



Description

HDTV camera with video frame rate - 2 Megapixel

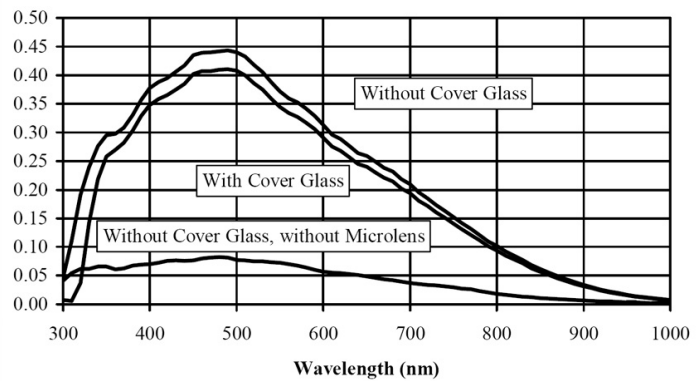
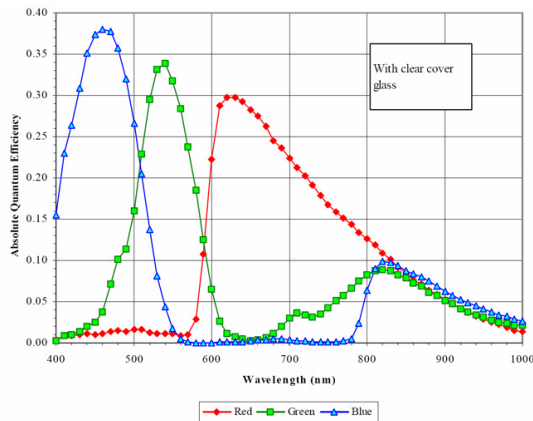
The Pike F-210B/C is equipped with a Kodak KAI-2093 CCD sensor, and it features smart real-time functions. At full resolution, it runs up to 31 fps. Higher frame rates can be reached by a smaller AOI, binning (b/w), or sub-sampling.

- Kodak KAI-2093
- Trigger
 - Programmable, trigger level control, single trigger, bulk trigger, programmable trigger delay
- Options
 - 1394b connectors: daisy chain copper or copper and GOF
 - Various IR cut/pass filters
 - F/M39-Mount
 - Hirose power: out
 - 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 x 1080
Sensor	Kodak KAI-2093
Type	CCD Progressive
Sensor Size	Type 1
Cell size	7.4 μ m
Lens mount	C
Max frame rate at full resolution	31 fps
A/D	14 bit
On-board FIFO	64 MB
Output	
Bit depth	8-14 bit
Mono modes	Mono8, Mono12, Mono16
Color modes YUV	YUV411, YUV422
Color modes RGB	RGB8
Raw modes	Raw8, Raw12, Raw16
General purpose inputs/outputs (GPIOs)	
TTL I/Os	0
Opto-coupled I/Os	2 inputs, 4 outputs
RS-232	1
Power/Mass/Dimensions/Regulations	
Power requirements (DC)	8 V - 36 V
Power consumption (12 V)	4 W
Mass	250 g
Body Dimensions (L x W x H in mm)	96.8 x 44 x 44 mm including connectors, w/o tripod and lens
Regulations	CE, FCC Class B, RoHS

Pike technical drawing (C-Mount)



Smart features

- Programmable LUT, white balance, hue, saturation
- Debayering
- Gain
 - Auto/manual
 - Manual gain control: 0 - 22 dB
- Exposure
 - Auto/manual
 - Exposure time: 43 μ s - 67 s
- Color correction
- Shading correction
- High SNR mode (up to 24 dB better signal-to-noise ratio)
- Smear reduction
- Sub-sampling, 2x - 8x binning (b/w)
- Separate AOI for auto features
- Sequence mode (changes the image settings on the fly)
- Image mirror
- Deferred image transport
- SIS (secure image signature, time stamp for trigger, frame count etc.)
- Storable user settings

Applications

The Pike F-210B/C 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
- ITS (Intelligent traffic solutions)
- Long cable lengths, 400 meters and more (fiber version)

Application Case Studies:

- **Every Nook and Cranny**

The Mephisto Extreme 3D-Scanner from 3DDynamics relies on AVT Pike digital cameras to scan objects, humans, animals or plants with the highest possible precision in three dimensions.