

Description

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

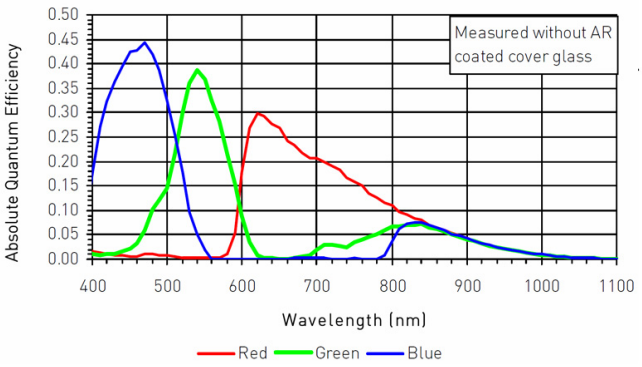
The Pike F-1600B/C is a 16 Megapixel 1394b camera with exceptional image quality. It can be operated both with single tap and dual tap mode. At full resolution, it runs up to 3.1 fps (dual tap). Higher frame rates can be reached by a smaller AOI, binning (b/w), or sub-sampling.

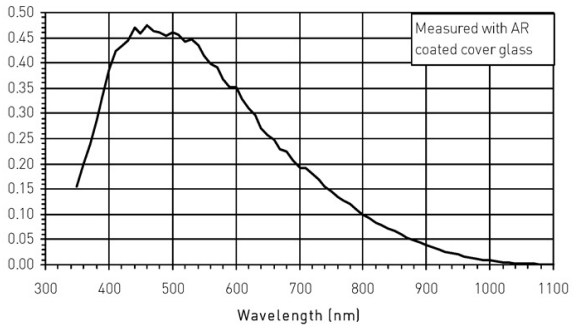
- Kodak KAI-16000
- Standard: Class 2 sensor, optional: Class 1 sensor
- Standard: F-Mount
- Trigger
  - Programmable, trigger level control, single trigger, bulk trigger, programmable trigger delay
- Options
  - 1394b connectors: daisy chain copper or copper and GOF
  - Various IR cut/pass filters
  - M42/M58-Mount
  - Hirose power: out
  - Angled head
  - White medical housing

Specifications

Pike	F-1600
Interface	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain, fiber optic (GOF) optional
Resolution	4872 x 3248
Sensor	Kodak KAI-16000
Type	CCD Progressive
Sensor Size	Type 35 mm
Cell size	7.4 µm
Lens mount	F
Max frame rate at full resolution	3 fps
A/D	14 bit
On-board FIFO	256 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	380 g
Body Dimensions (L x W x H in mm)	142.8 x 59 x 59 mm including connectors, w/o tripod and lens
Regulations	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 µs - 67 s
- Color correction
- Shading correction
- Defect pixel correction
- High SNR mode (up to 24 dB better signal-to-noise ratio)
- 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
- ITS (Intelligent traffic solutions)
- Long cables - 400 meters and more without additional repeaters (fiber version)