



## Description

### 16 Megapixel premium camera - 35 mm CCD sensor Kodak KAI-16000

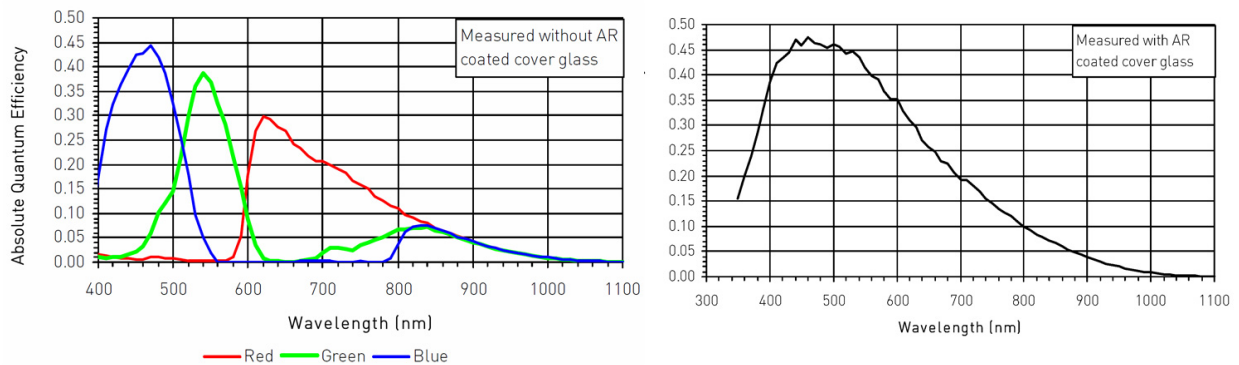
The Pike F-1600B/C is a 16 Megapixel 1394b camera with exceptional image quality. It can be operated both with single tap and dual tap mode. At full resolution, it runs up to 3.1 fps (dual tap). Higher frame rates can be reached by a smaller AOI, binning (b/w), or sub-sampling.

- Kodak KAI-16000
- Standard: Class 2 sensor, optional: Class 1 sensor
- Standard: F-Mount
- 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
  - M42/M58-Mount
  - Hirose power: out
  - Angled head
  - White medical housing

## Specifications

Pike	F-1600
<b>Interface</b>	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain, fiber optic (GOF) optional
<b>Resolution</b>	4872 x 3248
<b>Sensor</b>	Kodak KAI-16000
<b>Type</b>	CCD Progressive
<b>Sensor Size</b>	Type 35 mm
<b>Cell size</b>	7.4 $\mu$ m
<b>Lens mount</b>	F
<b>Max frame rate at full resolution</b>	3 fps
<b>A/D</b>	14 bit
<b>On-board FIFO</b>	256 MB
<b>Output</b>	
<b>Bit depth</b>	8-14 bit
<b>Mono modes</b>	Mono8, Mono12, Mono16
<b>Color modes YUV</b>	YUV411, YUV422
<b>Color modes RGB</b>	RGB8
<b>Raw modes</b>	Raw8, Raw12, Raw16
<b>General purpose inputs/outputs (GPIOs)</b>	
<b>TTL I/Os</b>	0
<b>Opto-coupled I/Os</b>	2 inputs, 4 outputs
<b>RS-232</b>	1
<b>Power/Mass/Dimensions/Regulations</b>	
<b>Power requirements (DC)</b>	8 V - 36 V
<b>Power consumption (12 V)</b>	4 W
<b>Mass</b>	380 g
<b>Body Dimensions (L x W x H in mm)</b>	142.8 x 59 x 59 mm including connectors, w/o tripod and lens
<b>Regulations</b>	CE, FCC Class B, RoHS

[Pike technical drawing \(F-Mount\)](#)



## Smart features

- Programmable LUT, white balance, hue, saturation
- Debayering
- Gain
  - Auto/manual
  - Manual gain control: 0 - 24 dB
- Exposure
  - Auto/manual
  - Exposure time: 636  $\mu$ 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-1600B/C is made for high-precision applications which require highest attention to detail. Its excellent image quality can be enhanced by several image pre-processing functions. It is also available with M42-Mount or with M58-Mount.

This camera is well-suited for:

- Science and research
- Metrology
- Document scanning (replaces DSLR cameras - no mechanical shutter, long life time)
- Healthcare and medical applications
- Industrial inspection at high resolutions
- Aerial imaging
- Very demanding OEM camera applications
- Long cables - 400 meters and more without additional repeaters (fiber version)