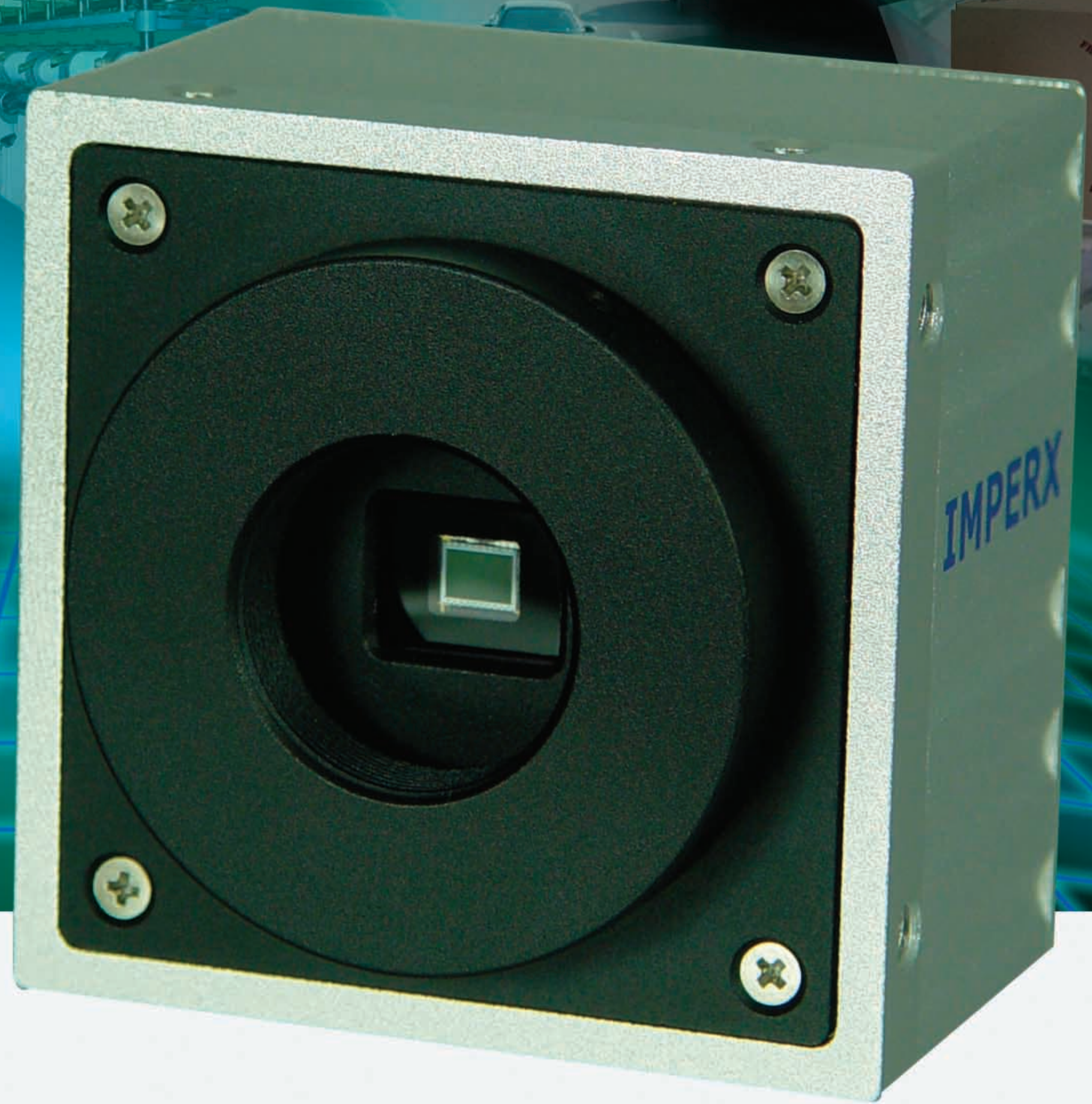


VGA 8/10/12 BIT, 210 FPS, FIELD UPGRADEABLE, PROGRAMMABLE DIGITAL CAMERA,
GigE OUTPUT

IPX-VGA210-G



Features

- 640 x 480 pixels @ 210 fps
- 8/10/12 bit selectable data output
- GigE Output
- Single or Dual tap operation
- Serial communication
- 32 bit RISC processor
- Horizontal and vertical binning
- Highly programmable:
 - resolution • frame rate
 - electronic shutter • long integration
 - external trigger • pre-exposure
 - fast triggering • double exposure
 - strobe output • gain and offset
 - area of interest • user LUT
- Dynamic Transfer Function correction
- Dynamic S/N correction
- Temperature monitor
- Field upgradeable:
 - software • firmware • user LUT
- Automatic Iris Control - optional

Applications

- Medical and Scientific Imaging
- Machine Vision and Metrology
- Microscopy
- Remote Sensing
- Surveillance

The **IPX-VGA210-G** is an advanced, high-speed progressive scan, fully programmable and field upgradeable CCD camera, built around KODAK's KAI-0340 interline transfer CCD. The camera provides 640 x 480 resolution and delivers 210 frames per second at full resolution. The camera image processing engine is based on a 1 million gate FPGA and 32 bit RISC processor, featuring programmable resolution, AOI, binning, triggering, shutter, long integration, transfer function correction and user LUT.

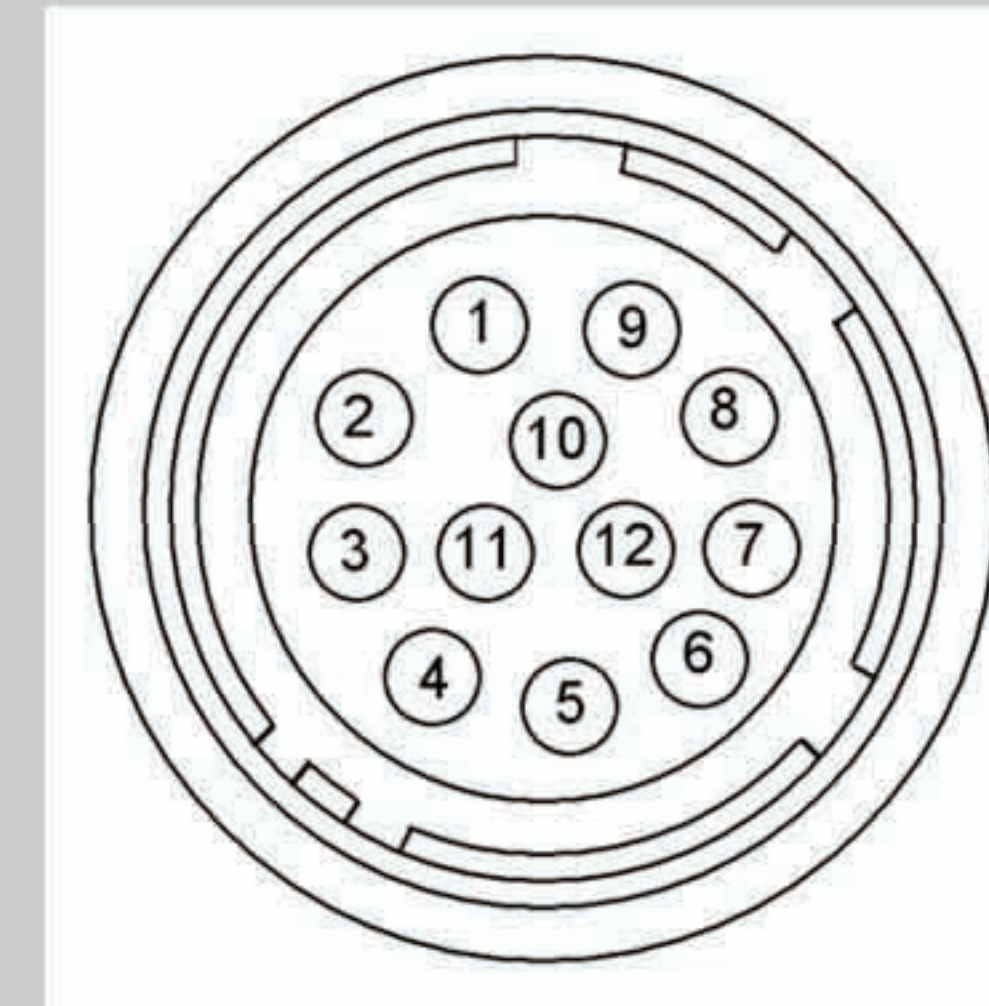
FAST...SMART...FLEXIBLE...
LYNX FAMILY



Specifications for IPX-VGA 210-G

Active Image Pixels	640 (H) x 480 (V), Mono or Color
Active Image Area	5.87 mm x 4.71 mm (0.231" x 0.185")
Pixel size	7.4 um
Video Output	Digital, 8/10/12 bit, one or two outputs
Camera Interface	GigE Output
Physical Interface	RJ-45, 802.3, Ethernet v2.0, IP, ICMP, UDP, PING
Data Clock	40.000 MHz
Resolution	640 x 480 pixels max
Frame Rate	210 fps (dual) / 120 fps (single), up to 3000 fps w/AOI
Shutter Speed	1/50000 sec to 1/100 sec
Long Integration	1/100 sec to 10 sec
Gamma Correction	G=1.0, G=0.45, User defined LUT
Black Level Offset	256 levels/output
Video Gain	6-40 dB, 1024 steps/output
Camera Triggering	Asynchronous, Hardware, Software
Trigger Modes	Programmable, Normal, Double, Fast
Camera Firmware	32 bit RISC, field upgradeable
S/N Ratio	60 dB
Strobe Output	Active HIGH, for external light source
Lens Mount	C mount, 1/3" format
Environmental	Operating: -5 to 50 C, Storage: -10 to 65 C
Min. Illumination	1.0 Lux, f=1.4, no IR cut filter, no shutter
Mechanical	(67 x 67 x 54) mm; 14 oz (390 g)

Power Connector



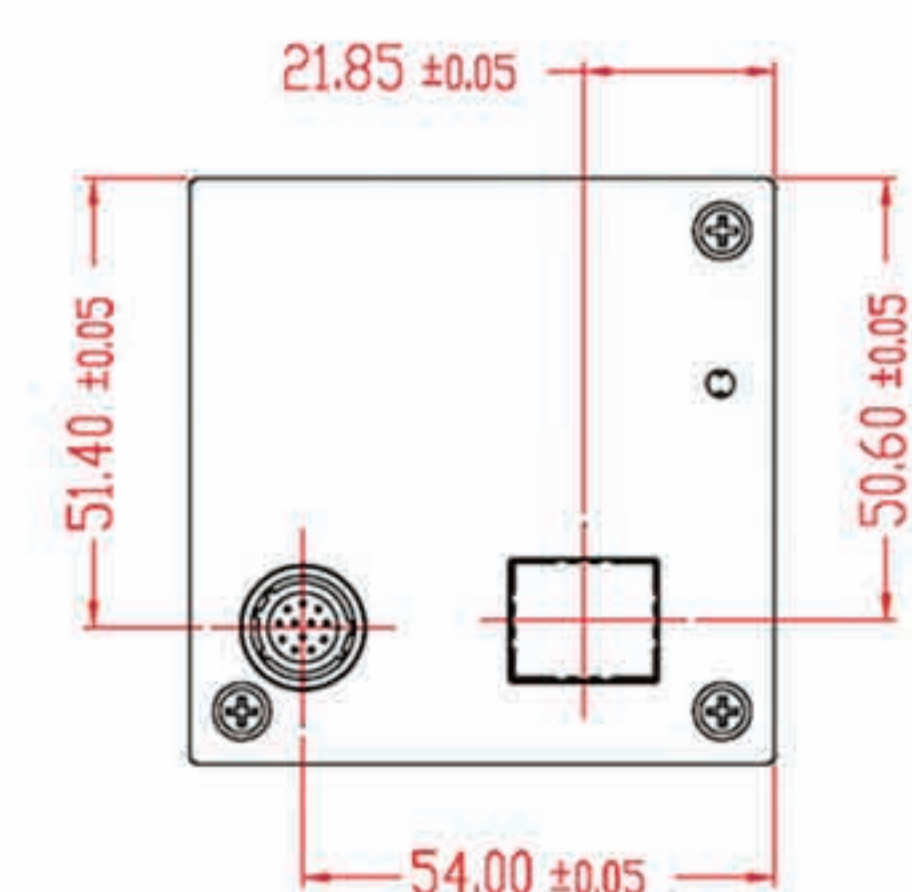
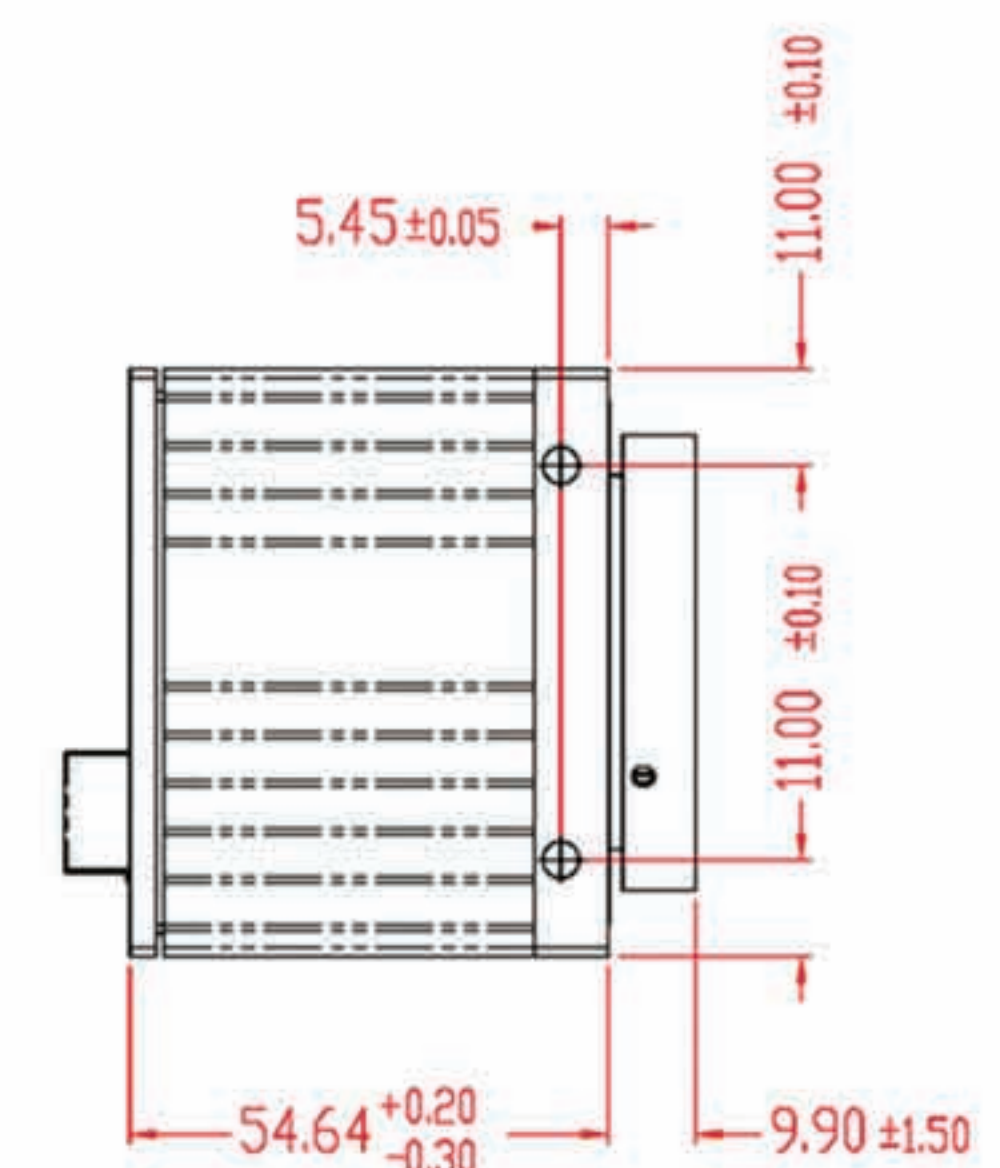
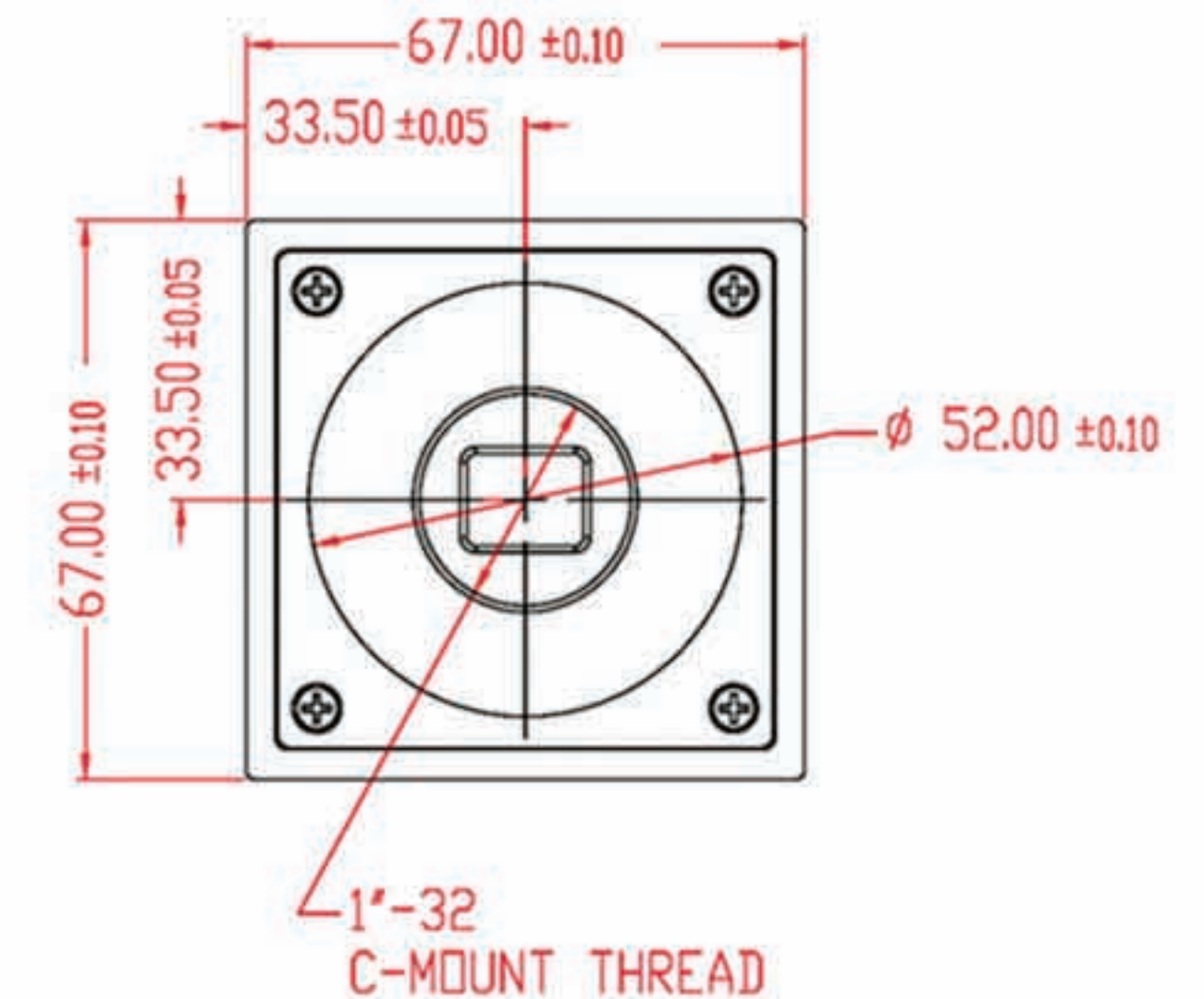
Rear Camera View

- 1 - 12V DC
- 2 +12V DC
- 3 Auto Iris 1
- 4 Auto Iris 2
- 5 Auto Iris GND
- 6 Strobe GND
- 7 Strobe OUT
- 8 Trigger IN
- 9 N/C
- 10 Trigger GND
- 11 N/C
- 12 N/C

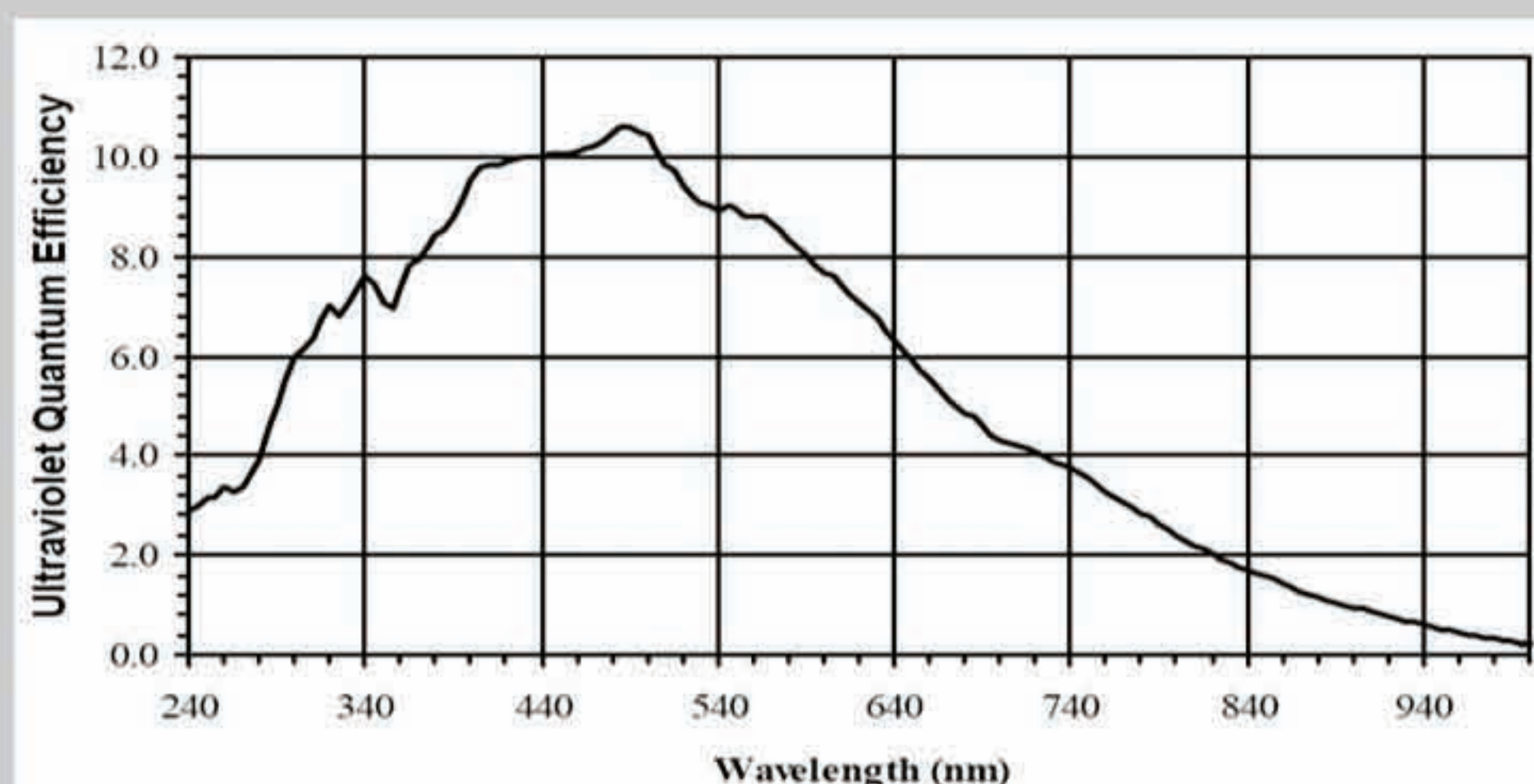
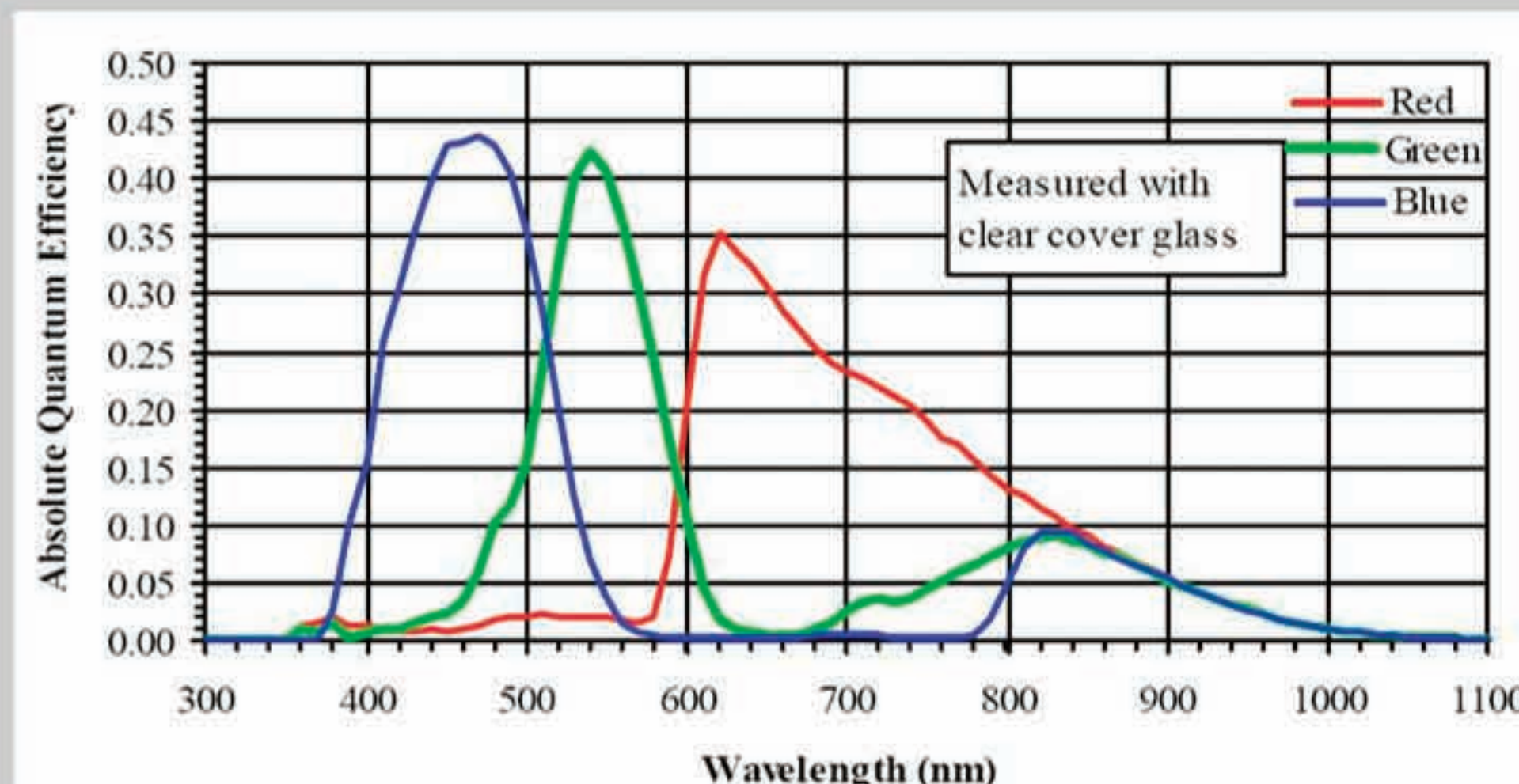
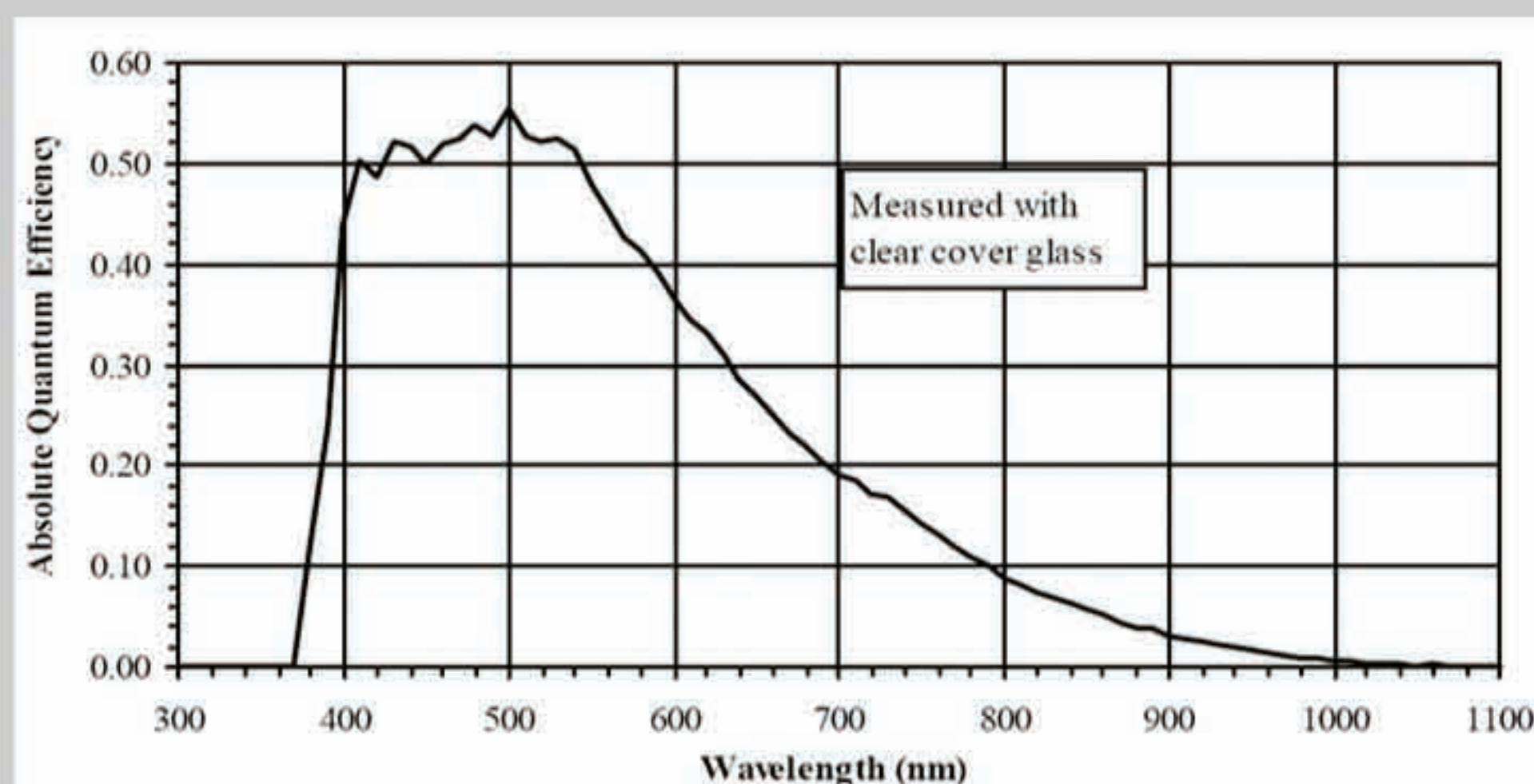
Power Requirements

- 12V DC, (10V min, 15V max)
- 500 mA steady, 1.5 A inrush
- 6.2 W constant power
- Connector: Hirose HR 10A-10R-12P

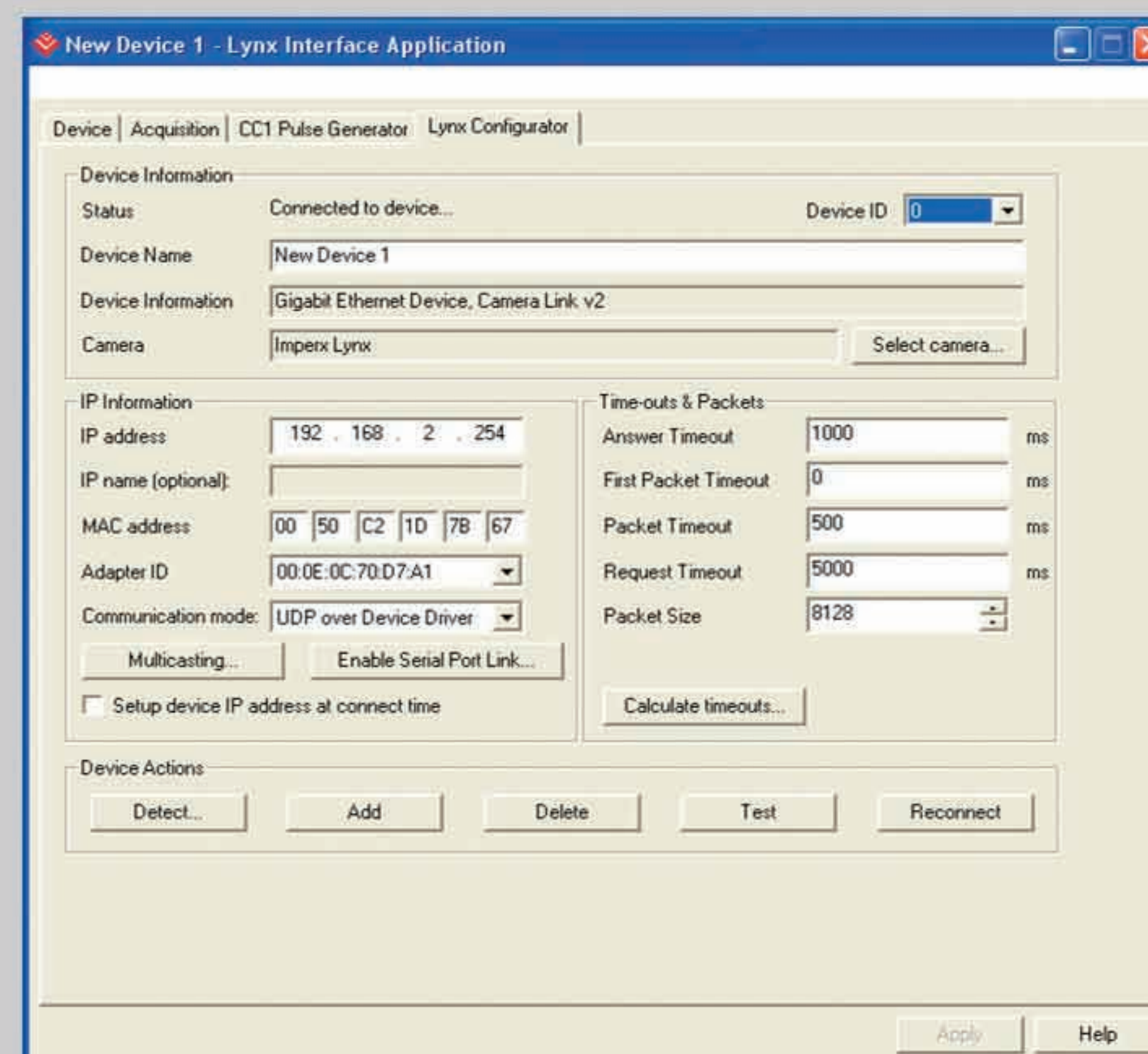
Mechanical Dimensions



Spectral Response



Software Tools



- Integrated software tools:
 - data acquisition and display
 - camera control and communication
 - camera configuration utility
 - triggering waveform generator
- Support for Labview, Image Pro, Halcon, Video Savant, MIL, eVision, Common Vision, Sapera, and others.
- C++ and VB SDK. Support for Windows 2000, XP, Red Hat Linux, and SuSe.

Ordering: **IPX-VGA210-GMCI**

Camera Family	Options
G - LYNX GigE Family	blank - none
Sensor Type	I - Auto Iris
M - Monochrome	Lens Mount
C - Color	blank - "C" mount
U - UV sensitive (no glass)	O - Open frame
S - Special - user filter	

For specific details and ordering information, consult the camera user's manual or contact us at sales@imperx.com.

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