

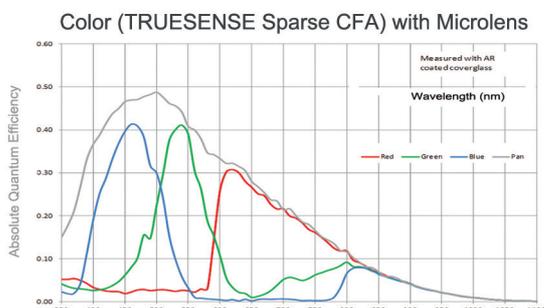
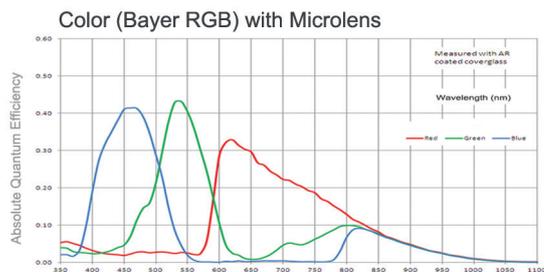
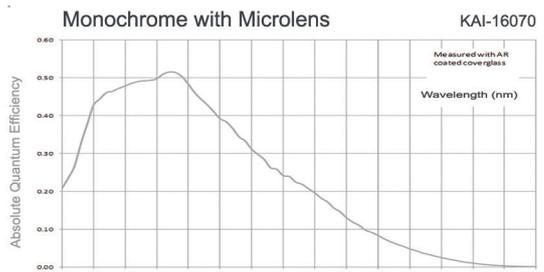
B4822



IMPERX: Technically superior products, full tech support, rapid-response customer care. "Bobcat 2.0" adds many new features, lens control, more memory and enhanced image quality. Each easy to use Bobcat is supported by IMPERX professionals.

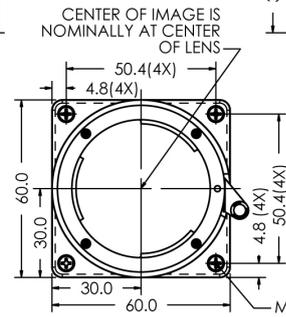
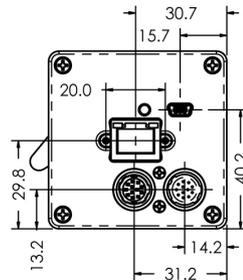
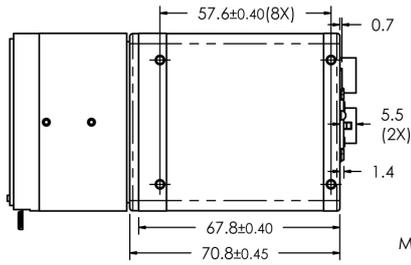
INTERFACES AVAILABLE:

Resolution	Camera Link® Base (PoCL), GigE Vision, PoE, CoaXPress 4864 x 3232 (std.), 4880 x 3256 (max.)
Sensor	KAI-16070, CCD
Sensor Format	36.11mm (H) x 24.09mm (V) 43.2mm diagonal 35mm optical format
Pixel Size	7.4 µm
Frame Rate Standard Clock	30 MHz / 3.0 fps
Frame Rate Overclocked	40 MHz / 4.1 fps
Maximum Frame Rate	13.2 fps
Minimum S/N Ratio	60dB
Output Format	Mono CCD: 8, 10, 12, 14-bit (Single only) Color CCD: 8, 10, 12
	TRUESENSE Sparse CFA
Analog Gain Control	Manual, Auto: 0 - 36dB 1024 steps
Black Level Control	Manual, 1024 steps
Digital Gain and Offset	Manual
RGB Gain and Offset	Manual
White Balance	Manual, auto, off
Shutter Speed	1µs/step, 1/125,000 to 1/3 sec (nom)
Exposure Control	Manual, auto, external
Long Integration	Up to 16 seconds
Regions of Interest (ROI)	7 ROIs, any line to any line, any pixel to any pixel
Binning H/V	1x, 2x, 3x, 4x, 8x (Independent for H & V)
Trigger Inputs	External (TTL via IN1/IN2), pulse generator, software, computer
Trigger Options	Level, edge, pulse width, internal exposure, up to 16 seconds trigger delay, debounce
Trigger Modes	Free-run, standard, double, fast, asynchronous, frame accumulation
	Time: ~300 nanoseconds
Double Trigger (PIV) Interframe	2 IN, 2 OUT, user programmable
External Inputs/Outputs	2 strobes, programmable position and duration
Strobe Output	Yes, programmable
RS232 Interface	Yes, programmable
Pulse Generator	Optical center, programmable H & V lines
Image Overlay	Threshold, contrast enhancement, knee correction, horizontal flip, negative image, bit shift (+/- 7 places)
Image Enhancement	
Internal DDR Memory	2Gb (256 MB)
On Board FIFO (GEV & PoE)	1Gb (128 MB)
Gamma Correction	G=1.0, G=0.45, user upgradeable LUT
Data Corrections	Defective/hot pixel correction (static, dynamic), FFC, black level, vertical smear
Minimum Illumination	1 Lux, F/ 1.4
Lens Mount	F-Mount (Default), C, M42, EOS, Rodenstock, Custom OEM
Video Iris Control	Auto, programmable
Iris, Zoom Focus Control	Manual, user programmable
Supply Input Range	12VDC (10V - 15V), 1.5 A inrush
Power Consumption	CLB 4.5 W, GEV 6.1W, PoE 7.4W, CXP TBD
Size – Width/Height	60mm (W) x 60mm (H) – Applies to all interfaces
Size – Length	CLB 53.1mm (L), GEV 70.8mm (L), PoE 84.4mm (L), CXP 60.1mm (L)
Weight	CLB 353g, GEV 403g, PoE 543g, CXP 383g
Vibration, Shock	100g (20-200) HZ XYZ, 1000g
Environmental	-40°C to +85°C Operating, -50°C to +90°C Storage
Humidity	10% to 90% non-condensing
MTBF	>660,000 hours @ 40°C (Telcordia SR-332)
Regulatory	FCC 15 part A, CE, RoHS



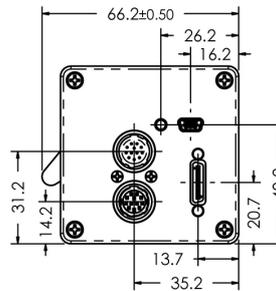
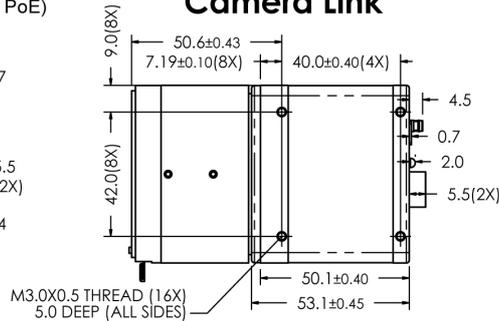
BOBCAT 2.0 B4822 Specifications

GigE Vision (Without PoE)

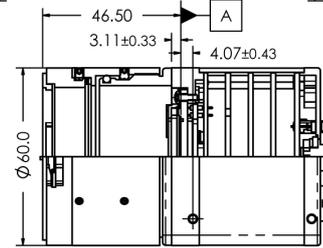


COMMON FRONT VIEW

Camera Link

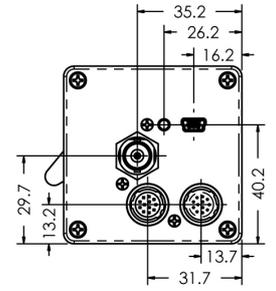
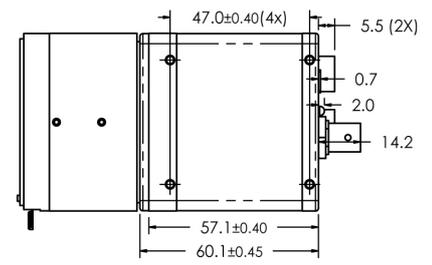


NOTE:
DATUM "A" REFERS TO
THE IMAGE PLANE
(TOP OF IMAGING DIE)

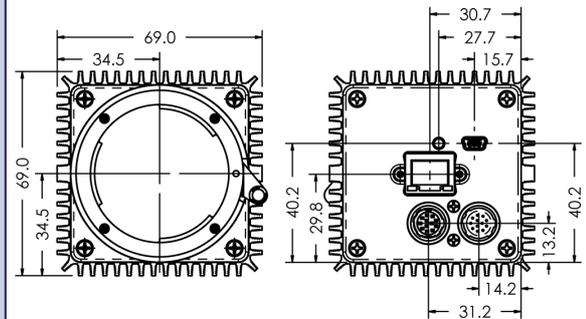
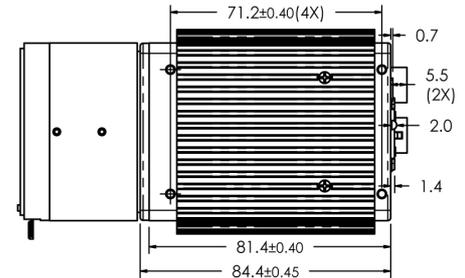


COMMON IMAGE PLANE DISTANCE

CoaXPress



PoE



Hirose Connectors

Power and I/O Interface



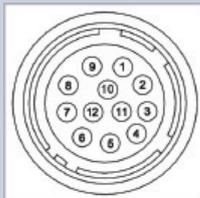
- | | |
|-------------------|-----------------|
| 1 12V DC Return * | 7 OUT1 Signal |
| 2 +12V DC* | 8 IN1 Signal |
| 3 IRIS VCC | 9 IN2 Signal |
| 4 IRIS Video | 10 IN1/2 Return |
| 5 IRIS Return | 11 Reserved |
| 6 OUT1/2 Return | 12 OUT2 Signal |

*Not connected for CXP

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

Lens Control/RS232

See manual for PIN information



- | | |
|---------------|-------------|
| 1 IRIS Return | 7 FOCUS + |
| 2 IRIS VCC | 8 ZOOM - |
| 3 IRIS Video | 9 ZOOM + |
| 4 IRIS - | 10 UART_COM |
| 5 IRIS + | 11 UART_RX |
| 6 FOCUS - | 12 UART_TX |

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

* Canon EOS control available

B4822 Ordering Information

Interfaces available

- Camera Link® Base (CLB)
- GigE Vision (GEV / PoE)
- CoaXPress (CXP)

Sensor types available

- Monochrome
- Bayer Color
- TRUESENSE Sparse CFA

Accessories (Sold separately)

- PS12v04-Power Supply w/ 1 input and 1 output
- PS12v05-Power Supply (as above) and Video Iris



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Environmental Management System ISO 14001:2004 Registered
DDTC Registered (Directorate of Defense Trade Controls, US Department of State)



bobcat-B4822_Rev1