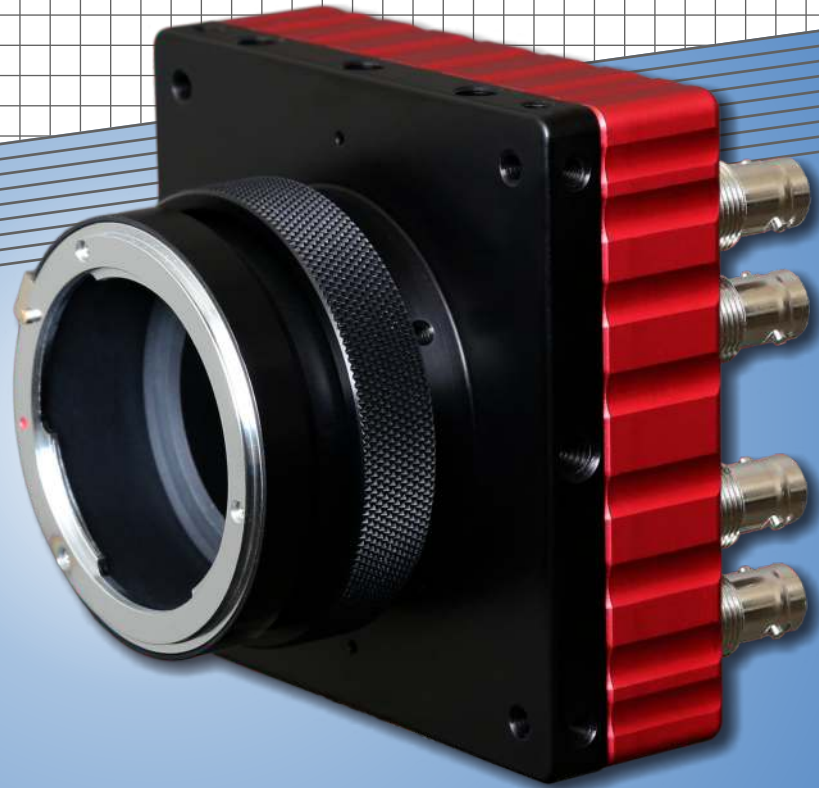


Flare™

High Resolution
Fast Frame Rate
12 Megapixels

12M180
12M125



CoaXPRESS
CAMERA
Link

4K x 3K @ 187fps (CXP)
4K x 3K @ 124fps (CL)

Features

- Monochrome, Color and Near-IR Models
- Global Shutter CMOS with Correlated Double Sampling
- CoaXPRESS or Camera Link Output
- Multiple Lens Mount Options (F, C, and Active EF)
- Selectable 8-bit or 10-bit Data Formats
- High Sensitivity with Low Noise
- Advanced Auto Exposure Control and Auto White Balance

Applications

- Automated Inspection
- High Speed Motion Analysis
- Research Imaging
- Specialty Video Production



IOI
IO INDUSTRIES

Specifications

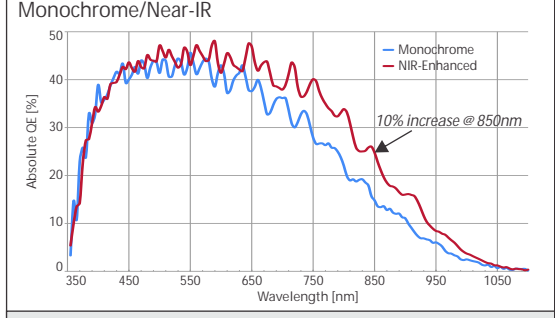
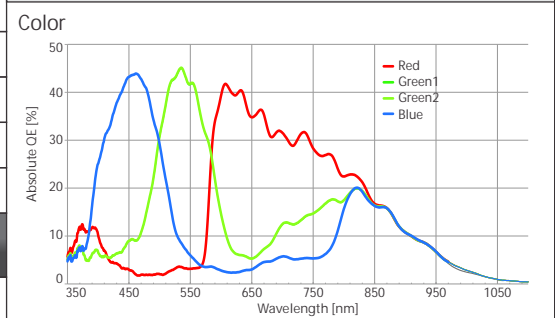
Camera Specifications

| | |
|--------------------------------|---|
| Sensor Type | CMOS w. Global Electronic Shutter (CMOSIS CMV12000) |
| Sensor Size (H x V) | 4096 x 3072 (5.51 m square pixels) |
| Optical Format | Super 35mm / APS-C (28.1mm image circle at full resolution) |
| Dynamic Range / Sensitivity | 60dB, 4.64 V/lux.s |
| Frame Rate (Full Resolution) | CX: 187 fps (8-bit), 149 fps (10-bit) CL: 124 fps (8-bit), 100 fps (10-bit) |
| Output Configurations | CX: 1/2/4 channels at 3.125Gb/s (CXP-3) or 6.25Gb/s (CXP-6) CL: Base, Medium, Single Full, Dual Full (80MHz Pixel Clock) |
| Additional I/O (Hirose 12-pin) | TTL-level trigger input/output, EF-mount lens control interface |
| Exposure Control | Programmable, edge-triggered, or auto-exposure control |
| Image Correction | Black level, column and row FPN, bad pixel replacement |
| Color Processing | Auto white balance (tracking or manual), programmable LUTs |
| Camera Configuration | GenICam (CX), ASCII commands (CL), or Flare Control software |

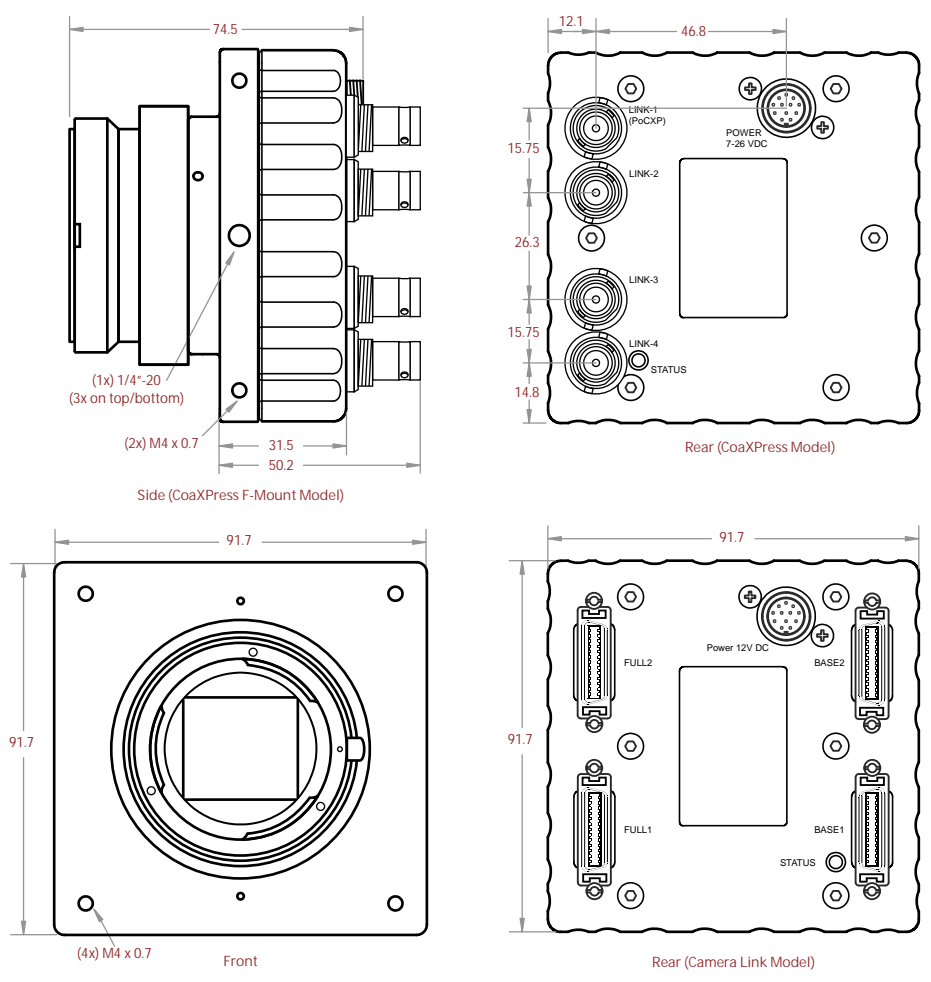
Mechanical/Electrical

Lens Mount: M42 x 0.75 with F, EF and C-Mount adapters
 Dimensions (no lens adapter): 91.7 x 91.7 x 44.5mm
 Dimensions (with F-mount): 91.7 x 91.7 x 74.5mm
 Operating Temperature: -30° to 45°C
 Power Requirements:
 CX: 12-24V DC or PoCXP, approx. 9.5W
 CL: 12V DC, approx. 7.5W
 Weight (typical): 490g (600g with F-mount)

Spectral Response



Mechanical Diagrams



Frame Rate Chart

| Frame Rates by Resolution and Bit Depth | 12M180xCX (4x CXP-6) | | 12M125xCL (2x CL-Full) | |
|---|----------------------|--------|------------------------|--------|
| | 8-bit | 10-bit | 8-bit | 10-bit |
| 4096 x 3072 | 187 | 149 | 124 | 100 |
| 4096 x 2160 (4K) | 266 | 212 | 175 | 141 |
| 3360 x 2496 | 231 | 184 | 152 | 122 |
| 2048 x 2048 | 500 | 447 | 370 | 296 |
| 1920 x 1080 | 935 | 838 | 692 | 555 |
| 1000 x 1000 | 1009 | 904 | 924 | 598 |
| 512 x 512 | 1912 | 1718 | 1753 | 1139 |

Ordering

Example: 12M180MCX-F

| | |
|---------------------------------|------------------|
| Camera | Lens Type |
| 12M180 (CX) | F - F-mount |
| 12M125 (CL) | C - C-mount |
| Sensor Type | Interface |
| M - Monochrome | CX - CoaXPress |
| C - Color (with IR filter) | CL - Camera Link |
| N - Near-IR Enhanced Monochrome | |



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 Specifications subject to change without notice