

# CHEETAH

RUGGEDIZED CAMERA SERIES

Front View

Rear View

## SFP-C4440

### CMOS 20 MP

10 GigE Vision® with SFP+

#### Imperx: C4440

The SFP-C4440 camera features the Sony Pregius IMX367 Global Shutter CMOS sensor with a native resolution of 4416 x 4436 in a 4/3" optical format. The Gen<I>Cam™ compliant camera delivers up to 39.6 frames per second in global shutter mode using 10 GigE Vision® interface via SFP+ transceiver. The camera can be used with either copper or optical cable for extreme distances. 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 image corrections, if desired. The C4440'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

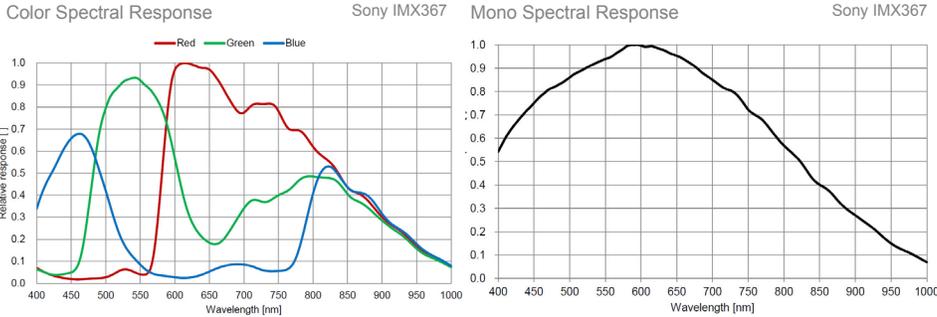
Feature	Description	Feature	Description
Output Interface	10 GigE Vision® with SFP+	Strobe Output	2 strobes, programmable position and duration
Resolution	4416 (H) x 4436 (V)	Pulse Generator	Yes, programmable
Sensor	Sony Pregius IMX367 CMOS Color/Mono	Data Correction	2 LUTs pre-programmed with Gamma 0.45 2 LUTs pre-programmed with Negative LUT Hot and Defective pixel correction (static) 8 Flat Field Correction tables
Sensor Format	15.2 mm (H) x 15.3 mm (V), 4/3" optical format	Forced Air Cooling Control	On, Off, Auto
Pixel Size	3.45 microns square	Lens Mount	F-Mount (default)
Shutter	Global shutter (GS)	Canon EF-Mount	Optional, Active or Passive
Sensor Digitization	10 or 12-bit	Supply Voltage Range	12 V DC (6.5V–33V), 2 A inrush @ 12 V
Frame Rate	39.6 fps (8-bit), 28.3 fps (10-bit/12-bit unpacked), 28.3 fps (10-bit/12-bit packed)	Camera Current	Typical: 1.2 A @ 12 V
Dynamic Range	71 dB	Power Consumption	Typ.:14.4 W, Max.:16.8 W
Output Bit Depth	8, 10, 12-bit	PoE Capable	Yes
Analog/Digital Gain	Manual, Auto; 0 dB – 48 dB, 480 steps	Size - Width/Height/Length	60 mm (W) x 60 mm (H) x 99mm (L)
Digital Gain	1x (0 dB) to 4x (12 dB) with a precision of 0.001x	Weight	530 g
AEC/AGC	Yes	Vibration, Shock	20G (20 – 200 Hz XYZ) /100G
Black Level Offset	Manual (0 – 4095), Auto	Environmental	-30 °C to +70 °C Operating (with a fiber 10GBase-R transceiver module), (may vary depending on the transceiver module used) -30 °C to +45 °C Operating (with a copper 10GBase-T transceiver module) -40 °C to +85 °C Storage
White Balance	Manual, Auto, Once, Off	Humidity	10% to 90% non-condensing
Shutter Speed	36 µs to 16.0 s	MTBF	TBD
Exposure Control	Off, Internal, External, Auto	Military Standard	MIL-STD-810G
Regions of Interest (ROI)	1 ROI	Regulatory	FCC Part 15 Class A, CE, RoHS, UKCA
Binning	1 x 2, 2 x 1, 2 x 2 (mono cameras only)		
Sub-sampling	1 x 2, 2 x 1, 2 x 2		
Trigger Inputs	External, Pulse generator, Software		
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: C4440 Applications

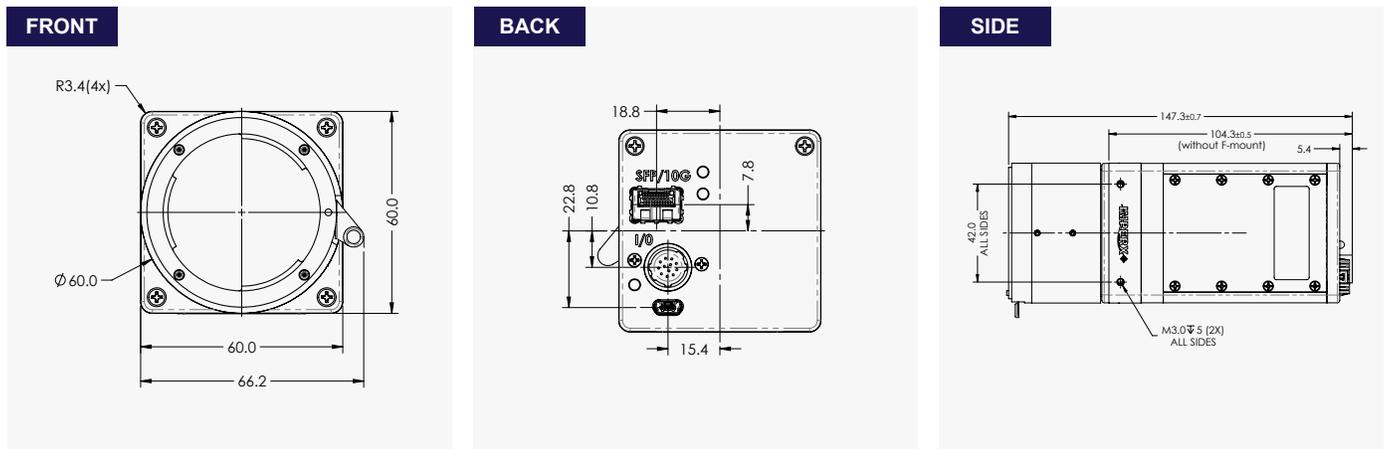
The SFP-C4440 incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

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

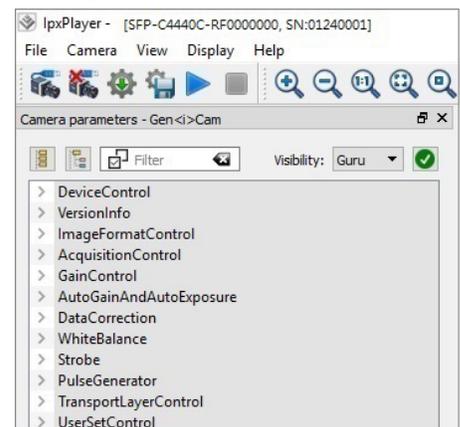


## Ordering Information

<b>Output Interface</b>
10 GigE Vision® with SFP+ (SFP)
<b>Sensor Types available</b>
Monochrome
Bayer Color

<b>Lens Mounts</b>
F Mount (Default)
M42 (Optional)
Canon EF Mount (Optional)
<b>Accessories (Sold separately)</b>
PS12V14A-Power Supply w/ 1 input and 1 output

## Gen<I>Cam Compliant Camera Configurator



## Hirose Connectors

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

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

Rev: sfp\_c4440\_r7\_2021

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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