

CHEETAH

RUGGEDIZED CAMERA SERIES

Front View

Rear View

CXP-C9440

CMOS 65 MP

Quad CXP-6

Imperx: C9440

The CXP-C9440 camera features the GPIXEL GMAX3265 Global Shutter CMOS sensor with a native resolution of 9344 x 7000 delivering up to 34.7 frames per second with a quad CXP-6 CoaXPress output. CMOS technology eliminates smear columns from areas of ultra-bright intensity and specular reflections in uncontrolled lighting applications. The Imperx Cheetah line provides excellent image quality with Imperx proprietary processing. In addition, Imperx puts you in control and gives you full access to raw data without corrections. Using the simple, intuitive GenlCam™ compliant user interface, you can quickly apply image corrections, if desired. The CXP-C9440'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
Output Interface	4-channel CXP-6 CoaXPress w/PoCXP	Strobe Output	2 strobes, programmable position and duration
Resolution	9344 (H) x 7000 (V)	Pulse Generator	Yes, programmable
Sensor	GPIXEL GMAX3265 CMOS Color/Mono	Data Correction	2 LUTs pre-programmed with Gamma 0.45, 2 LUTs pre-programmed with Negative LUT; Bad and Defective pixel correction (static), Defective cluster correction (static), 8 Flat field correction tables
Sensor Format	29.9 mm (H) x 22.4 mm (V), 37.4 mm diagonal	Lens Mount	F-Mount (default)
Pixel Size	3.2 microns square	Canon EF-Mount	Optional, Active or Passive
Shutter	Global shutter (GS)	Power	Power over CoaXPress or 12/24 V external power supply (Optional)
Sensor Digitization	10- or 12-bit	Power Consumption	Typ. (Fan is On): 13.1 W (at 25 °C) Max. (Fan is Off): 15 W (at 25 °C)
Frame Rate	34.7 fps (8-bit), 28.9 fps (10-bit), 24.0 fps (12-bit)	Size - Width/Height/Length	87 mm x 87 mm x 47 mm
Dynamic Range	66 dB	Weight	655 g
Output Bit Depth	8, 10, 12-bit	Vibration, Shock	20G (20 – 200 Hz XYZ) / 100G
Analog Gain	0.75x to 6.0x, x0.25 step	Environmental	-40 °C to +55 °C Operating (Fan is On), -40 °C to +30 °C Operating (Fan is Off); -40 °C to +85 °C Storage
Digital Gain	Manual, Auto, Once; 1x (0 dB) to 4x (12 dB) with a precision of 0.001x	Humidity	10% to 90% non-condensing
AEC/AGC	Off, Auto, Once	MTBF	TBD
Gamma Correction	0.00 to 4.00, with a step of 0.01	Military Standard	MIL-STD-810G
Black Level Offset	Manual (-8192 to 8191)	Regulatory	FCC Part 15 Class A, CE, RoHS, UKCA
White Balance	Manual, Auto, Once, Off		
Shutter Speed	11 µs to 16.0 s		
Exposure Control	Off, Internal, External, Auto		
Regions of Interest (ROI)	1 ROI		
Sub-sampling	2 x 1		
Trigger Inputs	External, Pulse generator, Software, Link trigger (Trigger over CXP)		
Trigger Options	Edge, Pulse width, Trigger filter, Trigger delay, Debounce		
Trigger Modes	Free run, Standard, Fast		
External Inputs/Outputs	2 IN (OPTO, LVTTTL) / 2 OUT (OPTO, TTL)		

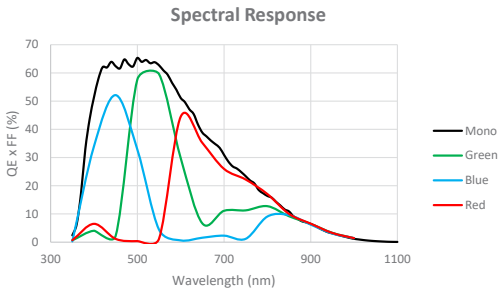
Imperx: C9440 Applications

The CXP-C9440 incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

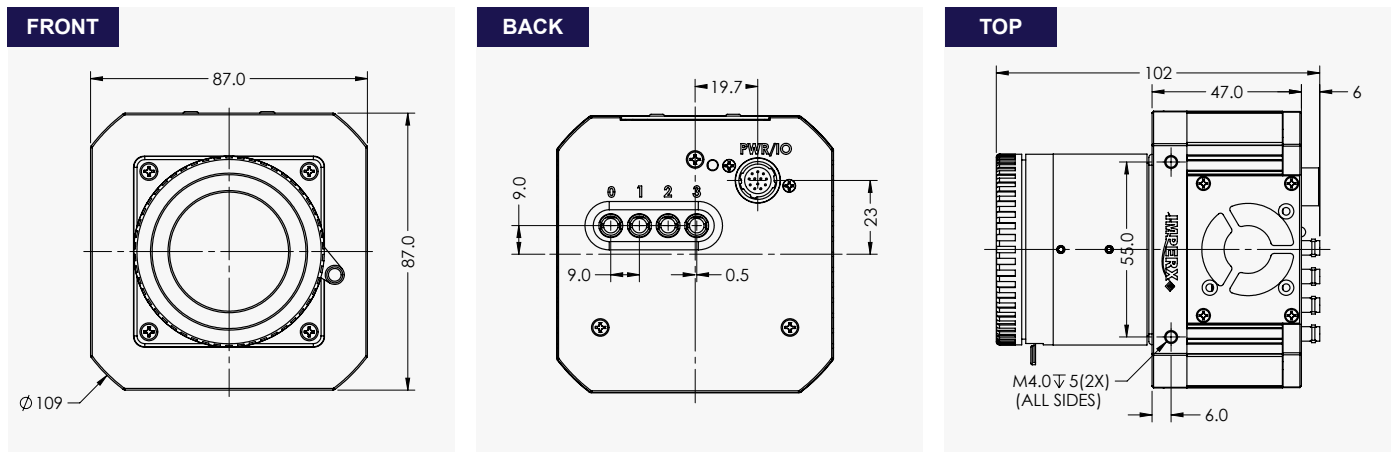
Aerospace • Satellites • Surveillance • Ball Grid Array • Printed Circuit Board Inspection • Motion Analysis • Broadcast Television • Telepresence • Unmanned Aerial Vehicles • Machine Vision • Intelligent Traffic Systems • Aerial Imaging • Open Road Tolling Systems • Situational Awareness

Absolute Quantum Efficiency

Color and Mono Spectral Responses GMAX3265



Dimensions

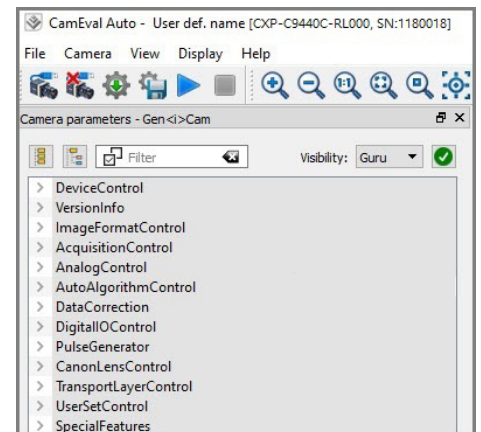


Ordering Information

Output Interface
4-channel CXP-6 CoaXPress w/PoCXP (CXP)
Sensor Types available
M = Monochrome C = Bayer Color
Accessories (Sold separately)
CBL-PWIO01: Cable Power; Hirose 12p (F) to loose end; 2 meters
PS12V04A: Power Supply w/1 input and output

Lens Mounts
F = F Mount (Default)
M = M42 (Optional)
E = Canon EF EOS Active Mount (Optional)
L = Canon EF EOS Passive Mount (Optional)
Sensor Grade
00 = Grade 1 G2 = Grade 2
(Mono or Color) (Mono or Color)
G3 = Grade 3 (Mono)

Gen<I>Cam Compliant Camera Configurator



Connectors

Power and I/O Interface	CXP-connectors
<ol style="list-style-type: none"> 12/24 VDC Return +12/24 VDC Reserved Reserved OUT2 RTN (OPTO) OUT1 RTN OUT1 (TTL) IN1 (OPTO) IN2 (LVTTTL) IN1 RTN IN2 RTN OUT2 (OPTO) 	Four micro-BNC (HD_BNC) 75 Ohm jacks

Connector: Hirose HR 10A-10R-12PB(71)

Rev: cxp_c9440_r5_2020

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)



IMPERX 6421 Congress Ave., Boca Raton, FL 33487, USA
 Tel: +1-561-989-0006. Email: sales@imperx.com

WWW.IMPERX.COM

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