

BOBCAT2.0 B1920



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
Sensor
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
Video Iris Control
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, HD-SDI

1920 x 1080
KAI-2093, CCD
14.21mm (H) x 7.99 mm (V) 16.3mm diagonal
1.0” optical format

7.4 μm
40 MHz / 33 fps
50 MHz / 41 fps
111 fps
60dB

Mono CCD: 8, 10, 12, 14-bit (Single only)
Color CCD: 8, 10, 12, RGB 24

Manual, Auto: 0 - 36dB 1024 steps

Manual, 1024 steps

Manual

Manual

Manual, auto, off

1us/step, 1/100,000 to 1/33 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

C-Mount

Auto, programmable

Manual, user programmable

12VDC (10V - 15V), 1.5 A inrush

CLB 3.6 W, GEV 5.2W, PoE 6.2W, CXP TBD

46mm (W) x 46mm (H) – Applies to all interfaces

CLB 50.6mm (L), GEV 68.6mm (L), PoE 82.2mm (L),

CXP 58.25mm (L)

CLB 164g, GEV 217g, PoE 319g, CXP 208g

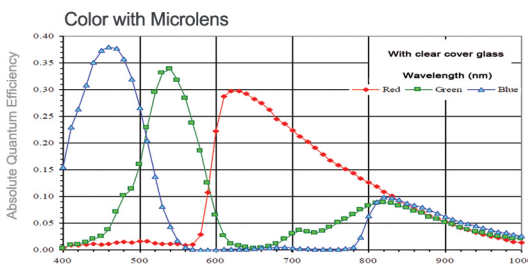
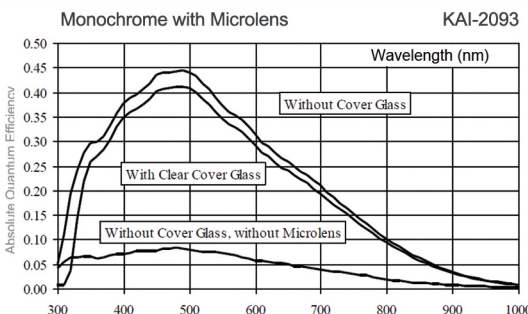
100g (20-200) HZ XYZ, 1000g

-40°C to +85°C Operating, -50°C to +90°C Storage

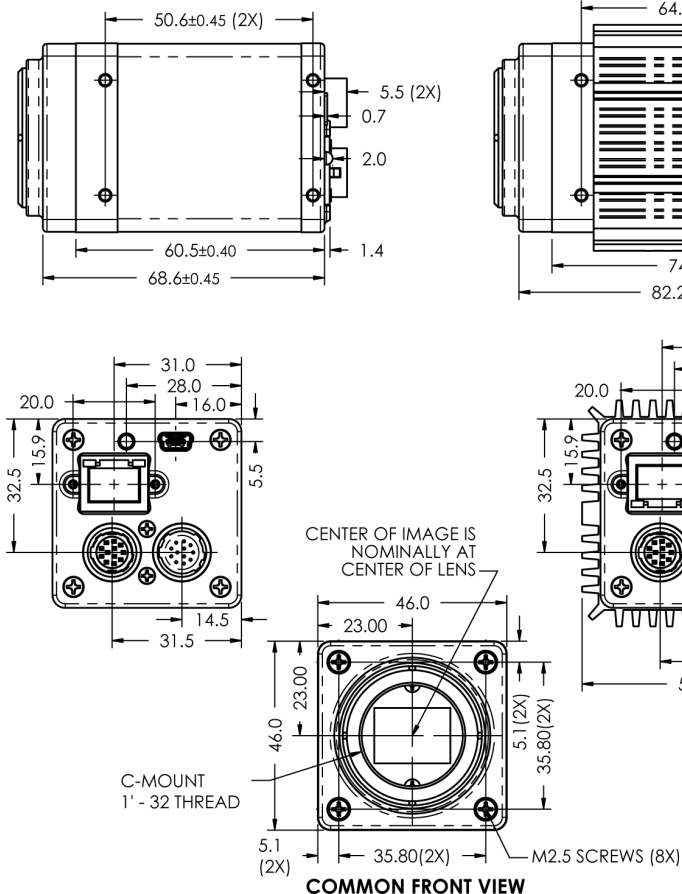
10% to 90% non-condensing

>660,000 hours @ 40°C

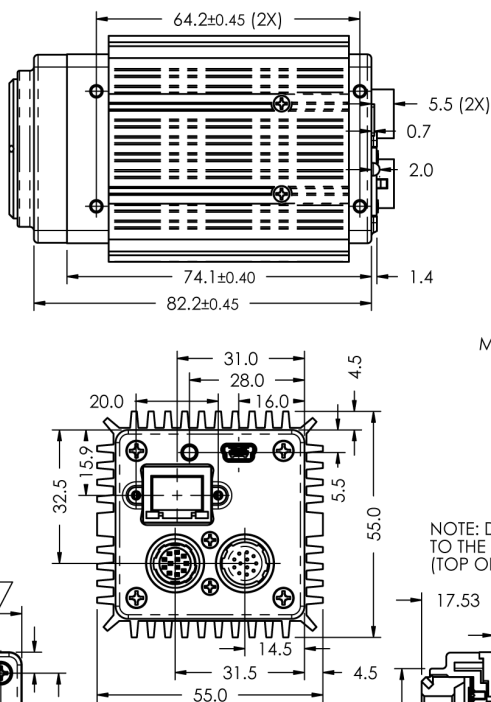
FCC 15 part A, CE, RoHS



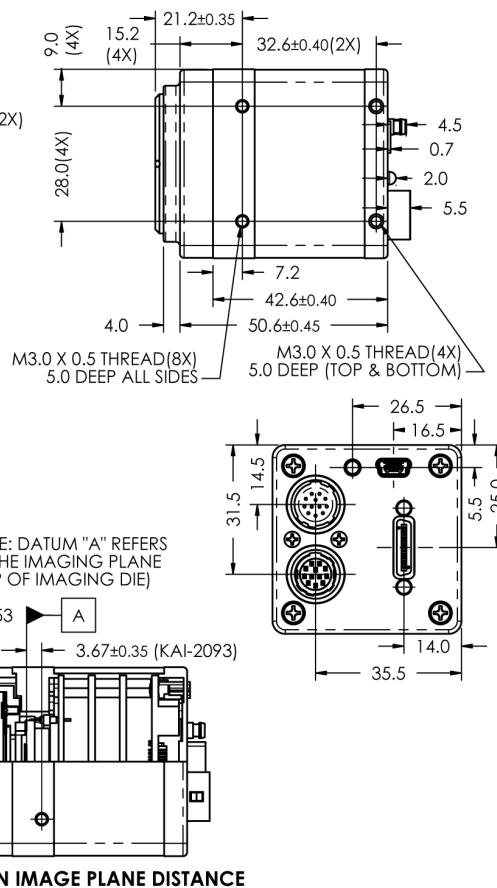
GigE Vision(Without PoE)



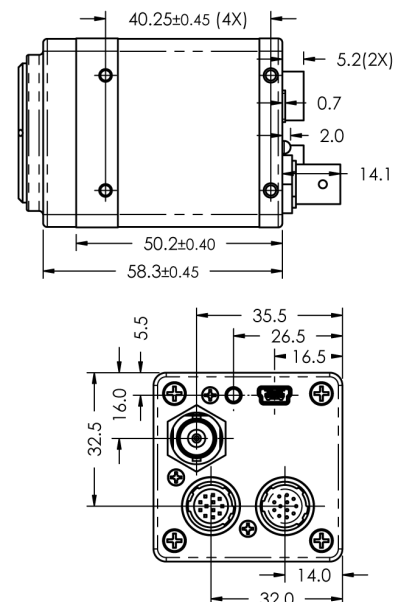
GigE Vision(With PoE)



Camera Link

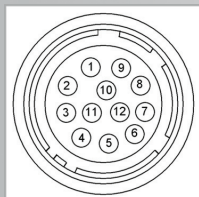


CoaXPress



Hirose Connectors

Power and I/O Interface



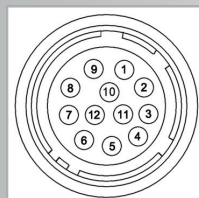
- | | |
|-------------------|-----------------|
| 1 12V DC Return * | 7 OUT1 Signal |
| 2 +12V DC* | 8 IN1 Signal |
| 3 IRIS VCC | 9 IN2 Signal |
| 4 IRIS Video | 10 IN1/2 Return |
| 5 IRIS Return | 11 Reserved |
| 6 OUT1/2 Return | 12 OUT2 Signal |

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)

B1920 Ordering Information

Interfaces available

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

Sensor types available

Monochrome
Bayer Color

Accessories (Sold separately)

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

WWW.IMPERX.COM

bobcat-B1920-v2_Rev1