

# B2510



**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 &amp; 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

2448 x 2050 (std.), 2456 x 2058 (max.)

ICX-655, CCD

8.47mm (H) x 7.10mm (V), 11.016mm diagonal

2/3" optical format

3.45  $\mu$ m

40 MHz / 6.5 fps

64 MHz / 9.6 fps

49 fps

53dB

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

1 $\mu$ s/step, 1/80,000 to 1/11 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 &amp; 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 &amp; 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 2.6 W, GEV 4.0W, PoE 5.4W, CXP TBD

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

CLB 46.8mm (L), GEV 64.7mm (L), PoE 78.3mm (L),

CXP 54.5mm (L)

CLB 159g, GEV 197g, PoE 299g, CXP 189g

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

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

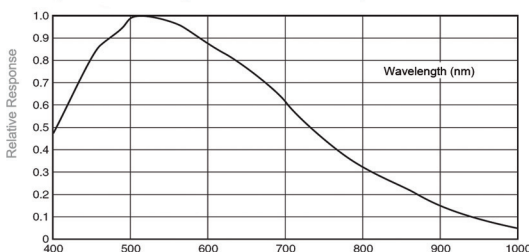
10% to 90% non-condensing

&gt;660,000 hours @ 40°C

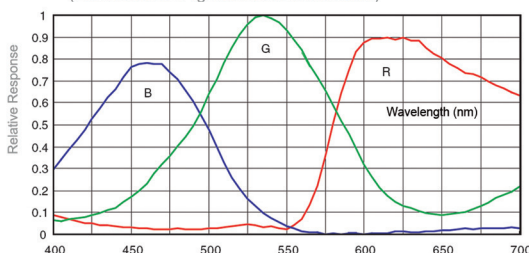
FCC 15 part A, CE, RoHS

Monochrome with Microlens  
(Excludes lens & light source characteristics)

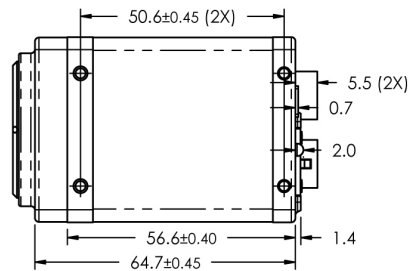
ICX-655



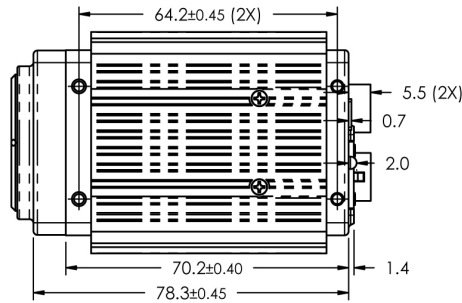
Color with Microlens  
(Excludes lens & light source characteristics)



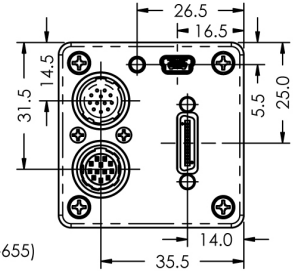
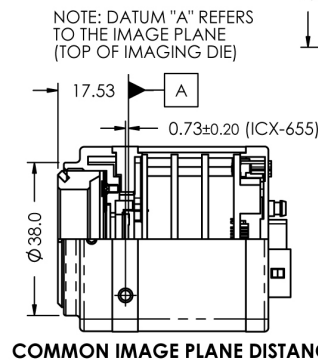
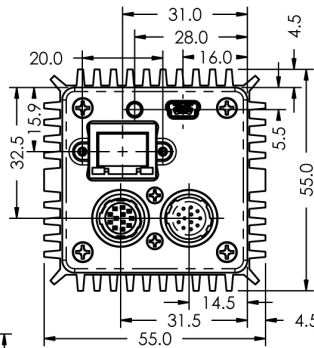
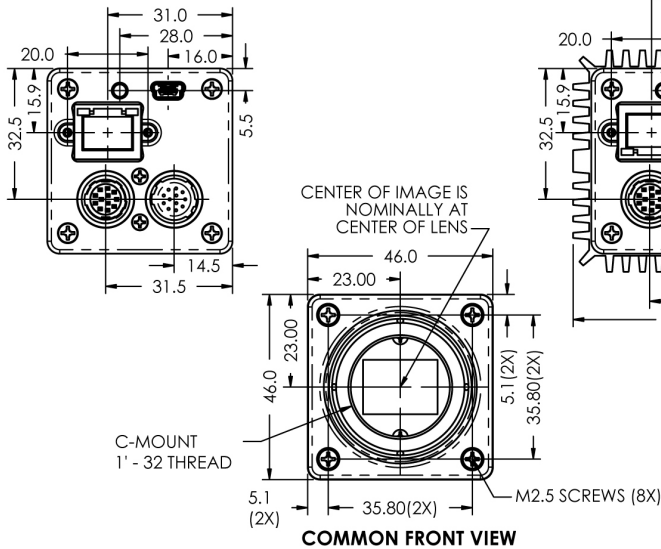
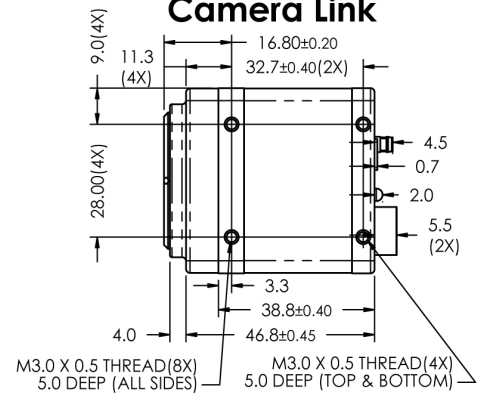
## GigE Vision(Without PoE)



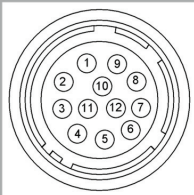
## GigE Vision(With PoE)



## Camera Link



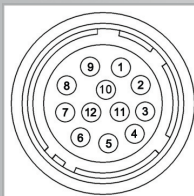
### Hirose Connectors Power and I/O Interface



- |                   |                 |
|-------------------|-----------------|
| 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

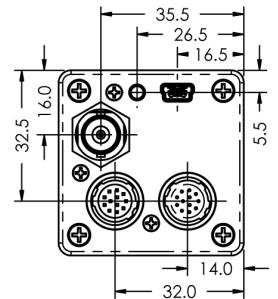
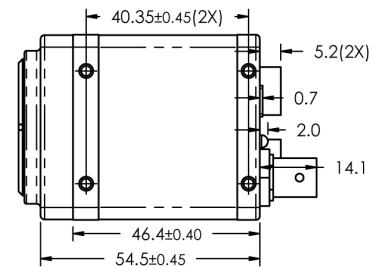
### Lens Control/RS232

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)

## CoaXPress



## B2510 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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bobcat-B2510\_Rev1