



Pike F-145

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

Description

IEEE 1394b camera with Sony ICX285 sensor – 30 frames per second

The Pike F-145B/F-145C is equipped with one of the finest sensors, Sony's EXview HAD CCD ICX285. Furthermore, various real-time pre-processing functions enhance its exceptional image quality. At full resolution, it runs 30 frames per second. Higher frame rates can be reached by using a smaller area of interest (AOI), binning (b/w), or sub-sampling.

Options:

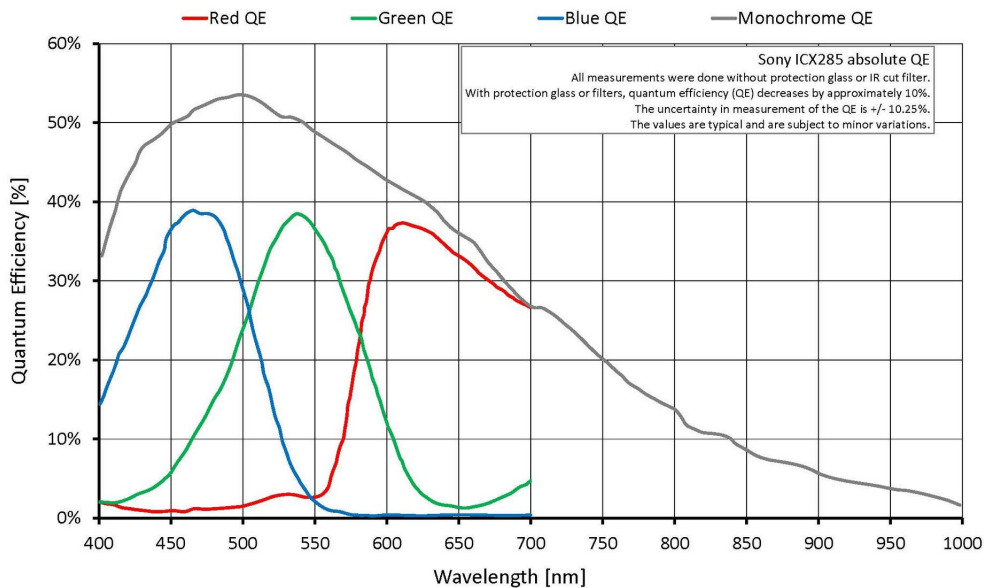
- IEEE 1394b connectors: 2 x copper (daisy chain) or 1 x GOF, 1 x copper, Hirose power: out
- Various IR cut/pass filters, various lens mounts
- Angled head, white medical housing

Also available: **Pike F-145B/C (-15fps) version** - lower framerate, enhanced image quality

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 |
| Cell size | 6.45 μm x 6.45 μm |
| Lens mount | C-Mount |
| Max frame rate at full resolution | 30 fps |
| ADC | 14 bit |
| Image buffer (RAM) | 64 MByte |

| Pike | F-145 |
|---|---------------------------------------|
| | Output |
| Bit depth | 8-14 bit |
| Mono modes | Mono8, Mono12, Mono16 |
| Color modes RGB | RGB8 |
| Raw modes | Raw8, Raw12, Raw16 |
| General purpose inputs/outputs (GPIOs) | |
| Opto-isolated I/Os | 2 inputs, 4 outputs |
| RS-232 | 1 |
| Operating conditions/dimensions | |
| Operating temperature | +5 °C to +50 °C |
| Power requirements (DC) | 8 V to 36 V |
| Power consumption (@12 V) | 4 W |
| Mass | 250 g |
| Body dimensions (L × W × H in mm) | 96.8 × 44 × 44 (including connectors) |
| Regulations | CE, RoHS, REACH, WEEE, FCC |



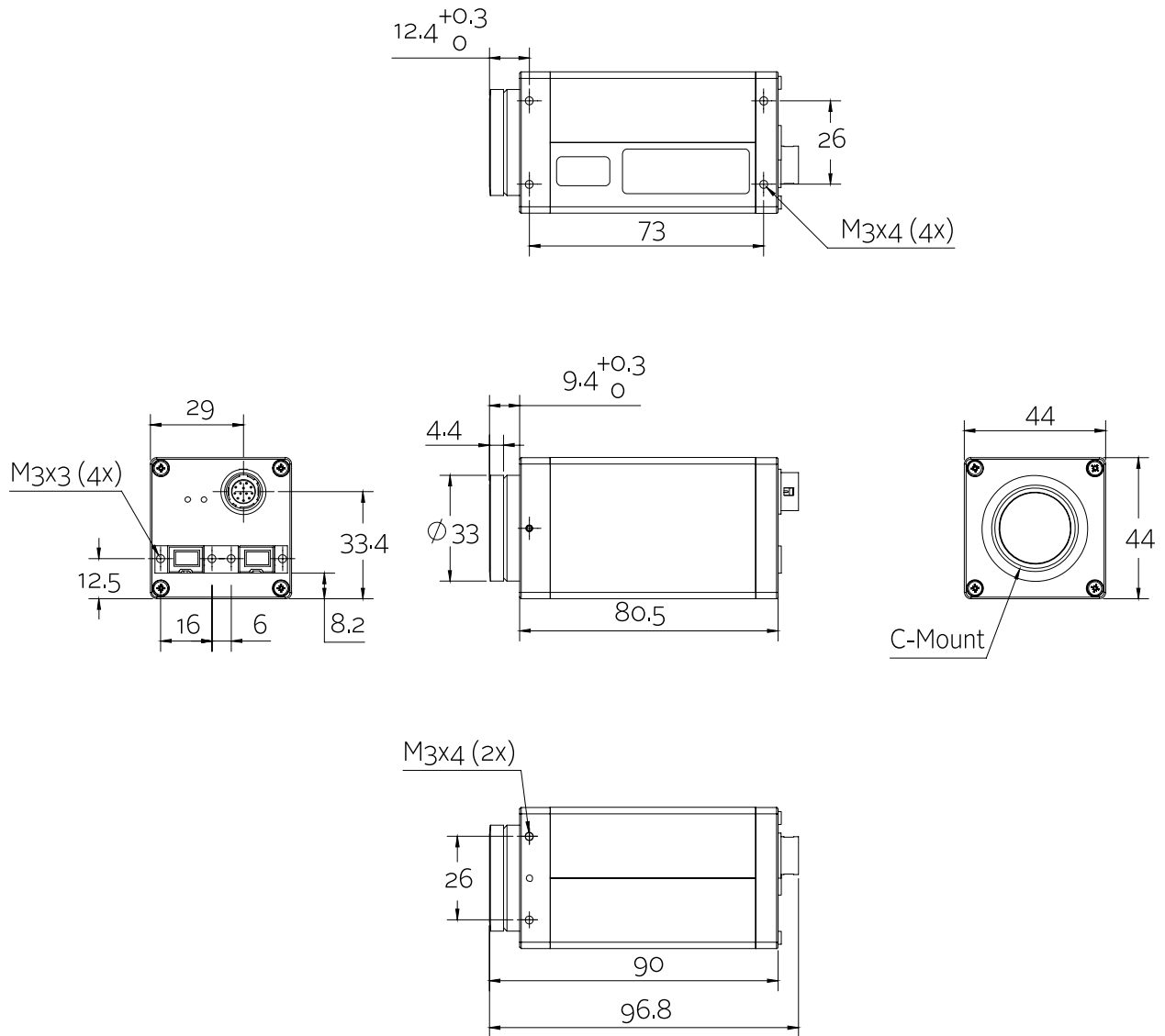
Features

- 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)