



## Pike F-210

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

### Description

#### HDTV camera with video frame rate - 2 Megapixels

The Pike F-210B is equipped with an ON Semiconductor KAI-2093 CCD sensor, and it features smart real-time functions. At full resolution, it runs up to 31 frames per second. Higher frame rates can be reached by using a smaller area of interest (AOI), binning (b/w), or sub-sampling. By default monochrome models ship with protection glass B 270.

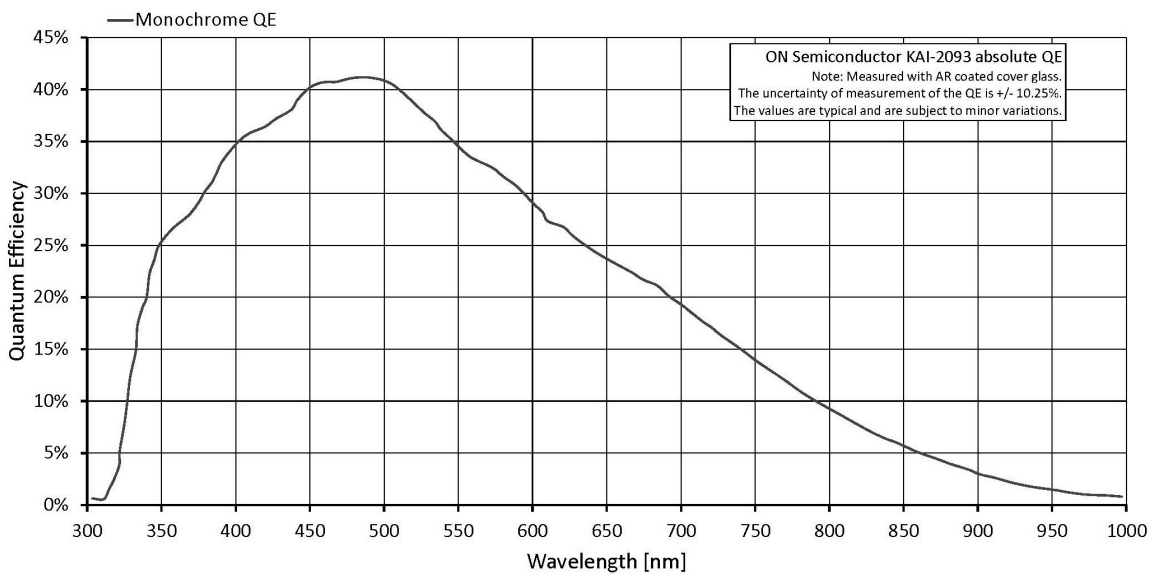
Options:

- 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

### Specifications

Pike	F-210
Interface	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain, fiber optic (GOF) optional
Resolution	1920 (H) × 1080 (V)
Sensor	ON Semi KAI-2093
Sensor type	CCD Progressive
Sensor size	Type 1
Pixel size	7.4 μm × 7.4 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	31 fps
ADC	14 bit
Image buffer (RAM)	64 MByte

Pike	F-210
	<b>Output</b>
Bit depth	8-14 bit
Monochrome pixel formats	Mono8, Mono12, Mono16
	<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



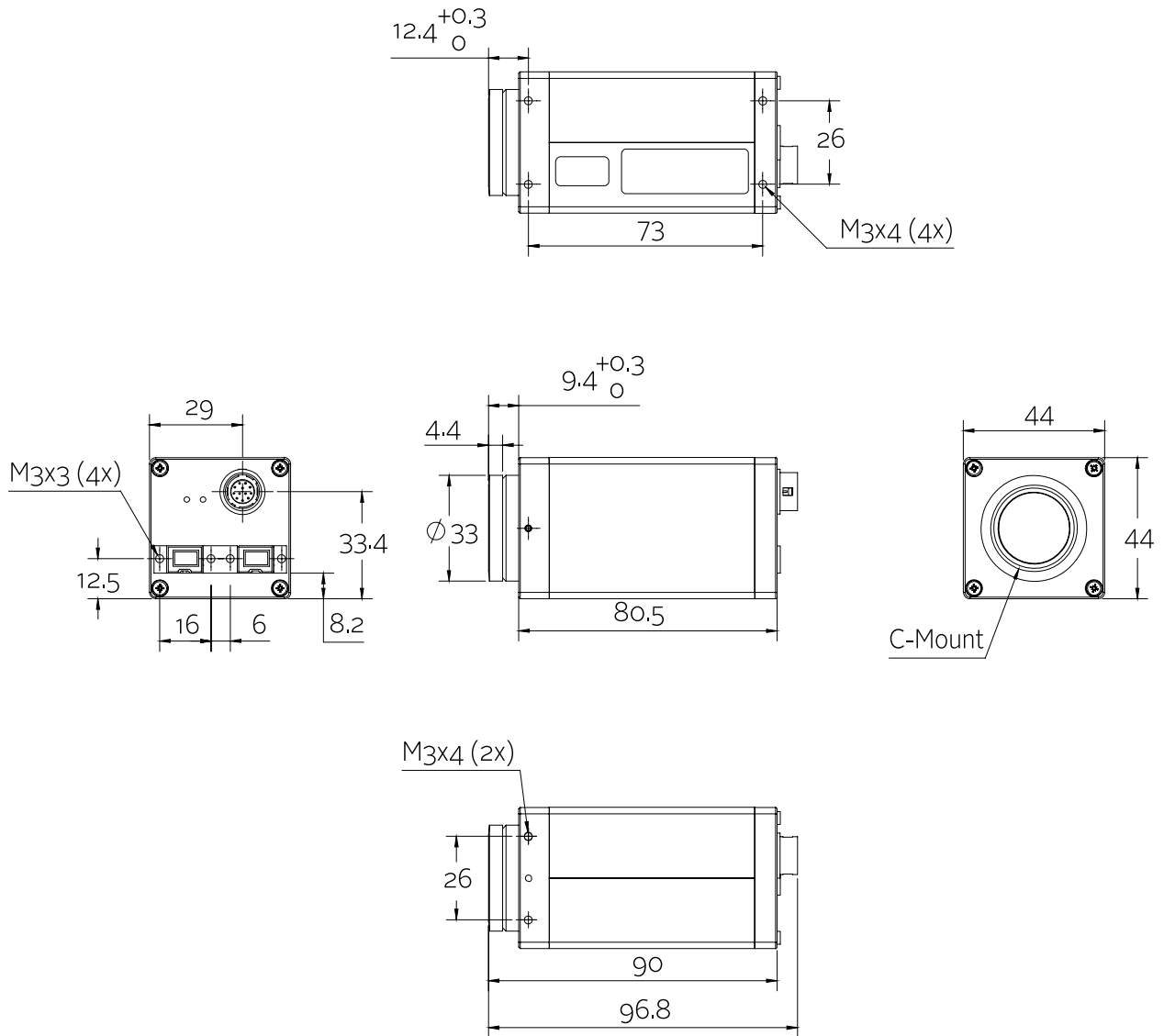
## Features

- 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 22 dB)
- Auto exposure (43  $\mu$ s to 67 s)
- Look-up table (LUT)
- 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 Pike F-210B suits for applications which require the highest quality in HDTV resolution (1920 x 1080) at video frame rates. Besides the excellent image quality, its flexibility makes it suitable for many applications. The fiber version supports cable lengths of 400 meters and even more without any additional repeaters.

**Pike cameras are especially suited for:**

- Entertainment, movie pre-production, video recording
- OEM applications (modular concept)
- Motion studies
- Science and research
- Healthcare and sports
- Event documentation
- Intelligent traffic solutions (ITS)
- Long cable lengths, 400 meters and more (fiber version)