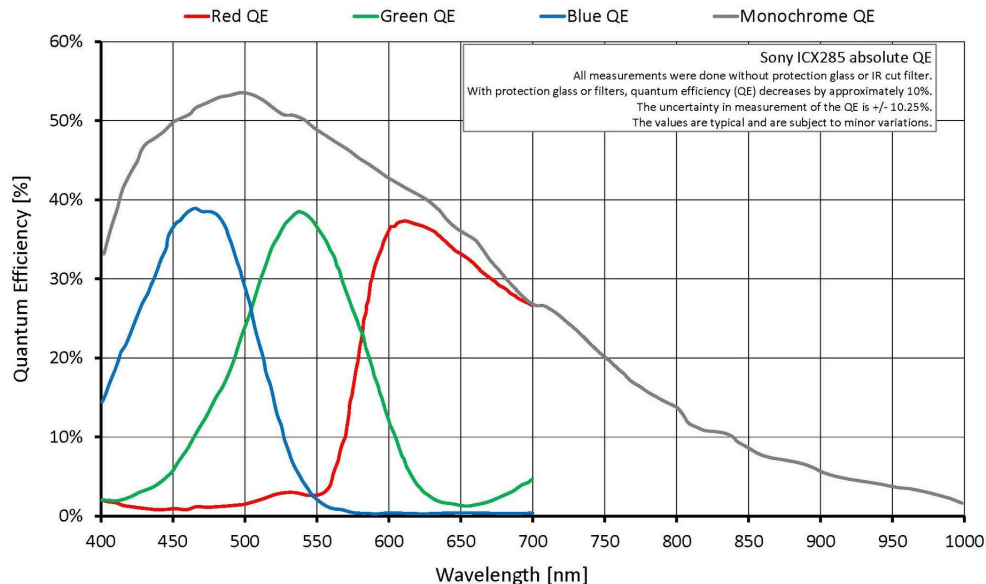
- IEEE 1394b connectors: 2 x copper (daisy chain) or 1 x GOF, 1 x copper, Hirose power: out
- Various IR cut/pass filters, various lens mounts
- Angled head, white medical housing

Also available: **Pike F-145B/C (-15fps) version** - lower framerate, enhanced image quality

## Specifications

Pike	F-145
Interface	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain, fiber optic (GOF) optional
Resolution	1388 (H) × 1038 (V)
Sensor	Sony ICX285
Sensor type	CCD Progressive
Sensor size	Type 2/3
Pixel size	6.45 µm x 6.45 µm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	30 fps
ADC	14 bit

Pike	F-145
Image buffer (RAM)	64 MByte
<b>Output</b>	
Bit depth	8-14 bit
Monochrome pixel formats	Mono8, Mono12, Mono16
RGB color pixel formats	RGB8
Raw pixel formats	Raw8, Raw12, Raw16
<b>General purpose inputs/outputs (GPIOs)</b>	
Opto-isolated I/Os	2 inputs, 4 outputs
RS232	1
<b>Operating conditions/dimensions</b>	
Operating temperature	+5 °C to +50 °C
Power requirements (DC)	8 V to 36 V
Power consumption	4 W (@ 12 VDC)
Mass	250 g
Body dimensions (L × W × H in mm)	96.8 × 44 × 44 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU (RoHS); FCC Class B



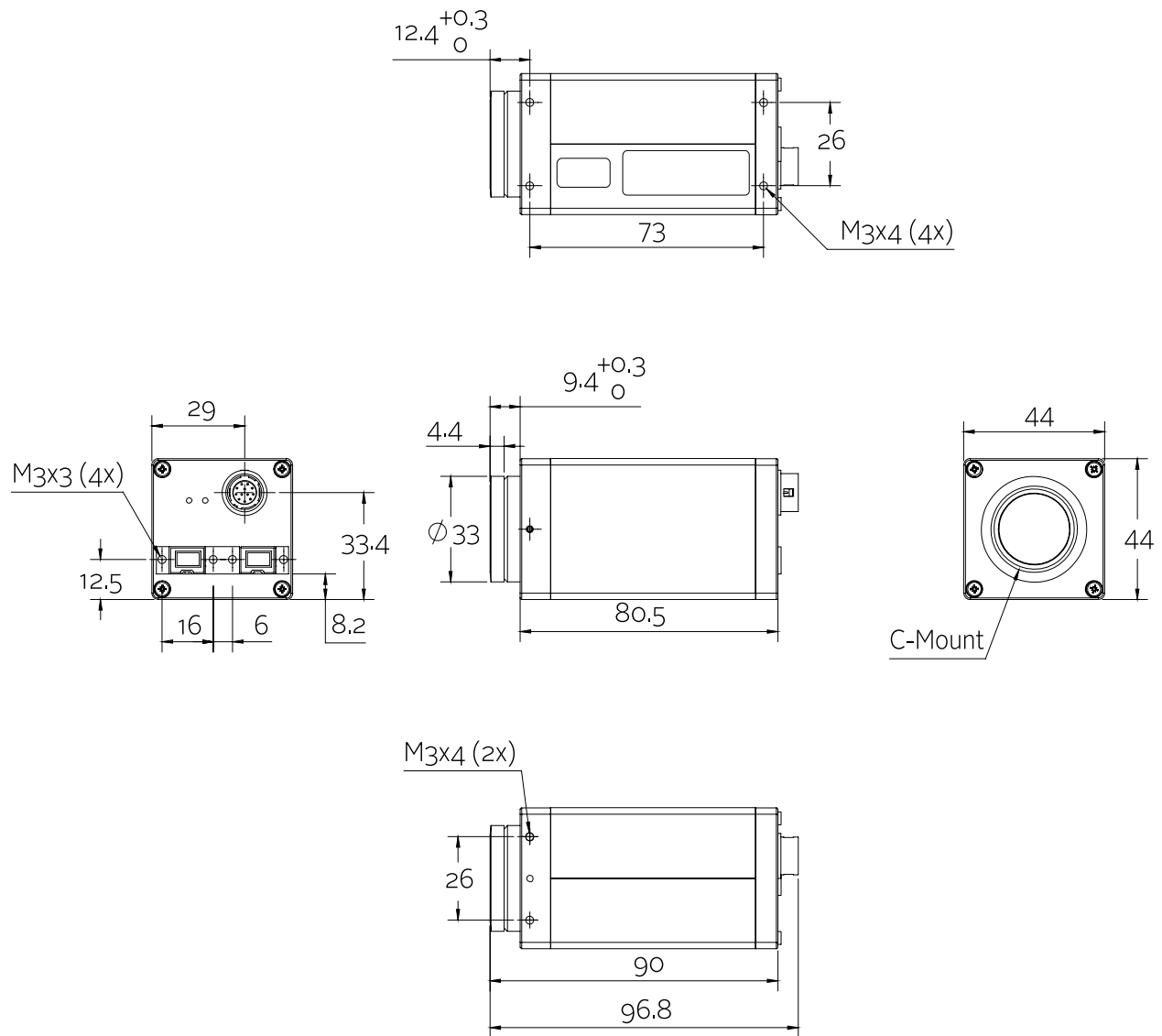
## Features

- High SNR mode (up to 24 dB better signal-to-noise ratio)
- Low-Noise Binning Mode
- Smear reduction



- Shading correction
- Area of interest (AOI), separate AOI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 32 dB)
- Auto exposure (39  $\mu$ s to 67 s)
- Auto white balance
- Look-up table (LUT)
- 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)
- Storable user sets

## Technical drawing





## Applications

The well-engineered sensor Sony ICX285 in combination with the diverse image pre-processing functions and the modular design of the Pike F-145B/F-145C result in a camera with an exceptional high performance. It is the perfect choice for sophisticated applications, especially with low light.

The Pike F-145B/F-145C is especially suited for:

- Applications which require the highest image quality even with low light
- OEM applications (modular concept)
- Motion studies
- 3D recordings of still and moving objects
- Science and research
- Healthcare and sports
- Multimedia and entertainment
- Intelligent traffic solutions (ITS)
- Long cable lengths, 400 meters and more (fiber version)