5 Megapixel premium camera with numerous image pre-processing functions

The Pike F-505B/F-505C is equipped with a renowned Sony Super HAD CCD sensor and has an excellent image quality. At full resolution, it runs up to 15 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

Specifications

<table>
<thead>
<tr>
<th>Pike</th>
<th>F-505</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface</td>
<td>IEEE 1394b - 800 Mb/s, 2 ports, daisy chain, fiber optic (GOF) optional</td>
</tr>
<tr>
<td>Resolution</td>
<td>2452 (H) × 2054 (V)</td>
</tr>
<tr>
<td>Sensor</td>
<td>Sony ICX625</td>
</tr>
<tr>
<td>Sensor type</td>
<td>CCD Progressive</td>
</tr>
<tr>
<td>Sensor size</td>
<td>Type 2/3</td>
</tr>
<tr>
<td>Pixel size</td>
<td>3.45 µm × 3.45 µm</td>
</tr>
<tr>
<td>Lens mount (default)</td>
<td>C-Mount</td>
</tr>
<tr>
<td>Max. frame rate at full resolution</td>
<td>14 fps</td>
</tr>
<tr>
<td>ADC</td>
<td>14 Bit</td>
</tr>
<tr>
<td>Image buffer (RAM)</td>
<td>64 MByte</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td></td>
</tr>
<tr>
<td>Bit depth</td>
<td>8-14 Bit</td>
</tr>
</tbody>
</table>
Pike F-505

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 24 dB)
- Auto exposure (27 µs 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 Pike F-505B/F-505C is perfectly suited for very demanding applications. The brilliant image quality can be enhanced by its image pre-processing functions. Due to the modular design, customization is easy and cost-effective. This camera fits especially for:

- Science and research
- Microscopy
- Healthcare and medical applications (white housing available)
- Multimedia, entertainment and sports
- Very demanding OEM camera applications
- ITS (Intelligent traffic solutions)
- Long cables - 400 meters and more without additional repeaters (fiber version)