



Pike

F-145



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

High-end FireWire

Fast 1394b cameras with high frame rates and powerful features

Pike F-145 with Sony ICX285 runs 30.0 frames per second at 1.4 MP resolution.

The Pike is a fast IEEE 1394b camera for demanding applications (e.g. industrial and medical imaging). Numerous pre-processing functions produce an outstanding image quality. Pike cameras operate with very high frame rates.

Pike cameras include extraordinary image pre-processing functions like the High SNR mode (up to 24 dB better signal-to-noise ratio).

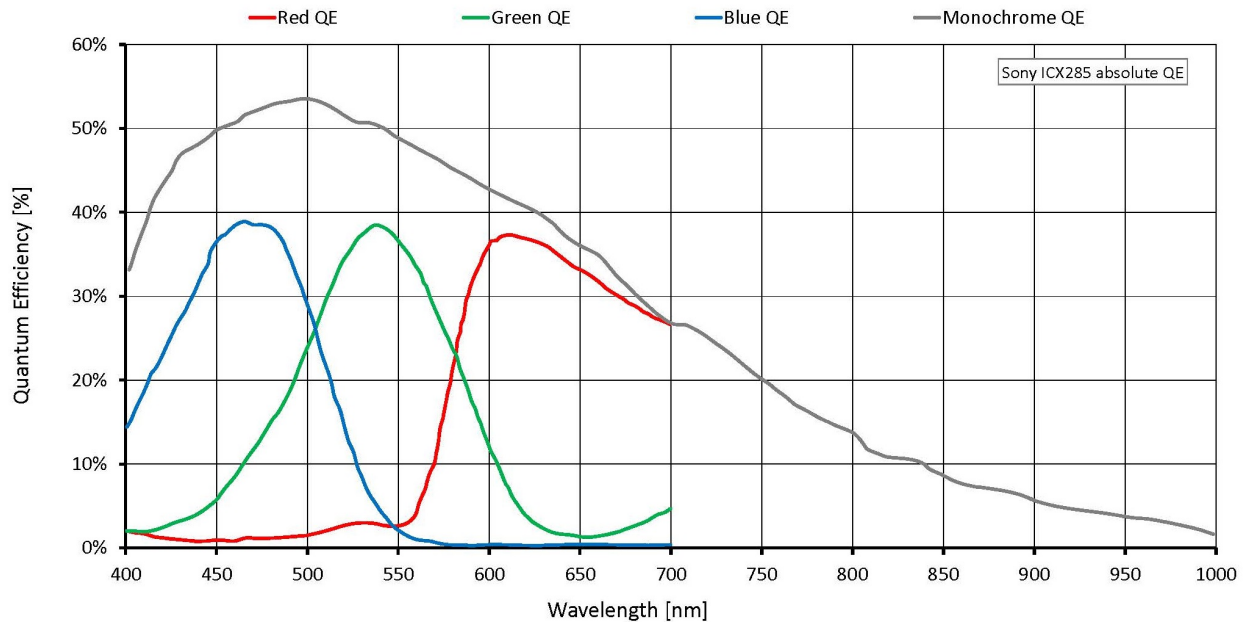
Pike cameras are available both with two copper ports (for daisy-chaining) and with copper/GOF (glass optical fiber) ports.

- Sony and OnSemi CCD sensors (1/3, 1/2, 2/3, 1, 1.2, 35 mm)
- 8 models (VGA to 16 Megapixel)
- Options
 - 1394b connectors: daisy chain copper or copper and GOF
 - Various IR cut/pass filters
 - F/M39-Mount (F-032 only: CS/M12-Mount)
 - Pike F-1100/F-1600: M42/M58-Mount
 - Hirose power: out
 - Angled head
 - White medical housing
 - Sensor variants: Taped cover glass w/o microlenses, fixed quartz cover glass w/o microlenses available for some models

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 × 6.45 μm |
| Lens mount (default) | C-Mount |
| Max. frame rate at full resolution | 30 fps |
| ADC | 14 Bit |
| Image buffer (RAM) | 64 MByte |
| Output | |
| Bit depth | 8-14 Bit |
| Monochrome pixel formats | Mono8, Mono12, Mono16 |
| RGB color pixel formats | RGB8 |
| Raw pixel formats | Raw8, Raw12, Raw16 |
| General purpose inputs/outputs (GPIOs) | |
| Opto-isolated I/Os | 2 inputs, 4 outputs |
| RS232 | 1 |
| Operating conditions/dimensions | |
| 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, including amendment 2015/863/EU (RoHS); FCC Class B |

Quantum efficiency

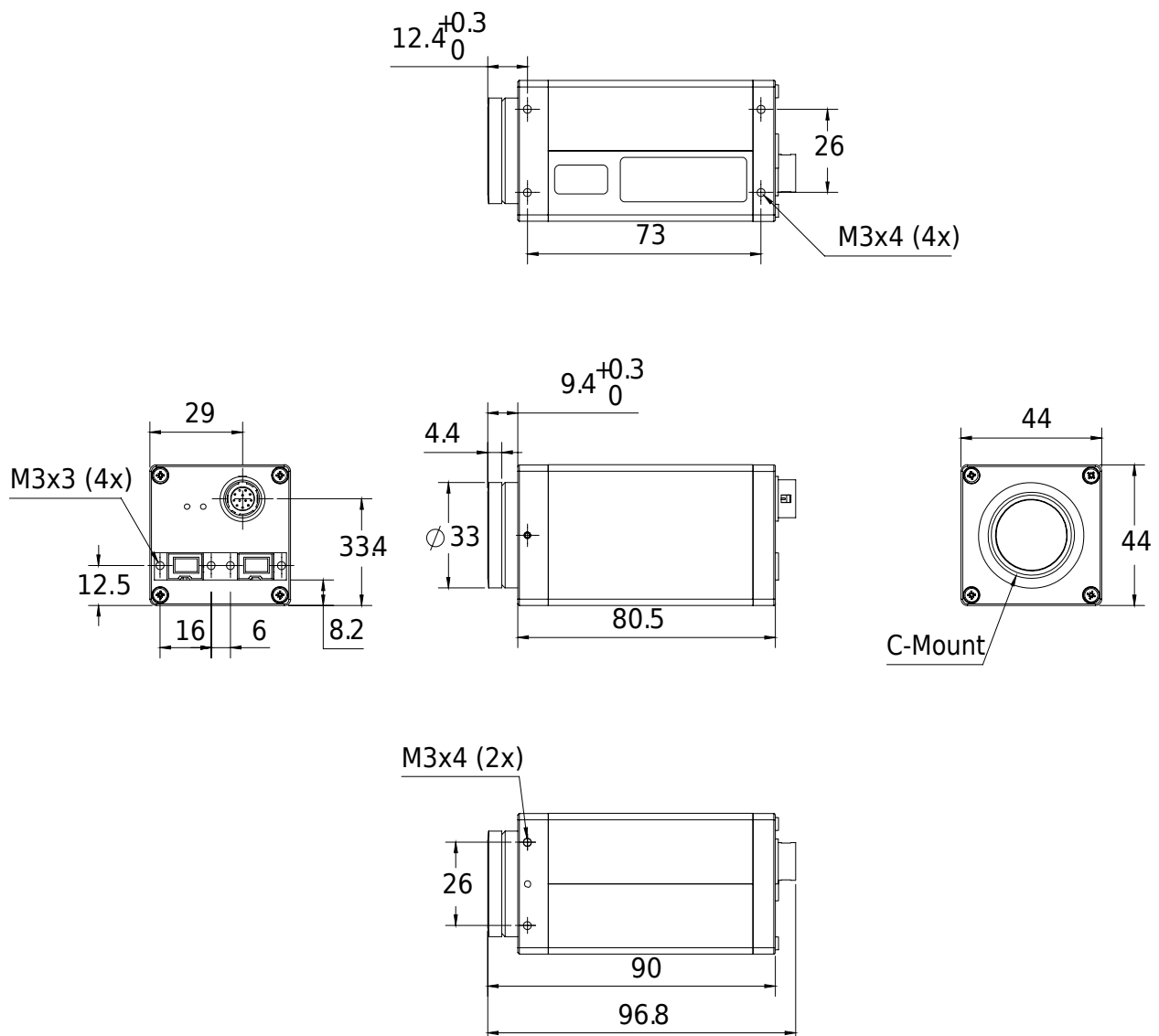


Features

- 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 μ 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)