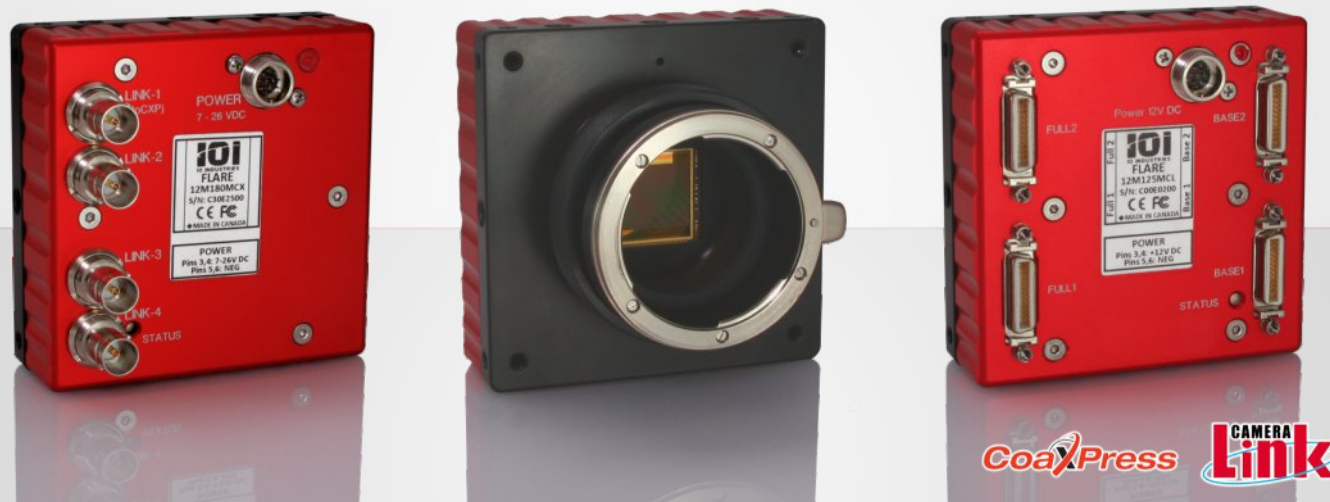


FlareTM

12MP CAMERAS



Video cameras with CMOSIS CMV12000 Sensors

APPLICATIONS

Automated Inspection

High Speed Motion Analysis

Research Imaging

Specialty Video Production



FEATURES INCLUDE:

- Monochrome and Color Models
- Global Shutter CMOS with CDS
- CoaXPress or Camera Link Output
- Multiple Lens Mount Options
- Selectable 8-bit or 10-bit Data Formats
- High Sensitivity with Low Noise
- Advanced Auto Exposure Control
- Auto White Balance

SPECIFICATIONS

| | |
|---------------------------------------|--|
| Camera Model | Flare 12MP |
| Sensor Size (H x V) | 4096 x 3072 |
| Frame rate (full resolution) | CX: 187 fps (8-bit), 149 fps (10-bit) CL: 124 fps (8-bit), 100 fps (10-bit) |
| Optical Format | Super 35mm / APS-C (28.1mm diagonal) |
| Sensor Type | CMOS w. global electronic shutter |
| Sensor Options | Monochrome or Color (Bayer) |
| Pixel Size | 5.5 x 5.5µm |
| Dynamic Range / Sensitivity | 60 dB, 4.64 V/lux.s |
| Output Configurations | CX: 1/2/4 links at 3.125Gbps (CXP-3), 5.0Gbps (CXP-5) or 6.25Gbps (CXP-6) CL: Base, Medium, Full, Full 80-bit, Dual Full 80-bit (80MHz Pixel Clock) |
| Pixel Bit Depth | 8-bit or 10-bit |
| Exposure Control | Trigger width, timed, or auto-exposure control |
| Image Correction | Black level, row and column-based FPN/PRNU correction, bad pixel replacement |
| Color Processing | Auto white balance (tracking or manual), programmable LUTs |
| Camera Configuration | GenICam (CX), ASCII commands (CL), or Flare Control software |
| Flat Field Correction | Available for CX camera models |
| Mechanical/Electrical | |
| Dimensions | 91.7 mm x 91.7mm x 74.5 mm (with F-mount) |
| Lens Mount | F-mount, Active EF-mount, C-mount or T-mount (M42 x 0.75) |
| Weight | 600g (with F-mount) |
| Power Requirements | CX: 9.5W, 7-26V DC via Hirose 12-pin or 24V via PoCXP CL: 7.5W, 12V DC via Hirose 12-pin |
| Additional I/O (Hirose 12-pin) | TTL-level trigger input/output, EF-mount lens control interface |
| Operating Temperature | -30°C to 45°C, 20-85% humidity (non-condensing) |
| Storage Temperature | -40°C to 85°C, 10-90% humidity (non-condensing) |

ORDERING

Example: 12M180MCX-F

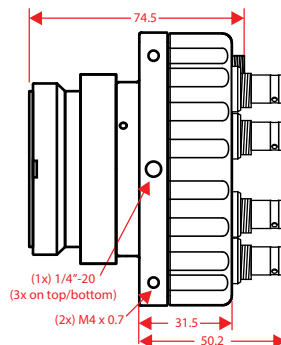
| | |
|----------------------------|------------------|
| Camera | Lens Type |
| 12M180 (CX) | F - F-mount |
| 12M125 (CL) | C - C-mount |
| | M - M42 x 0.75 |
| Sensor Type | Interface |
| M - Monochrome | CX - CoaXPress |
| C - Color (with IR filter) | CL - Camera Link |

FRAME RATE CHART

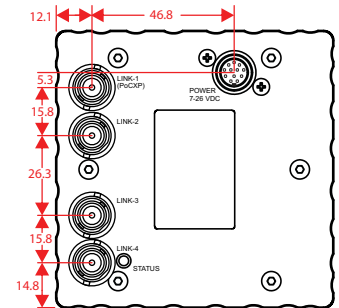
| Frame Rates by Resolution and Bit Depth | 12M180xCX (4x CXP-6) | | 12M125xCL (2x Full 80-bit) | |
|---|----------------------|--------|----------------------------|--------|
| | 8-bit | 10-bit | 8-bit | 10-bit |
| 4096 x 3072 | 187 | 149 | 124 | 100 |
| 4096 x 2160 (4K) | 266 | 212 | 175 | 141 |
| 3360 x 2496 | 231 | 184 | 152 | 122 |
| 2048 x 2048 | 500 | 447 | 370 | 296 |
| 1920 x 1080 | 935 | 838 | 692 | 555 |
| 1000 x 1000 | 1008 | 903 | 924 | 829 |
| 1280 x 720 | 1384 | 1242 | 1268 | 1139 |
| 640 x 480 | 2032 | 1827 | 1863 | 1677 |

MECHANICAL DIAGRAMS

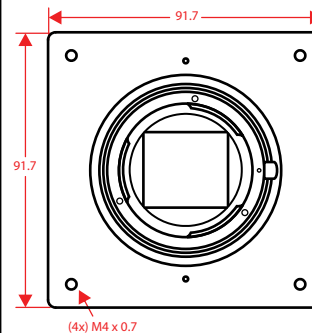
Side (CoaXPress F-Mount Model)



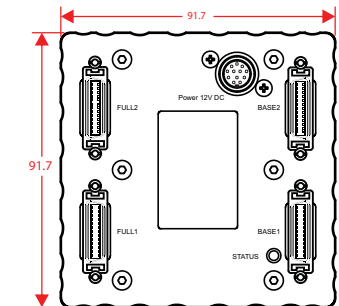
Rear (CoaXPress Model)



Front



Rear (Camera Link Model)



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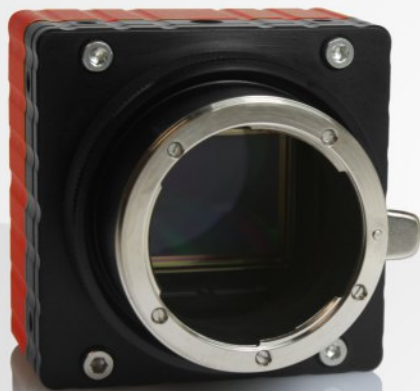
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Datasheet Rev. 3.4 (11/08/2019)
Specifications subject to change without notice

Flare™

48MP CAMERAS



CoaxPress

Video cameras with CMOSIS CMV50000 Sensors

APPLICATIONS

Automated Inspection

Aerial Imaging and Mapping

Wide Area Surveillance

Specialty Video Production



FEATURES INCLUDE:

- Monochrome and Colour Models
- Global Shutter CMOS with CDS
- CoaxPress Output
- Selectable 8/10/12-bit Data Formats
- Multiple Lens Mount Options
- Compact Size, Low-Power Fanless Design
- Multi-ROI with up to 10 Separate Windows
- Auto Exposure and Auto White Balance

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SPECIFICATIONS

| | |
|-------------------------------------|--|
| Camera Model | Flare 48MP |
| Sensor Size (H x V) | 7920 x 6004 (47.5MP) |
| Frame rate (full resolution) | 30.9 fps |
| Optical Format | 35mm Full Frame (45.7mm diagonal) |
| Sensor Type | CMOS w. global electronic shutter |
| Sensor Options | Monochrome or color (Bayer) |
| Pixel Size | 4.6 x 4.6 μm |
| Dynamic Range / Sensitivity | 64 dB, 4 V/lux.s |
| Output Configurations | 1/2/4 links at 2.50Gbps (CXP-2), 3.125Gbps (CXP-3), 5.0Gbps (CXP-5) or 6.25Gbps (CXP-6) |
| Multiple ROI | Up to 10 separate windows |
| Pixel Bit Depth | 8/10/12-bit |
| Exposure Control | Trigger width, timed, or auto-exposure control |
| Image Correction | Black level, row and column-based FPN/PRNU, bad pixel replacement, flat field correction |
| Color Processing | Auto white balance (tracking or manual), programmable LUTs |
| Camera Configuration | GenICam or Flare Control software |

Mechanical/Electrical

| | |
|---------------------------------------|---|
| Dimensions | 79.7 mm x 79.7 mm x 78.0 mm (WxHxD, with F-mount) |
| Lens Mount | F-mount, M58 x 0.75, Active Canon EF, others upon request |
| Weight | 610g (with F-mount, no lens) |
| Power Requirements | 7.9W, 7-26V DC via Hirose 12-pin or 24V via PoCXP |
| Additional I/O (Hirose 12-pin) | TTL-level trigger input/output |
| Operating Temperature | -30°C to 45°C, 20-85% humidity (non-condensing) |
| Storage Temperature | -40°C to 85°C, 10-90% humidity (non-condensing) |

ORDERING

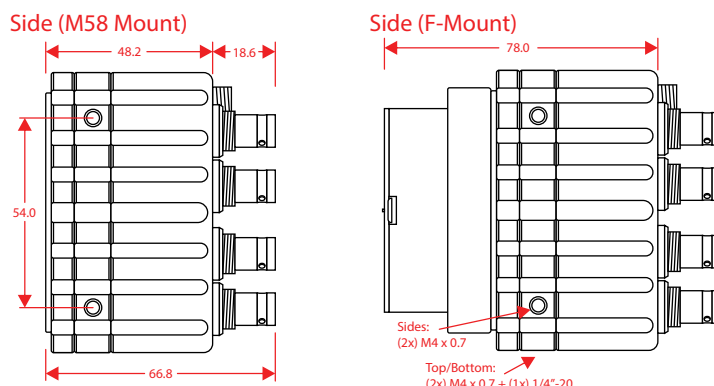
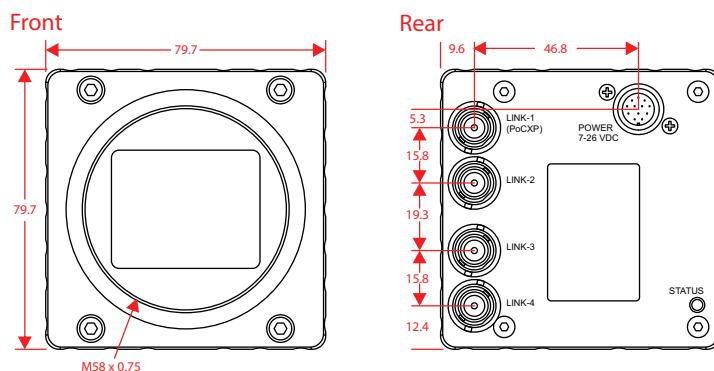
Example: 48M30MCX-F

| | |
|---|---|
| Camera 48M30 | Lens Type F - F-mount M - M58 x 0.75 A - Active EF-mount |
| Sensor Type M - Monochrome C - Color (with IR filter) | Interface CX - CoaXPress |

FRAME RATE CHART

| Full-Resolution Frame Rate by Connection and Bit Depth | 48M30xCX | | |
|--|----------|--------|--------|
| | 8-bit | 10-bit | 12-bit |
| 4x CXP-6 | 30.9 | 30.9 | 30.9 |
| 4x CXP-5 | 30.9 | 29.2 | 24.3 |
| 4x CXP-3 | 23.5 | 18.9 | 15.6 |
| 4x CXP-2 | 18.8 | 15.2 | 12.4 |
| 2x CXP-6 | 23.5 | 18.9 | 15.6 |
| 2x CXP-5 | 18.2 | 14.6 | 12.2 |
| 2x CXP-3 | 11.7 | 9.5 | 7.8 |
| 2x CXP-2 | 9.4 | 7.6 | 6.2 |
| 1x CXP-6 | 11.7 | 9.5 | 7.8 |
| 1x CXP-5 | 9.1 | 7.3 | 6.1 |
| 1x CXP-3 | 5.9 | 4.7 | 3.9 |
| 1x CXP-2 | 4.7 | 3.8 | 3.1 |

MECHANICAL DIAGRAMS



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