

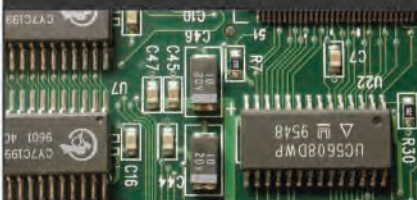
Flare™

High Resolution
Motion Capture



2MP 283fps
4MP 142fps

CoaxPress



Features

- Monochrome and color models
- CoaxPress output with PoCXP support
- Selectable 8-bit or 10-bit pixel depth
- Advanced global shuttering with CDS
- High Dynamic Range modes
- Multiple ROIs and subsampling
- Low power consumption

Applications

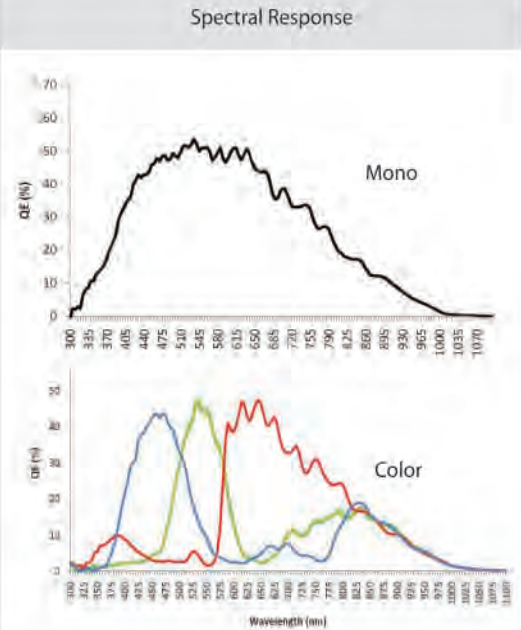
- Inspection and monitoring
- Motion capture
- Research
- Broadcast and cinema

IOI
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Specifications

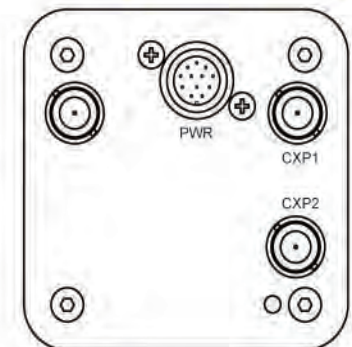
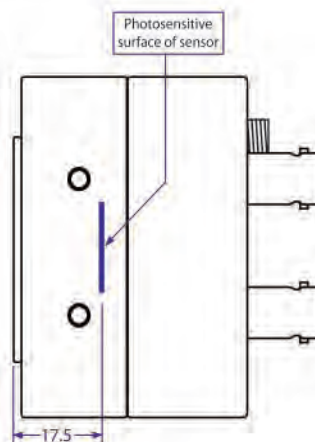
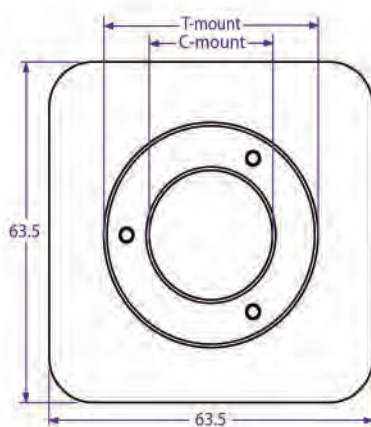
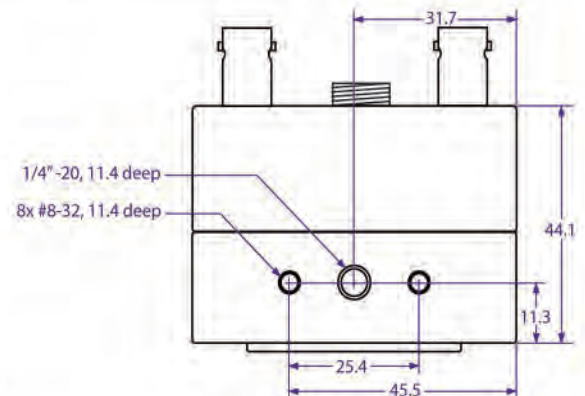
Camera Specifications

Camera Model	2M280 - CXP	4M140 - CXP
Sensor Size (H x V)	2048 x 1088 pixels	2048 x 2048 pixels
Frame Rate (8-bit, full resolution)	283 fps	142 fps
Optical Size	2/3"	1"
Shutter	Pipelined Global Shutter with CDS	
Pixel Size (µm)	5.5 x 5.5	
Sensor Type	60 dB CMOS	
Image Type	Mono / Color (Bayer)	
Pixel Format	8-bit or 10-bit	
Data Output Format	Dual CoaXPress up to 3.125GHz	
Link Speeds	1.25GHz, 2.5GHz, 3.125GHz	
Link Configurations	Single or Dual	
Synchronization	Via external trigger or free-run	
Exposure Control	Trigger width or timed	



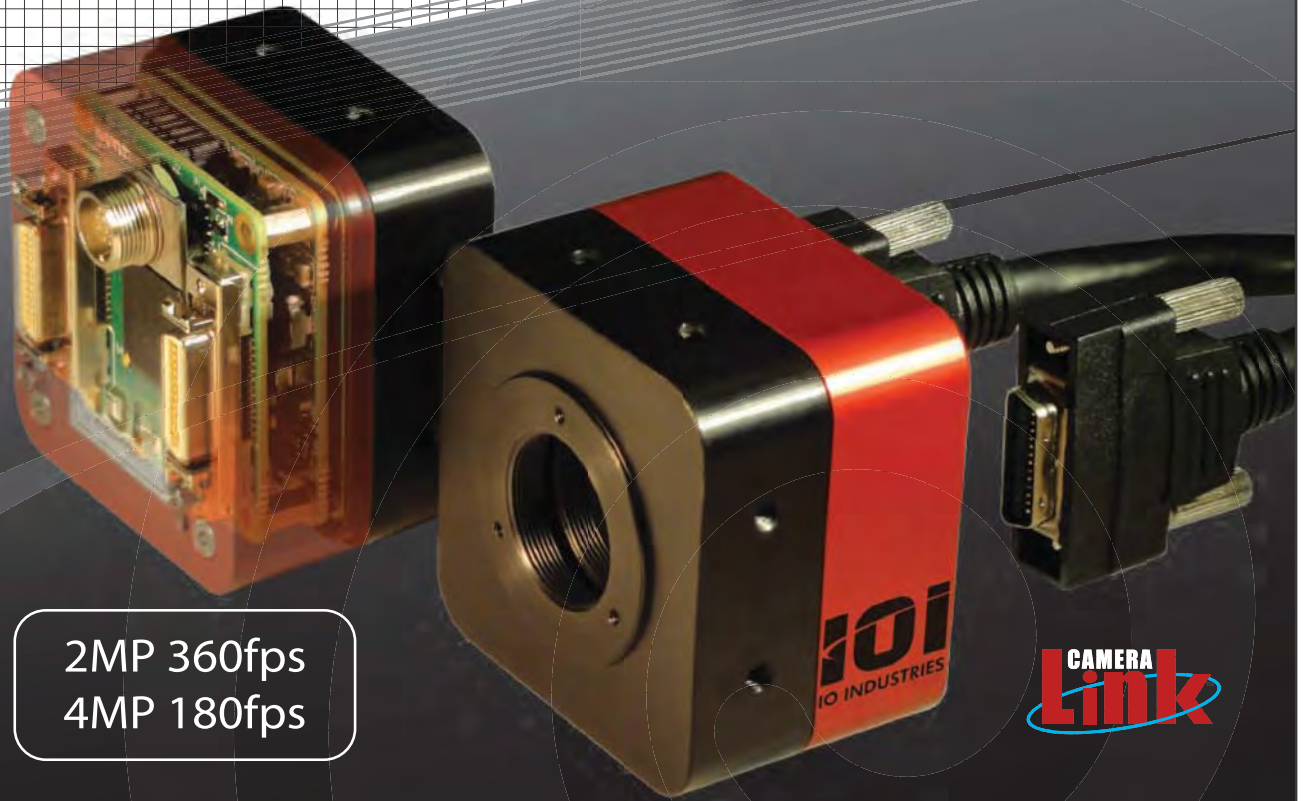
Mechanical / Electrical Specifications

Housing Size	63.5 mm x 63.5 mm x 44.1 mm
Ambient Temperature	Up to 50°C
Lens Mount	C-Mount or T-Mount
Connectors	(2) BNC, (1) 12-pin Hirose
Power Requirements	12 VDC (via Hirose or PoCXP)
Power Consumption (typical)	4.5 W
Weight (typical)	310 g

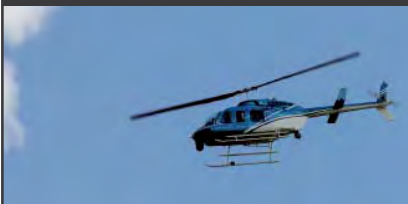


Flare™

High Resolution
Motion Capture



2MP 360fps
4MP 180fps



Features

- Monochrome and color models
- Camera Link output with PoCL support
- Selectable 8-bit or 10-bit pixel depth
- Advanced global shuttering with CDS
- High Dynamic Range modes
- Multiple ROIs and subsampling
- Low power consumption

Applications

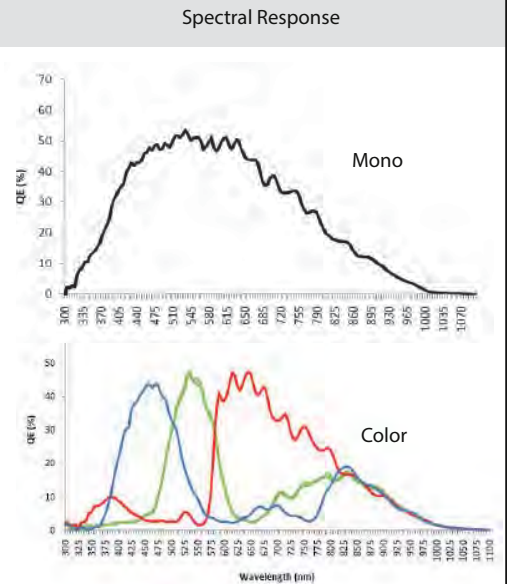
- Inspection and monitoring
- Motion capture
- Research
- Broadcast and cinema



Specifications

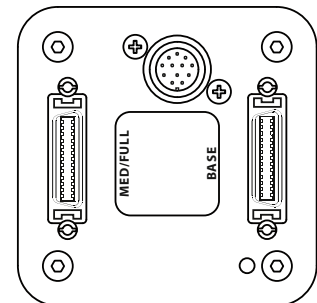
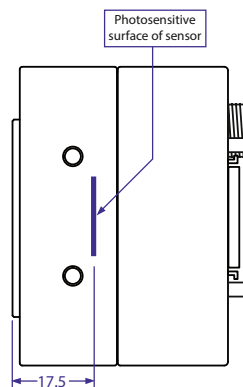
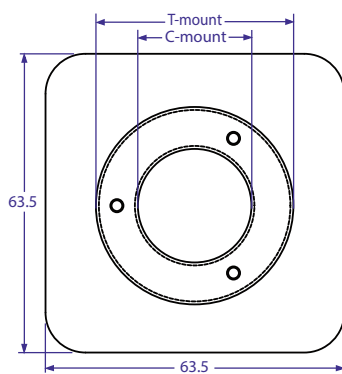
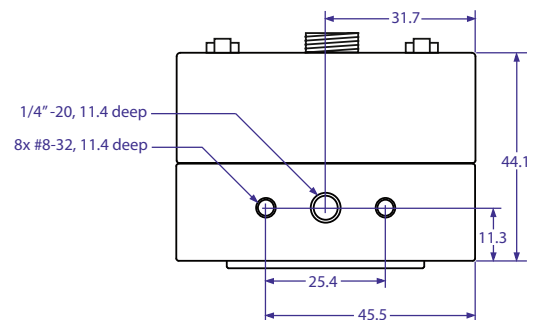
Camera Specifications

Camera Model	2M360 - CL	4M180 - CL
Sensor Size (H x V)	2048 x 1088 pixels	2048 x 2048 pixels
Frame Rate (8-bit, full resolution)	340 fps	180 fps
Optical Size	2/3"	1"
Shutter	Pipelined Global Shutter with CDS	
Pixel Size (µm)	5.5 x 5.5	
Sensor Type	60 dB CMOS	
Image Type	Mono / Color (Bayer)	
Pixel Format	8-bit or 10-bit	
Data Output Type (Interface)	Camera Link Base, Medium, Full, or Full 80-bit	
CL Pixel Clock	80 MHz	
CL Tap Geometry	(2x, 3x, 4x, 8x, 10x) 8-bit, (2x, 4x, 8x) 10-bit	
Synchronization	Via external trigger or free-run	
Exposure Control	Trigger width or timed	



Mechanical / Electrical Specifications

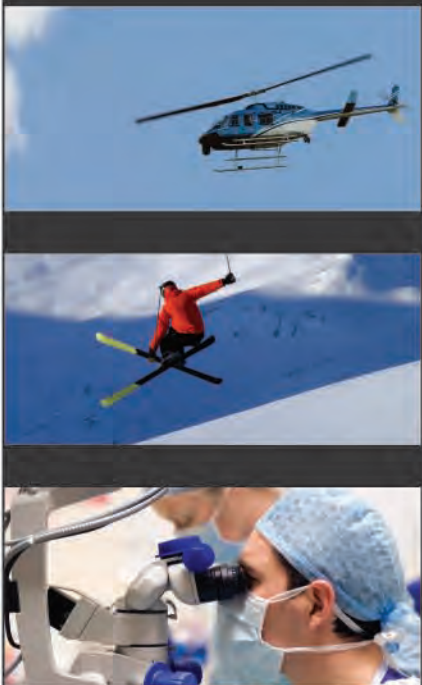
Housing Size	63.5 mm x 63.5 mm x 44.1 mm
Ambient Temperature	Up to 50°C
Lens Mount	C- Mount or T-Mount
Ports	(2) MDR 26-pin, (1) 12-pin Hirose
Power Requirements	12 VDC (via Hirose or PoCL)
Power Consumption (typical)	2.5 W
Weight (typical)	310 g



Flare™ 2KSDI



2K • 1080p • 720p



Features

- Compact one-piece rugged color camera
- Dual outputs for high speed CXP mode
- SYNC IN for 3D and genlock capability
- YCbCr, XYZ and RAW color modes
- Low noise and high light sensitivity
- Auto-exposure and auto white balance
- Adjustable color matrix, saturation, and gamma

Applications

- Broadcast and cinema
- Recording on vehicles and aircraft
- Medical
- Security



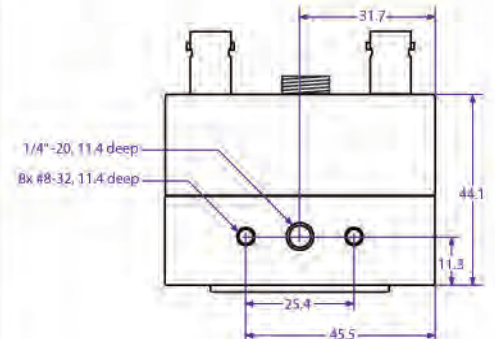
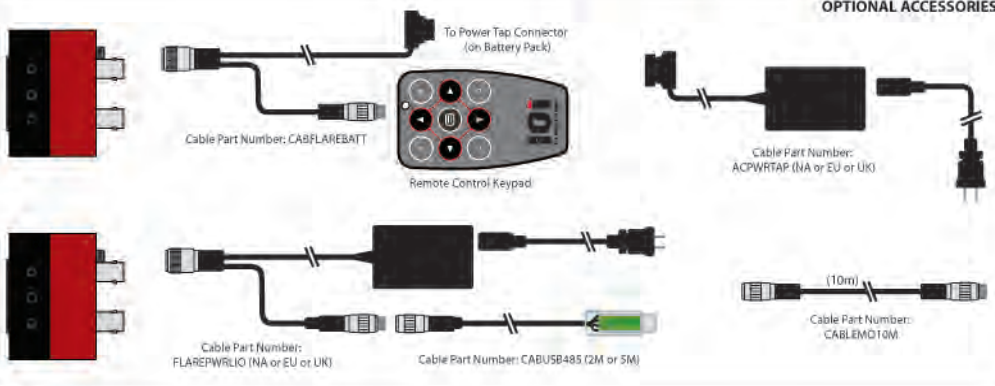
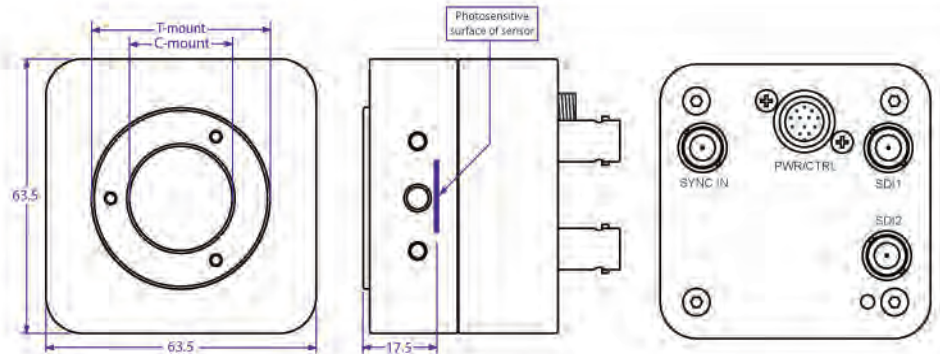
Specifications

Camera Specifications

Features		Output Modes
Sensor Size (H x V)	2048 x 1088 pixels	Single Link HD-SDI: <ul style="list-style-type: none"> • 720p 10bit 4:2:2: 50, 59.94, 60 • 1080p 10bit 4:2:2: 23.98, 24, 25, 29.97, 30 Single Link 3G-SDI: <ul style="list-style-type: none"> • 1080p 10bit 4:2:2: 50, 59.94, 60 • 2K 12bit 4:4:4: 24 CXP Mode (OPTIONAL): <ul style="list-style-type: none"> • Runs CoaXPress firmware • See datasheet "Flare 2M280CCX" For other modes please contact IO Industries.
Maximum Frame Rate	60 fps at 1080p, 283 fps in CXP mode	
Sensor Details	2/3", 60 dB CMOS, 5.5 x 5.5 µm pixels	
Shutter	Pipelined Global Shutter with Correlated Double Sampling	
Image Type	4:2:2(Y'Cb'Cr'), 4:4:4(X'Y'Z'), or RAW (Bayer)	
Pixel Format	10-bit or 12-bit	
Data Output Type (Interface)	3G/HDS/SDI Single or Dual Link	
White Balance	Automatic (AWB), Tracking AWB, or manually adjustable	
Color Adjustment	Color Matrix, Saturation	
Black/White Adjustment	Master Pedestal, Black Gamma, Knee Point	
Camera Control	Wired Remote or RS-485 (USB adapter available)	
Synchronization	External Tri-Level SYNC IN	
Exposure Control	Automatic (AEC) or manually adjustable	

Mechanical / Electrical Specifications

Housing Size	63.5 x 63.5 x 44.1 mm
Ambient Temperature	Up to 50°C
Lens Mount	C-Mount or T-Mount
Ports	(2) SDI, (1) SYNC IN, (1) 12-pin Hirose
Power Requirements	12 VDC (via Hirose)
Power Consumption	4.5 W
Weight	310 g



DVR EXPRESS®
CORE

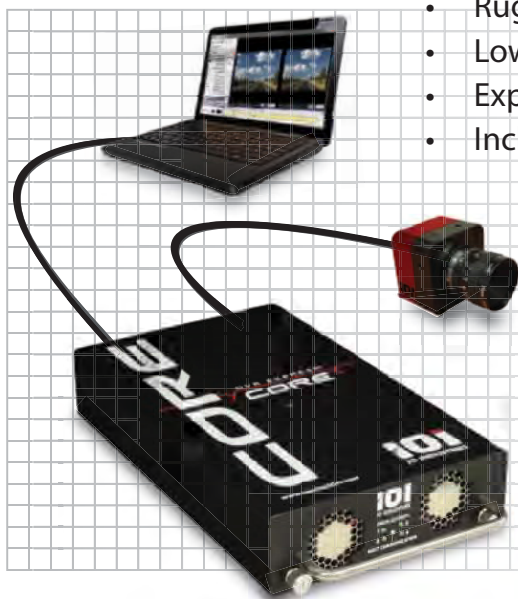


Portable DVR with Removable Solid State Storage

Record, Synchronize, Playback and Export

Product Highlights

- Fully uncompressed recording directly to solid state storage
- Removable drive shuttle with 2TB of storage capacity
- Rugged aluminum enclosure
- Low power (<35W with drives) and light weight (1.4kg)
- Export to standard file formats
- Includes interactive software; optional SDK for programmatic control




**Designed for use in aircraft, vehicles,
the factory, and the laboratory**

Comes with DVR control software

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DVR Express® CORE Models

CAMERA LINK



DVR Express® Core Camera Link Full

- (1) Camera Link Full or Medium, or (2) Camera Link Base inputs
- Maximum input clock frequency of 85MHz
- Supports monochrome (8 to 16bits) and color (Bayer or RGB)

DVR Express® Core Camera Link Base

- (2) Camera Link Base inputs
- Maximum input clock frequency of 85MHz
- Supports monochrome (8 to 16bits) and color (Bayer or RGB)

DVR Express® Core Camera Link In/Out

- (1) Camera Link Base input plus (1) output
- Maximum clock frequency of 85MHz
- Supports monochrome (8 to 16bits) and color (Bayer or RGB)

3G-SDI



DVR Express® Core 3G-SDI In/Out

- (2) 3G/HD-SDI inputs plus (2) outputs
- SMPTE : 259, 260, 274, 295, 296, 372, 425, 428
- Includes : 1080p, 1080i, 720p, 2K and RAW
- Also records embedded audio and metadata

COAXPRESS



DVR Express® Core CoaXPRESS In/Out

- (2) CoaXPRESS inputs plus (2) outputs
- Includes : 1.25 GHz, 2.5GHz, 3.125GHz
- Single or Dual link operating modes
- CoaXPRESS recording with 3G-SDI play out


GIGE VISION



DVR Express® Core GigE Vision

- (2) GigE Vision™ inputs
- Full support for GenICam™ cameras
- Connect cameras directly or through switch
- Supports cameras in multicast mode

ANALOG



DVR Express® Core NTSC / PAL

- (4) Analog composite inputs
- Supports NTSC and PAL formats
- Also available with (4) S-Video inputs


STANDALONE OPTION



DVR Express® Core Standalone

- Available for Camera Link, 3G/HDSLI, CoaXPRESS and NTSC/PAL models
- (1) DVI/HDMI monitor output
- (2) USB for KB/Mouse/Other
- (1) GigE port for remote control

Features of All Models



Connection to Remote Computer:
3Gb eSATA

Trigger Input / Output:
(6) Bi-directional TTL lines
(2) LVDS inputs/outputs

Time Stamping:
Every recorded frame is time-stamped by hardware time code generator

Synchronization:
Time code generator can be synchronized to external IRIG, GPS, or other external clock (receiver module not included)

Control Software:
CoreView™, Core SDK, Streams™ 5 (Windows XP/Vista/7 - 32/64 bit)

Storage

- Removable quad-pack drive shuttle
- Up to (4) 2.5" solid state SATA drives
- RAID (levels 0, 1, 0+1, 3)

Mechanicals

Dimensions:
325 x 165 x 52 mm (12.8 x 6.5 x 2")

Weight:
1.4 kg* (3.1 lbs)

Case:
Black, aluminum

Power:
14-34V DC, < 35W*

* Depending on model and storage

Optional Download Module Kit



Remove drive shuttle

Download to PC with DM Kit