

CHEETAH

RUGGEDIZED CAMERA SERIES

C4020 CMOS 9 MP Camera Link®



Imperx: C4020

The Cheetah CLF-C4020 camera features the Sony Pregius IMX-255 Global Shutter CMOS sensor with a native resolution of 4112 x 2176 in a 1" optical format delivering up to 57 frames per second with a Camera Link® Full, PoCL output. The Sony Pregius image sensor delivers outstanding sensitivity and excellent image quality. Imperx puts you in control by providing full access to raw data without corrections. Using the simple intuitive graphical user interface, you can quickly apply or remove image corrections. The C4020's flexibility, image quality, and speed make it suitable for a broad range of diverse and demanding applications, but "one size doesn't fit all," and Imperx can help optimize the camera to your exact requirements.

Specifications

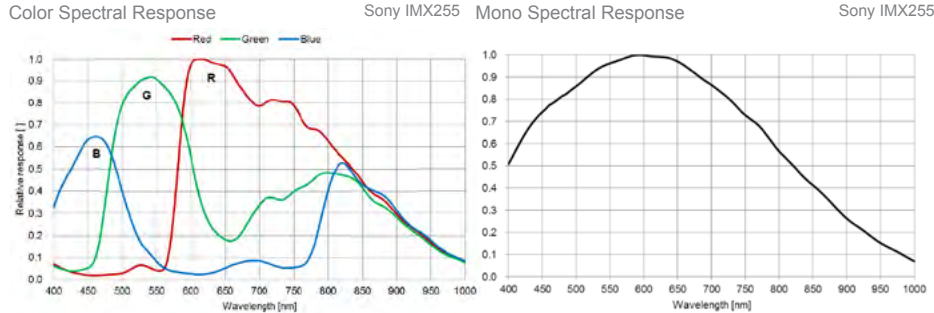
Feature	Description	Feature	Description
Interfaces available	Camera Link® Base, Medium, Full w/PoCL	Strobe Output	2 strobes, programmable position and duration
Resolution	4112 (H) x 2176 (V)	Pulse Generator	Yes, programmable
Sensor	Sony Pregius IMX-255 CMOS Color/Mono	Data Correction	4 LUTs; 1 LUT pre-programmed with Gamma 0.45; Bad pixel correction (static, dynamic)
Sensor Format	14.1mm (H) x 7.5mm (V); 1" optical format	Lens Mount	C-Mount (default)
Pixel Size	3.45 microns square	P-IRIS	Optional
Shutter	Global shutter (GS)	Supply Voltage Range	12VDC (5V – 30V), 1.5 A inrush
Digitization	8, 10, 12 bit	Camera Current	Typical: 220mA/12V
Frame Rate	57 (8-bit), 47 (10-bit), 20 (12-bit)	PoCL	PoCL capable in medium/full mode
Pixel Clock Rate	37.125MHz	Size - Width/Height/Length	37mm (W), 37mm (H), 48.6mm (L)
Dynamic Range	71dB	Weight	91.8g
Output Bit Depth	8, 10, 12 bit	Vibration, Shock	TBD
Analog/Digital Gain	Manual, auto; 0-48 dB, 480 steps	Environmental	-30° C to +75° C
White Balance	Manual, Auto, Off	Humidity	10% to 90% non-condensing
Shutter Speed	1 µs/step, 14 µs to 16.0 sec.	MTBF	TBD
Exposure Control	Off, internal, external, auto	Military Standard	MIL-STD-810F
Regions of Interest (ROI)	2 ROI	Regulatory	FCC Part 15, CE, RoHS
Binning	1x2, 2x1, 2x2		
Sub-sampling	1x2, 2x1, 2x2		
Trigger Inputs	External, pulse generator, software, computer		
Trigger Options	Edge, debounce		
Trigger Modes	Free run, Standard, Fast		
External Inputs/Outputs	2 IN (OPTO, LVTTTL) / 2 OUT (OPTO, TTL)		

Imperx: C4020 Applications

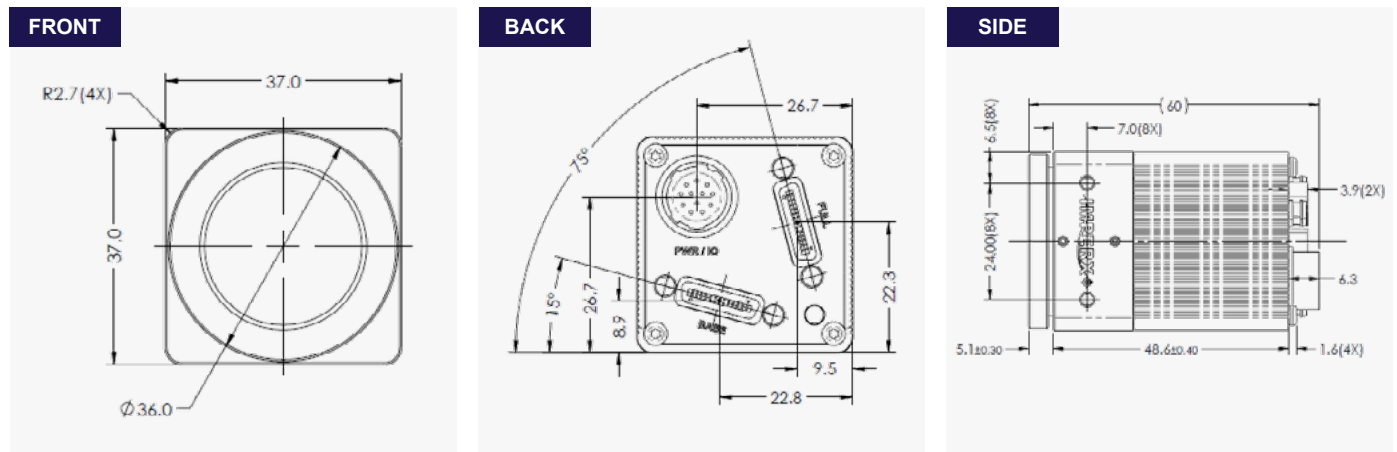
The CLF C4020 incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

Aerospace • Satellites • Surveillance • Ball Grid Array • Printed Circuit Board Inspection • Motion Analysis • Broadcast Television • Telepresence • Unmanned Aerial Vehicles • Machine Vision • Intelligent Traffic Systems • Aerial Imaging • Open Road Tolling Systems • Situational Awareness

Absolute Quantum Efficiency



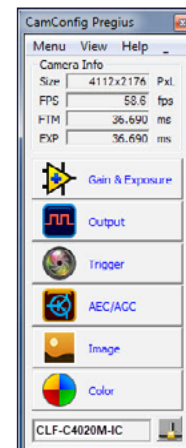
Dimensions



Ordering Information

Interface Available	Camera Link® Full (CLF)	Lens Mounts	C-Mount (Default)
Sensor Types available	Monochrome Bayer Color	Accessories (Sold separately)	PS12V04A-Power Supply w/ 1 input and 1 output

Camera Link GUI



Hirose Connectors

Power and I/O Interface	
	<ul style="list-style-type: none"> 1. 12 VDC Return 2. +12 VDC 3. Reserved 4. Reserved 5. OUT2 RTN (OPTO) 6. OUT1 RTN 7. OUT1 (TTL) 8. IN1 (OPTO) 9. IN2 (LVTTTL) 10. IN1 RTN 11. IN2 RTN 12. OUT2 (OPTO)

Quality Management System ISO 9001:2015 Registered
 Environmental Management System ISO 14001:2015 Registered
 DDTC Registered (Directorate of Defense Trade Controls, US Department of State)



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