

# B2021



**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  
Imager  
Sensor Format

Pixel Size  
Frame Rate Standard Clock  
Frame Rate Overclocked  
Maximum Frame Rate  
Minimum S/N Ratio  
Output Format

Analog Gain Control  
Black Level Control  
Digital Gain and Offset  
RGB Gain and Offset  
White Balance  
Shutter Speed  
Exposure Control  
Long Integration  
Regions of Interest (ROI)  
Binning H/V  
Trigger Inputs

**Trigger Options**

**Trigger Modes**

Double Trigger (PIV) Interframe  
External Inputs/Outputs  
Strobe Output  
RS232 Interface  
Pulse Generator  
Image Overlay  
Image Enhancement

Internal DDR Memory  
On Board FIFO (GEV & PoE)  
Gamma Correction  
Data Corrections

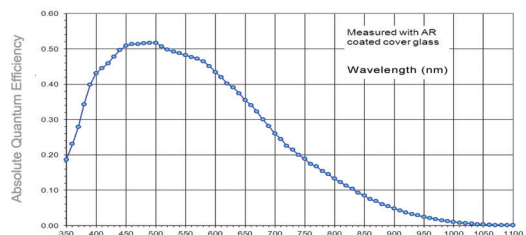
Minimum Illumination  
Lens Mount

Iris, Zoom Focus Control  
Supply Input Range  
Power Consumption  
Size – Width/Height  
Size – Length

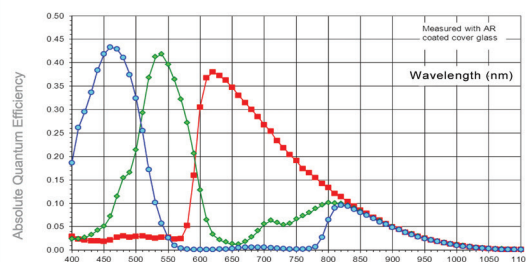
Weight  
Vibration, Shock  
Environmental  
Humidity  
MTBF  
Regulatory

Camera Link® Base (PoCL), GigE Vision, PoE, CoaXPress  
2048 x 2048 (std.), 2072 x 2072 (max.)  
KAI-04070, CCD  
15.15mm (H) x 15.15 mm (V) 21.4mm diagonal  
4/3" optical format  
7.40 µm  
40 MHz / 13 fps  
50 MHz / 17 fps  
47 fps  
60dB  
Mono CCD: 8, 10, 12, 14-bit (Single only)  
Color CCD: 8, 10, 12, RGB 24 (Bayer only)  
TRUESENSE Sparse CFA  
Manual, Auto: 0 - 36dB 1024 steps  
Manual, 1024 steps  
Manual  
Manual, auto, off  
1µs/step, 1/500,000 to 1/16 sec (nom)  
Manual, auto, external  
Up to 16 seconds  
7 ROIs, any line to any line, any pixel to any pixel  
1x, 2x, 3x, 4x, 8x (Independent for H & V)  
External (TTL via IN1/IN2), pulse generator, software, computer  
Level, edge, pulse width, internal exposure, up to 16 seconds trigger delay, debounce  
Free-run, standard, double, fast, asynchronous, frame accumulation  
Time: 200 nanoseconds  
2 IN, 2 OUT, user programmable  
2 strobes, programmable position and duration  
Yes, programmable  
Yes, programmable  
Optical center, programmable H & V lines  
Threshold, contrast enhancement, knee correction, horizontal flip, negative image, bit shift (+/- 7 places)  
2Gb (256 MB)  
1Gb (128 MB)  
G=1.0, G=0.45, user upgradeable LUT  
Defective/hot pixel correction (static, dynamic), FFC, black level, vertical smear  
1 Lux, F/ 1.4  
F-Mount (Default), C, M42, EOS, Rodenstock, Custom OEM  
Manual, user programmable (motorized lens, custom)  
12VDC (10V - 15V), 1.5 A inrush  
CLB 3.8 W, GEV 5.7W, PoE 6.7W, CXP -TBD  
60mm (W) x 60mm (H) – Applies to all interfaces  
CLB 53.1mm (L), GEV 70.8mm (L), PoE 84.4mm (L), CXP 60.1mm (L)  
CLB 340g, GEV 389g, PoE 534g, CXP 374g  
100g (20-200) HZ XYZ, 1000g  
-40°C to +85°C Operating, -50°C to +90°C Storage  
10% to 90% non-condensing  
>660,000 hours @ 40°C (Telcordia SR-332)  
FCC 15 part A, CE, RoHS

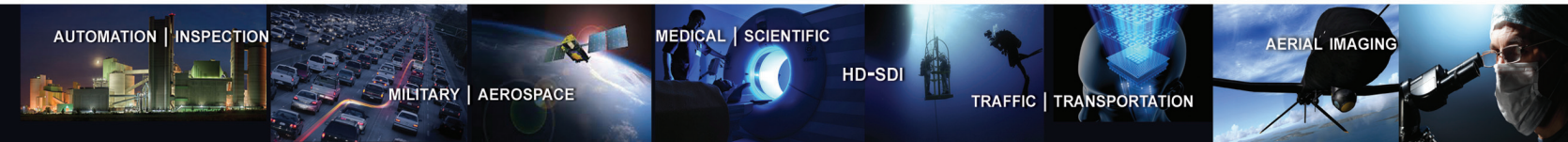
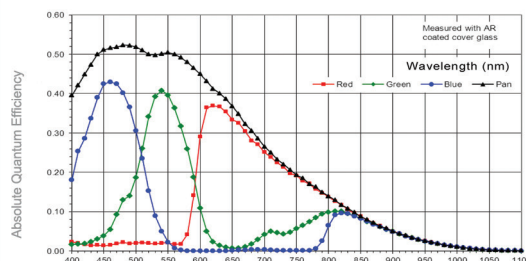
Monochrome with Microlens KAI-04070



Color (Bayer RGB) with Microlens

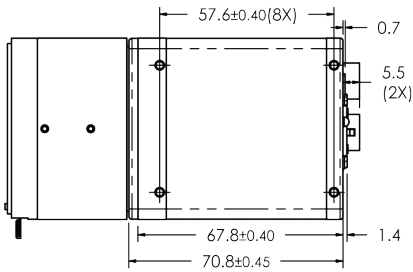


Color (TRUESENSE Sparse CFA) with Microlens

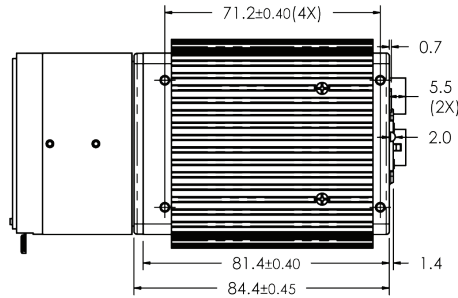


# BOBCAT 2.0 B201 Specifications

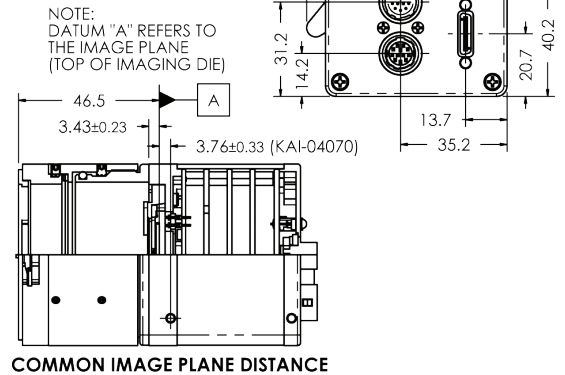
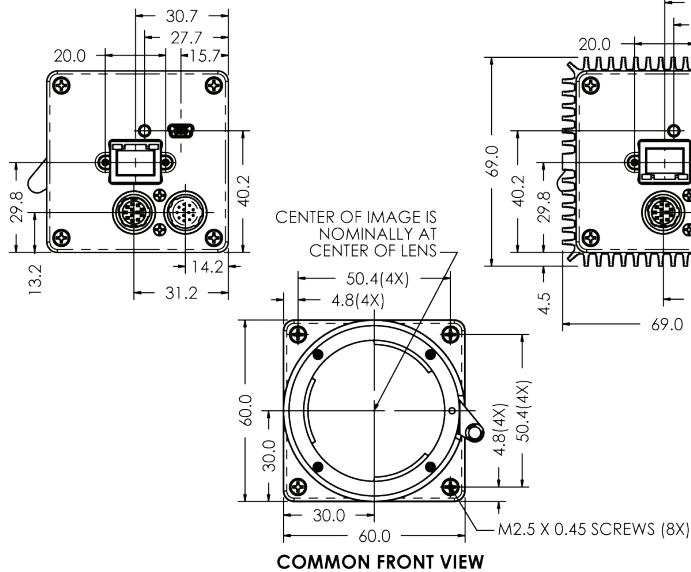
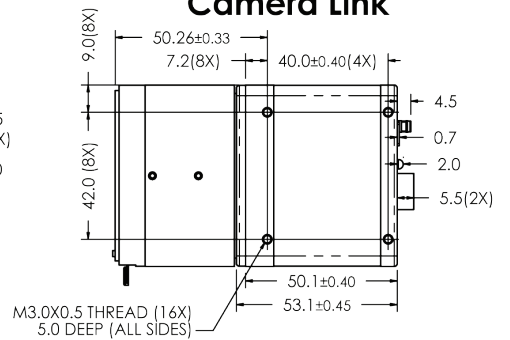
## GigE Vision(Without PoE)



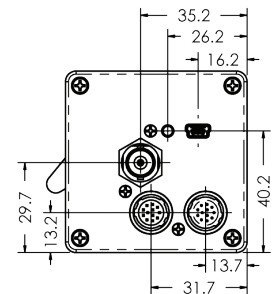
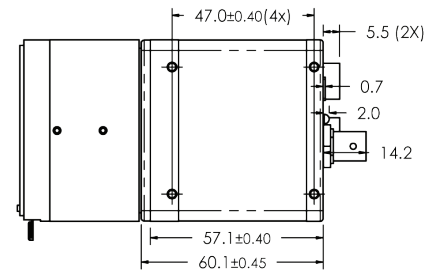
## GigE Vision(With PoE)



## Camera Link

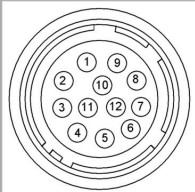


## CoaXPress



### Hirose Connectors

#### Power and I/O Interface

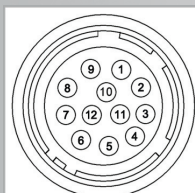


- |                   |                 |
|-------------------|-----------------|
| 1 12V DC Return * | 7 OUT1 Signal   |
| 2 +12V DC*        | 8 IN1 Signal    |
| 3 IRIS VCC        | 9 IN2 Signal    |
| 4 IRIS Video      | 10 IN1/2 Return |
| 5 IRIS Return     | 11 Reserved     |
| 6 OUT1/2 Return 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

Connector: Hirose HR 10A- 10R- 12PB(71)  
\*Not connected for CXP

#### 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

### B201 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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bobcat-B201,Rev1