



**BOBCAT**  
INTELLIGENT CAMERA SERIES



## IGV-B1410

The **IGV-B1410** is an advanced high-speed progressive scan, fully programmable CCD camera designed for imaging applications that require high frame rates, high quality images, and powerful features and flexibility. The camera has a small size, light weight, and is built around SONY'S ICX-285 Interline transfer CCD image sensor with a 2/3" optical format. IGV-B1410 is available with Ethernet output (GigEVision compliant).

The B1410 provides an image resolution of 1392 x 1040 and delivers up to 30 frames per second at full resolution. The camera image processing engine is based on a high-speed, high-density FPGA, featuring programmable resolution, speed, 8 independent AOIs, binning, triggering, exposure control, line and frame time, I/O mapping, external/internal sync, AGC, AEC, Auto Iris, transfer function correction, user LUT, Flat Field Correction (FFC), and Defective and Hot Pixel Correction (DPC, HPC).

### Features

1360/1392 x 1024/1040  
Mono and color - 8/10/12/14-bit data  
Color - 3x8-bit (RGB) data, auto white balance (optional)  
Ethernet ouput, GigEVision and Gen<|>Cam support  
Base CameraLink, PoCL support  
RS232 serial communication  
Analog and digital gain and offset control  
1x, 2x, 3x, 4x, 8x horizontal and vertical binning  
Eight (8) independent horizontal and vertical AOIs  
Programmable horizontal and vertical resolution  
Programmable line time, frame time and speed  
Programmable external trigger:  
    3 triggering sources  
    5 triggering modes  
Automatic gain, exposure and iris control

Internal/External exposure control  
Internal/External H and V sync input/output  
Left/right digital bit shift  
Test image with image superimposition  
Built in pulse generator  
Programmable I/O mapping  
    4 programmable inputs  
    3 programmable outputs  
Dynamic transfer function correction  
Dynamic black level correction  
Defective and hot pixel correction  
Temperature monitor  
Field upgradeable firmware, LUT, DPC, HPC

### Applications

Industrial  
Medical  
Microscopy  
Military  
Scientific  
Surveillance

SACASA INDUSTRIES ET SYSTEMES

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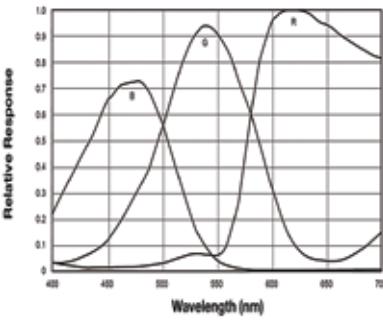
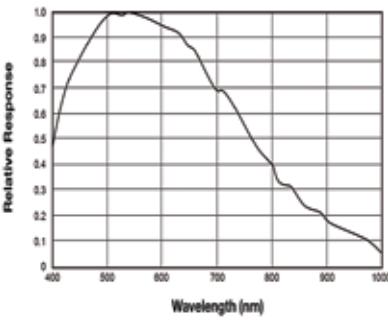
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# Specifications for Bobcat IGV-B1410

Maximum Resolution	1392 x 1040
Sensor Type	2/3" CCD ICX285
Pixel Size	6.45 um
Frame Rate	23/30 fps
Max Frame Rate	200 fps
Minimum S/N ratio	60 db
Video output	RJ45 CAT 5e, CAT6
Output format	mono 8/10/12/16, mono 10/12 packed, bayer 8/10/12
Binning H & V	x1, x2, x3, x4, x8
Area of Interest	8 independent AOIs, 2 x 2 to 1392 x 1040
Shutter Speed	1/50000 to 1/23
Long integration	Up to 16 sec
Gamma correction	G=1.0, G= 0.45, user upgradable LUT
Video gain	36 dB range, 1024 steps, 0.0351 dB per step
Exposure and AGC	Manual, Auto, Programmable
Iris Control	Auto, Programmable
Hardware trigger	LVTTL or TTL via IN1/IN2, optically isolated, level, edge, pulse-width, programmable
Software trigger	Software, internal, level, edge, pulse-width, programmable
Trigger modes	Programmable, standard, double exposure, fast, frame accumulation, asynchronous
Strobe output	Programmable position and duration
Image Overlay	Yes, Programmable
RS232 Interface	Yes
Config. Software	Yes
Min. illumination	0.2 Lux, F/1.4
Power input range	12 VDC, (10 V – 15 V)
Power consumption	4.6 W
Size (W x H x L), Weight	45 x 45 x 63mm, 243g
Lens Mount	C mount
Vibration, Shock	10G (20 - 200)Hz XYZ, 70G
Environmental	Operation (-30° to 60°) C, storage (-40° to 70°) C
Humidity	10% to 90% non-condensing

## Spectral Response



## Software/Drivers/Interface

**GigE Protocol:** 10/100/1000 Mb/s, 802.3, Ethernet v2.0, IPv4, IGMPv.2, UPD and ICMP

**Drivers for:** Windows 2000/XP/XP-64/Vista32/Vista64/Win 7-32/Win 7-64/SuSE 10/RedHat 5/ and others

**Software:** GigEVision Player

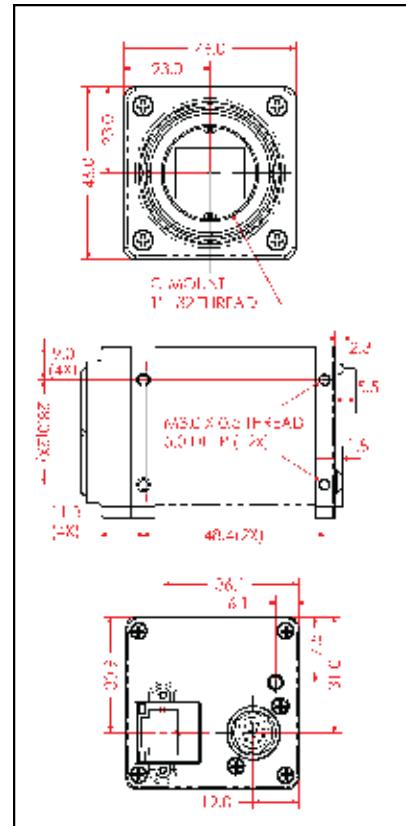
**SDK:** C++GigEVision Software Developers Kit

**Support for:** Labview, ImagePro, Halcon, MIL, eVision, CommonVision, StreamPix, CoreView, Streams5, Absoft Active GigE, and others

**Multicast capable**



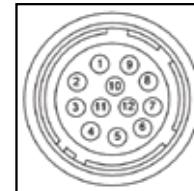
## Mechanical Dimensions



For specific details and ordering information, consult the camera user's manual or contact us at [sales@imperx.com](mailto:sales@imperx.com).

## Power and I/O Interface

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



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	Spare
6	OUT1/2 Return	12	OUT2 Signal

## Power Requirements

12V DC, (10V min, 15V max)

350 mA steady, 1.5 A inrush

4.2 W

## Accessories

PS12V04: Power Supply (sold separately)

PS12V05 Power Supply with Auto Iris (sold separately)

## Ordering Information

Ordering: **IGV-B1410M-SCO**

### Camera Family

B-Bobcat Family

### Lens Mount

C-“C” mount (default)  
F-“F” Mount

### Sensor Type

M-Monochrome  
C-Color

### CCD

S-Sony