



B1922



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

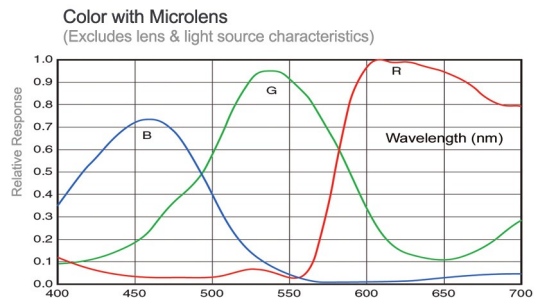
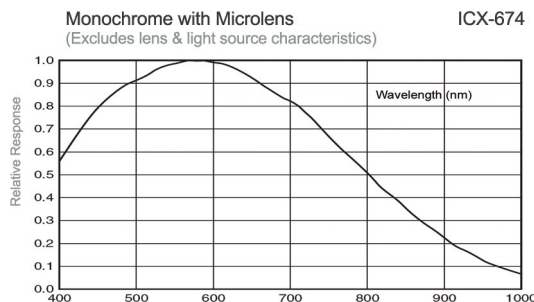
Double Trigger (PIV) Interframe
External Inputs/Outputs
Strobe Output
RS232 Interface
Pulse Generator
Image Overlay
Image Enhancement

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

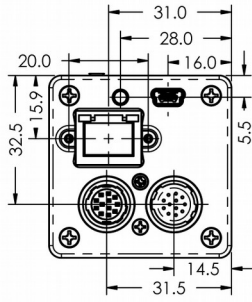
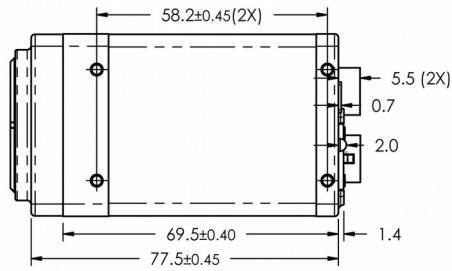
Weight
Vibration, Shock
Environmental
Humidity
MTBF
Regulatory

Camera Link® Base (PoCL), GigE Vision, PoE, CoaXPress, HD-SDI
1940 x 1460
ICX-674 EXview HAD CCD
8.81mm (H) x 6.63 mm (V) 10.97mm diagonal
2/3" optical format
4.54 µm
40 MHz / 20 fps
50 MHz / 25 fps
89 fps
60dB
Mono CCD: 8, 10, 12, 14-bit (Single only)
Color CCD: 8, 10, 12
Manual, Auto: 0 - 36dB 1024 steps
Manual, 1024 steps
Manual
Manual
Manual, auto, off
1us/step, 1/500,000 to 1/32 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), black level, vertical smear
0.5 Lux, F/1.4
C-Mount
Auto, programmable
Manual, user programmable
12VDC (10V - 15V), 1.5 A inrush
CLB 3.1 W, GEV 4.7W, PoE 5.8W, CXP TBD
46mm (W) x 46mm (H) – Applies to all interfaces
CLB 59.6mm (L), GEV 77.5mm (L), PoE 91.1mm (L), CXP 67.2mm (L)
CLB 201g, GEV 236g, PoE 349g, CXP 229g
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



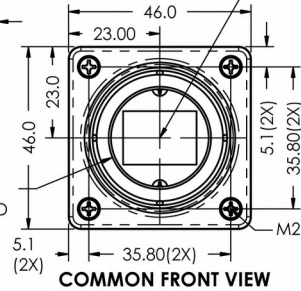
BOBCAT 2.0 B1922 Specifications

GigE Vision(Without PoE)



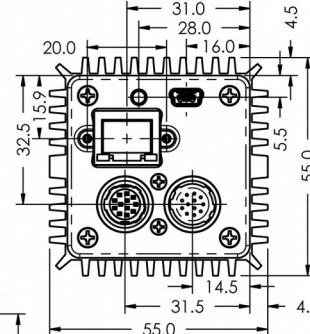
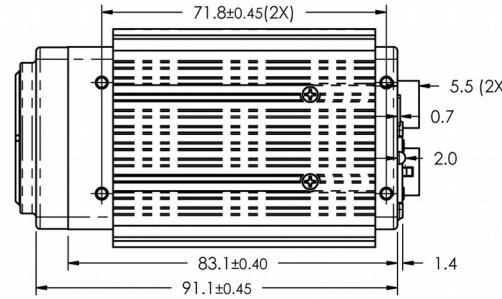
C-MOUNT
1" - 32 THREAD

CENTER OF IMAGE IS
NOMINALLY AT
CENTER OF LENS



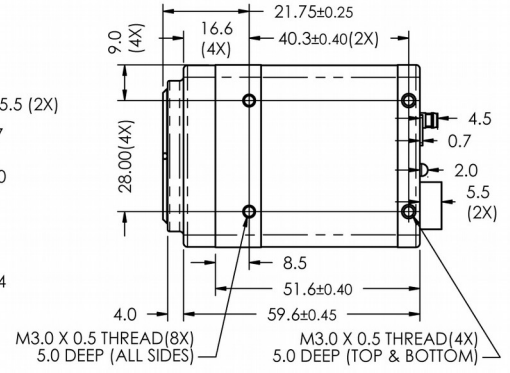
COMMON FRONT VIEW

GigE Vision(With PoE)



M2.5 SCREWS (8X)

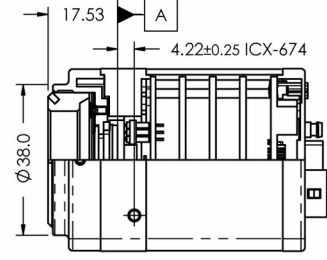
Camera Link



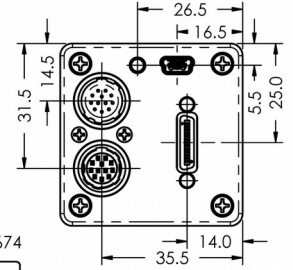
M3.0 X 0.5 THREAD(8X)
5.0 DEEP (ALL SIDES)

M3.0 X 0.5 THREAD(4X)
5.0 DEEP (TOP & BOTTOM)

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



COMMON IMAGE PLANE DISTANCE



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)

B1922 Ordering Information

Interfaces available

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

Sensor types available

- Monochrome
- Bayer Color

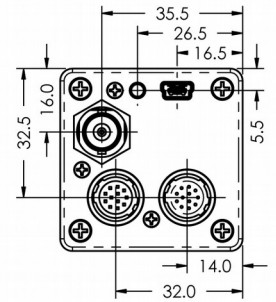
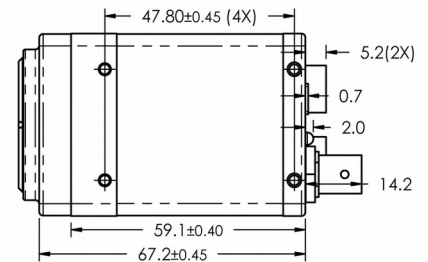
Accessories (Sold separately)

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



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CoaXPress



Quality Management System ISO 9001:2008 Registered
Environmental Management System ISO 14001:2004 Registered
DDTC Registered (Directorate of Defense Trade Controls, US Department of State)



Bobcat B1922 Base

contact@sacasa.info

www.sacasa.info



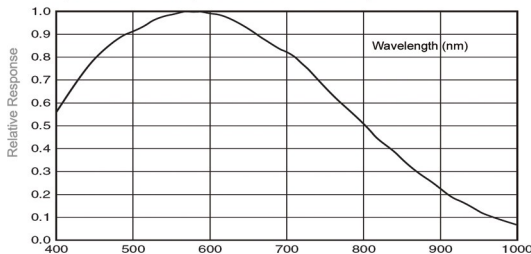
SDI-B1922



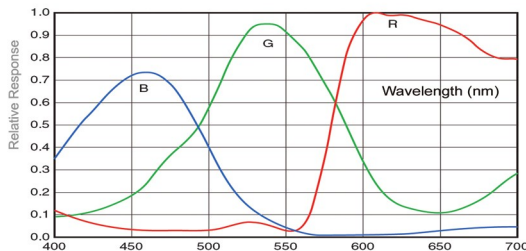
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Video Output	HD-SDI (SMPTE-292)
Resolution	1920 (H) x 1080 (V)
Sensor	SONY ICX-674 EXview HAD CCD II, 2/3” optical format
Sensor Format	8.71mm (H) x 4.9mm (V) 10.97mm diagonal
Pixel Size	4.54 μm
Frame Rates	23.98P, 24P, 25P, 29.97P, 30P, 50i, 59.94i, 60i
Output Format	10-bit, 4:2:2 (YCrCb)
Dynamic Range	11 F-stops (60dB)
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
Shutter Speed	1/500,000 to 1/30 sec (nom)
Exposure Control	Automatic (AEC) or manually adjustable
Long Integration	Up to 16 seconds (480 frames)
Regions of Interest (ROI)	7 independent
Synchronization	External tri-level sync
External Inputs/Outputs	1 IN, 2 OUT, user programmable
Strobe Output	2 strobes, programmable position and duration
Camera Control	RS232/RS485
Pulse Generator	Yes, programmable
Image Overlay	Optical center, programmable H & V lines
Image Enhancement	Threshold, contrast enhancement, knee correction, 3 x 3 convolution kernel
White Balance	Auto, manual, color temperature, hue correction
Gamma Correction	Black/white programmable
LUT (Look Up Tables)	4 RGB LUTs, user programmable
Data Corrections	Defective/hot pixel correction (static, dynamic), FFC, black level
Minimum Illumination	0.5 Lux, F/1.4
Lens Mount	C-Mount
Video Iris Control	Auto, programmable
Iris, Zoom Focus Control	Manual, user programmable
Supply Input Range	12VDC (10V - 15V), 1.5 A inrush
Power Consumption	5.5 W
Size – Width/Height/Length	46mm (W) x 46mm (H) x 67.1mm (L)
Weight	271g
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

Monochrome with Microlens ICX-674
(Excludes lens & light source characteristics)



Color with Microlens
(Excludes lens & light source characteristics)

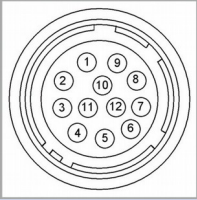




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Hirose Connectors

Power and I/O Interface

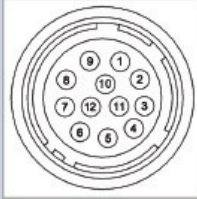


- | | |
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Hirose HR 10A- 10R- 12PB(71)

Lens Control/RS232

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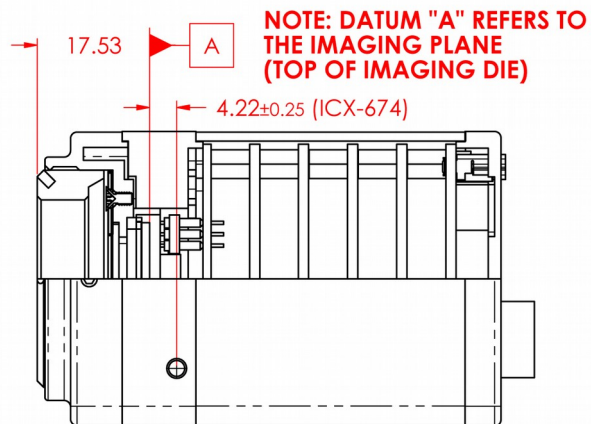
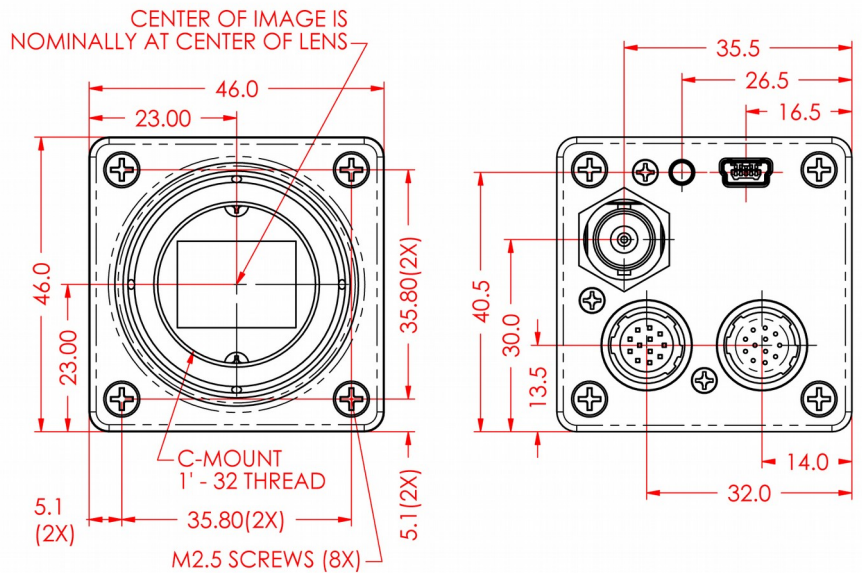
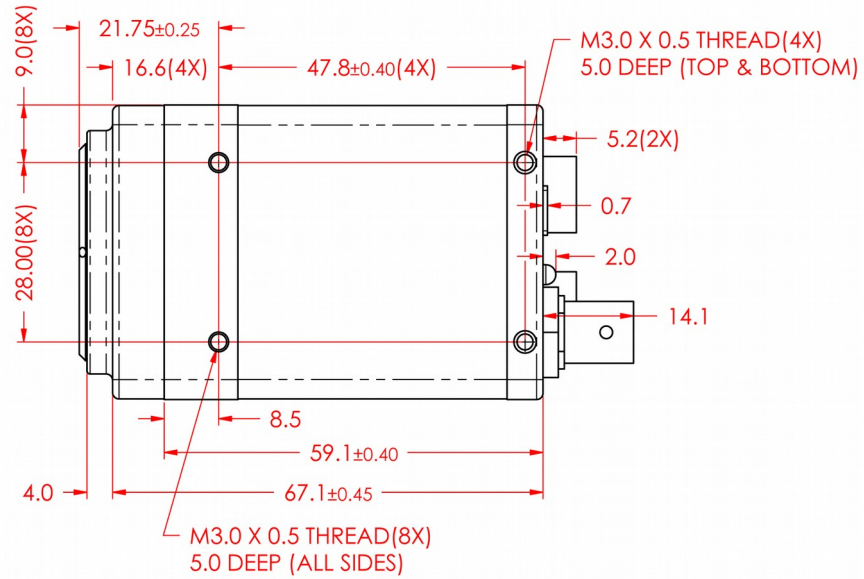
Connector:
Hirose HR 10A- 10R- 12SB(71)

SDI-B1922 Ordering Information

Interfaces available
HD-SDI (SMPTE-292M)

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Monochrome
Bayer Color

Accessories (Sold separately)
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bobcat-SDI-B1922, Rev1

