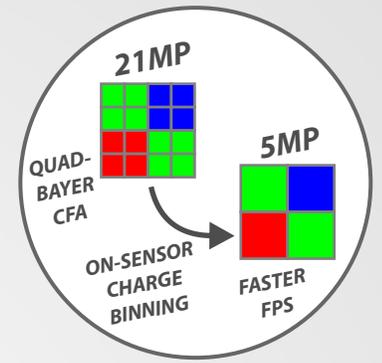


REDWOOD™

5MP CAMERAS



CoaxPress

Video Cameras with Gpixel GSPRINT4521 Sensors

APPLICATIONS

High Speed Motion Analysis

Specialty Video Production

Automated Inspection

Scientific Research



FEATURES INCLUDE:

- 21MP Quad-Bayer Color Sensor with On-Sensor Binning delivers 5MP Output at Fast Frame Rates
- Charge-Domain Global Shutter CMOS Sensor
- Fast CoaxPress 2.0 Video Output with Coaxial or Fiber Optic Cabling Options
- Selectable 8/10/12-bit Data Formats
- Multiple Lens Mount Options
- Flexible Image Adjustment and Enhancement

IO
IO INDUSTRIES

SPECIFICATIONS

Camera Model	Redwood 5MP
Sensor Size (H x V)	2560 x 2016 (5.2 MP)
Frame rate (full resolution)	872 fps (8-bit), 714 fps (10-bit), 583 fps (12-bit)
Optical Format	APS-C (29.5 mm diagonal)
Sensor Type	CMOS w. global electronic shutter
Sensor Options	Color-only (Bayer)
Pixel Size	9.0 x 9.0 μm
Dynamic Range	67.6 dB
Output Configurations	1/2/4 links via coaxial or fiber cabling (1x CXP-10/12, 2x CXP-5/6/10/12, or 4x CXP-3/5/6/10/12)
Multiple ROI / Binning	Single window, optically centered. On-sensor charge binning always enabled.
Pixel Bit Depth	8/10/12-bit output
Exposure Control	Programmable or level-controlled exposure, triggered double exposure (PIV), or auto exposure
Image Correction	Black level, FPN/PRNU, bad pixel replacement, denoise filter, detail enhancement filter
Color Processing	White balance (Auto one-shot, tracking, or manual), Black balance (auto or manual), Gamma LUTs
Camera Configuration	GenICam or Redwood Control software

Mechanical/Electrical

Dimensions	62.0 mm x 62.0 mm x 162.6 mm (WxHxD, with F-mount)
Lens Mount	C-mount, F-mount, M52 x 0.75, Active Canon EF-mount or Active Canon RF-mount.
Weight	760 g (with F-mount, no lens)
Power Requirements	Approx. 18W @ 12V DC via Hirose 6-pin, CX models support PoCXP (min. 2 links required)
Additional I/O (Hirose 12-pin)	TTL-level trigger input/output
Operating Temperature	-10°C to 50°C, 20-85% humidity (non-condensing)
Storage Temperature	-40°C to 85°C, 10-90% humidity (non-condensing)

FRAME RATE CHART

Example Output Resolution:	CXP Connection*:	Frame Rate:		
		8-bit	10-bit	12-bit
Maximum (2560 x 2016)	4x CXP-12	872	714	583
	2x CXP-12 / 4x CXP-6	450	350	292
4MP 1:1 (2048 x 2016)	4x CXP-12	950	872	731
	2x CXP-12 / 4x CXP-6	552	437	358
HD 1080p (1920 x 1080)	4x CXP-12	1945	1639	1360
	2x CXP-12 / 4x CXP-6	1008	826	685
1.3MP (1280 x 1024)	4x CXP-12	2976	2551	1782
	2x CXP-12 / 4x CXP-6	1636	1257	1039
HD 720p (1280 x 720)	4x CXP-12	3876	3378	2386
	2x CXP-12 / 4x CXP-6	2193	1689	1396

*both Coaxial and CoaXPress-over-Fiber models support configurations up to 4x CXP-12

ORDERING

Example: 52G872CCQ-A

Camera
52G872

Lens Type

C - C-mount
F - F-mount
M - M52 x 0.75
A - Active EF-mount
R - Active RF-mount

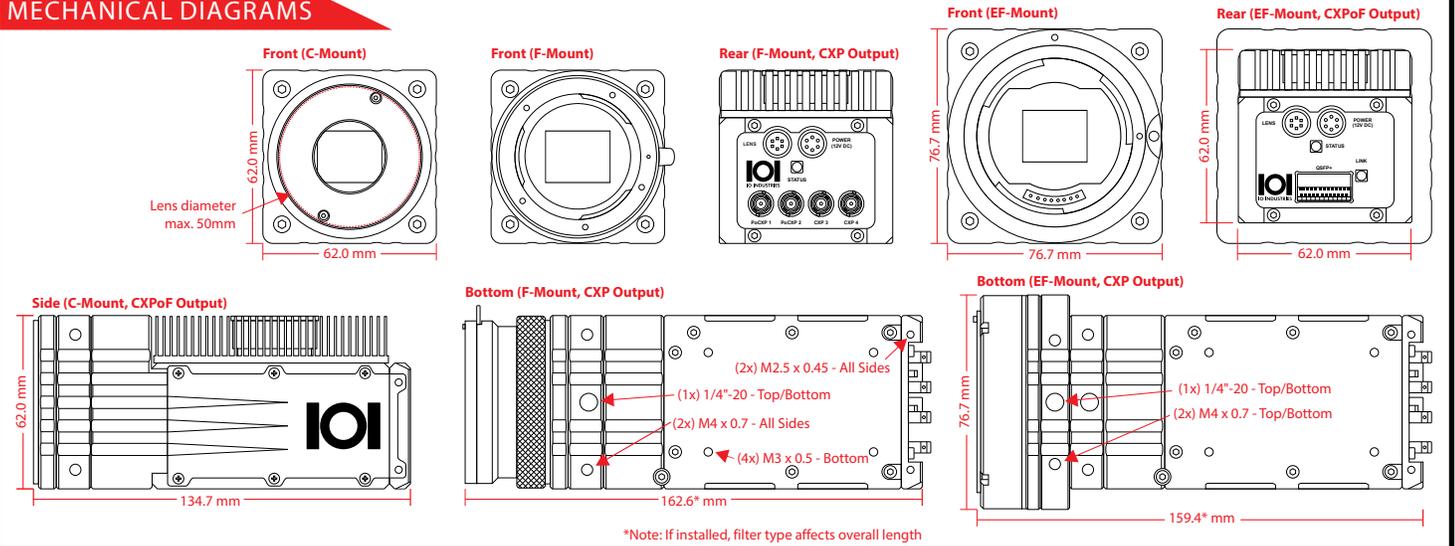
Sensor Type

C - Color (with IR-Cut filter)

Interface

CX - CoaXPress (Coaxial)
CQ - CoaXPress-over-Fiber (QSFP+)

MECHANICAL DIAGRAMS



Visit us at: www.ioindustries.com
15940 Robin's Hill Road
London, Ontario, Canada, N5V 0A4
Tel: +1 519 663 9570
Email: sales@ioindustries.com

LET'S STAY CONNECTED!



@IOINDUSTRIES



@IOINDUSTRIES



@IO-INDUSTRIES

Copyright © 2025 IO Industries Inc. Redwood is a trademark of IO Industries.
All other trademarks are the property of their respective owners.

Datasheet Rev. 1.1 (06/27/2025)
Specifications subject to change without notice