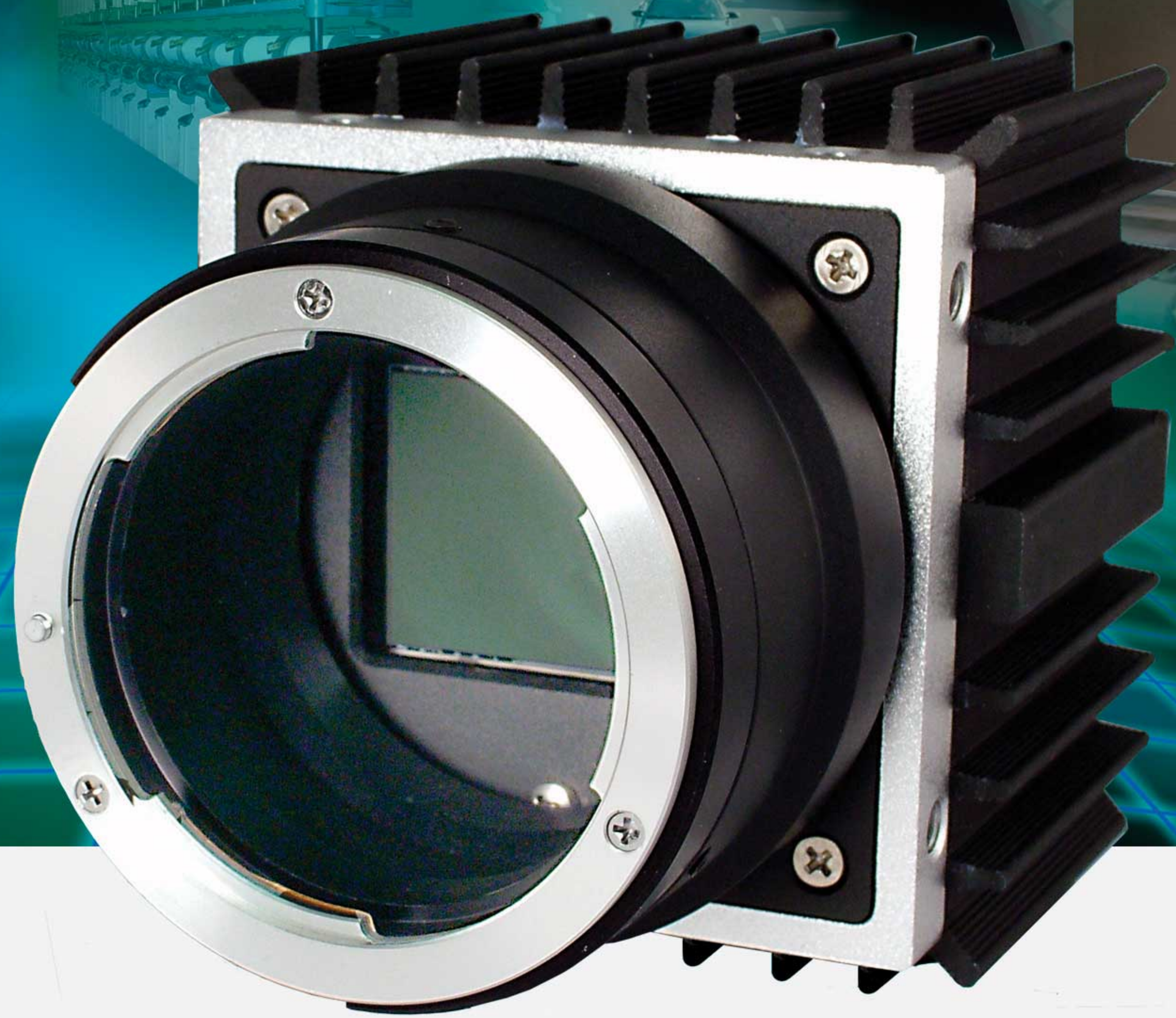


## 11 MEGA-PIXEL 8/10/12 BIT, 5 FPS, FIELD UPGRADEABLE, PROGRAMMABLE DIGITAL CAMERA

### IPX-11M5-L



#### Features

- 4000 x 2672 pixels @ 5 fps
- Mono or Color
- 8/10/12 bit data, Base Camera Link
- Single or Dual tap operation
- RS232 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 Black Level Compensation
- Temperature monitor
- Field upgradeable:
  - SW • FW • LUT • FFC • DPC
- Defective Pixel Correction
- Flat Field Correction
- Automatic Iris Control - optional

#### Applications

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



FAST...SMART...FLEXIBLE...  
**LYNIX** FAMILY

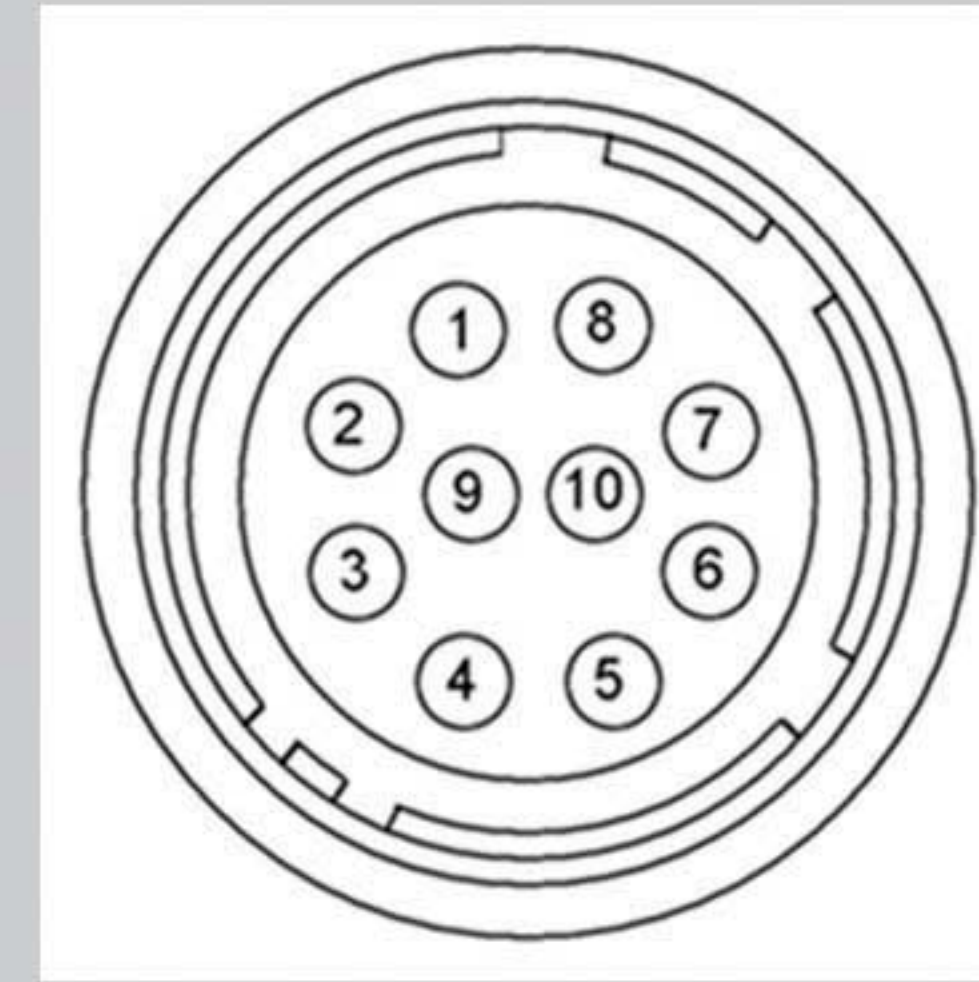
The **IPX-11M5-L** is an advanced, high-resolution progressive scan, fully programmable and field upgradeable CCD camera, built around KODAK's KAI-11002 interline transfer CCD. The camera provides 4000 x 2672 resolution and delivers 5 frames per second at full resolution. The camera image processing 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. Support for DPC and FFC.



# Specifications for IPX-11M5-L

<b>Active Image Pixels</b>	4000 (H) x 2672 (V), Mono or Color
<b>Active Image Area</b>	36.07 mm x 24.05 mm
<b>Pixel size</b>	9.0 $\mu$ m
<b>Video Output</b>	Digital, 8/10/12 bit, one or two outputs
<b>Camera Interface</b>	Base Camera Link
<b>Data Clock</b>	28.000 MHz
<b>Resolution</b>	4000 x 2672 pixels max
<b>Frame Rate</b>	5 fps (dual) / 2.5 fps (single), up to 49 fps w/AOI
<b>Shutter Speed</b>	1/10000 sec to 1/3 sec
<b>Long Integration</b>	1/3 sec to 10 sec
<b>Gamma Correction</b>	G=1.0, G=0.45, User defined LUT
<b>Black Level Offset</b>	256 levels/output
<b>Video Gain</b>	6-40 dB, 1024 steps/output
<b>External Trigger</b>	Asynchronous
<b>Hardware Trigger</b>	External, level sensitive, 3.3V - 5.0V, 10 mA., optically isolated, programmable exposure
<b>Software Trigger</b>	Frame-grabber, CC1, programmable exposure
<b>S/N Ratio</b>	60 dB
<b>Strobe Output</b>	Active HIGH, for external light source
<b>Lens Mount</b>	F mount, 43.3 mm image diagonal
<b>Environmental</b>	Operating: -5 to 50 C, Storage: -10 to 65 C
<b>Min. Illumination</b>	1.0 Lux, f=1.4, no IR cut filter, no shutter
<b>Mechanical</b>	(78 x 78 x 58) mm; 19 oz (540 g)

## Power Connector



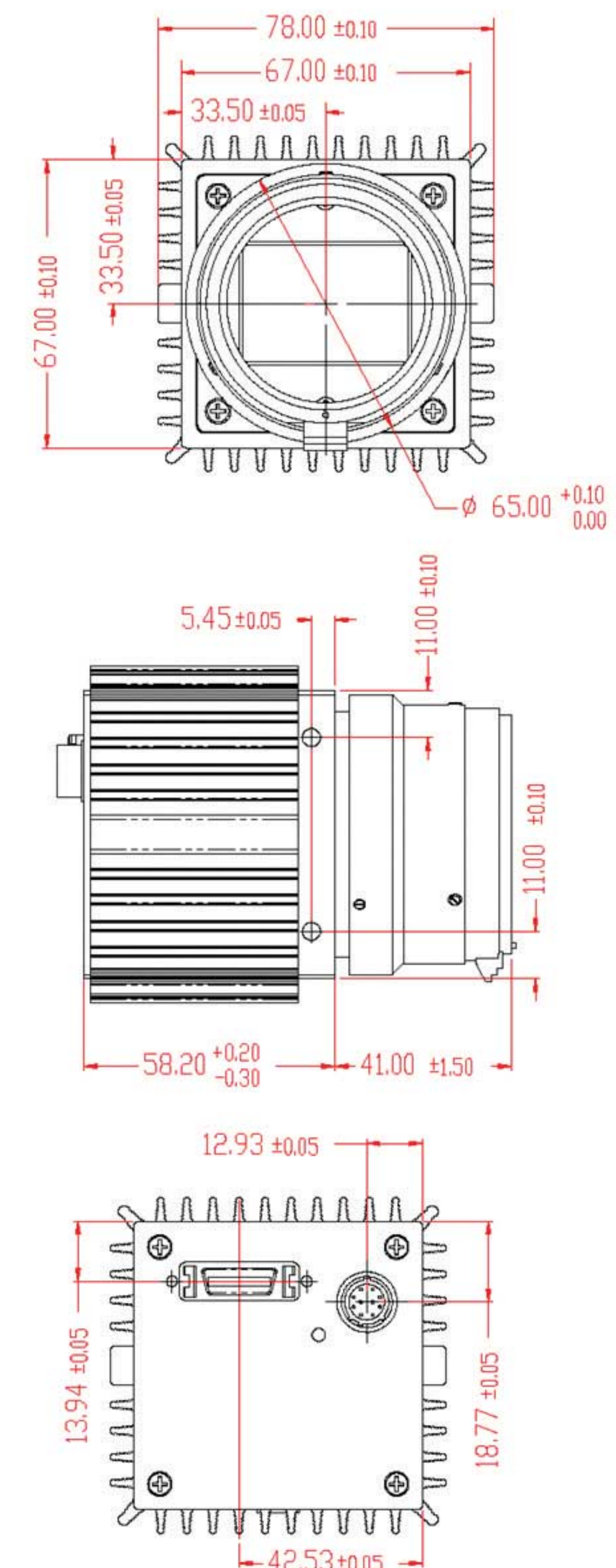
Rear Camera View

- 1 Trigger IN -
- 2 Trigger IN +
- 3 -12 VDC
- 4 -12 VDC
- 5 +12 VDC
- 6 +12 VDC
- 7 Strobe OUT -
- 8 Strobe OUT +
- 9 Auto Iris +
- 10 Auto Iris -

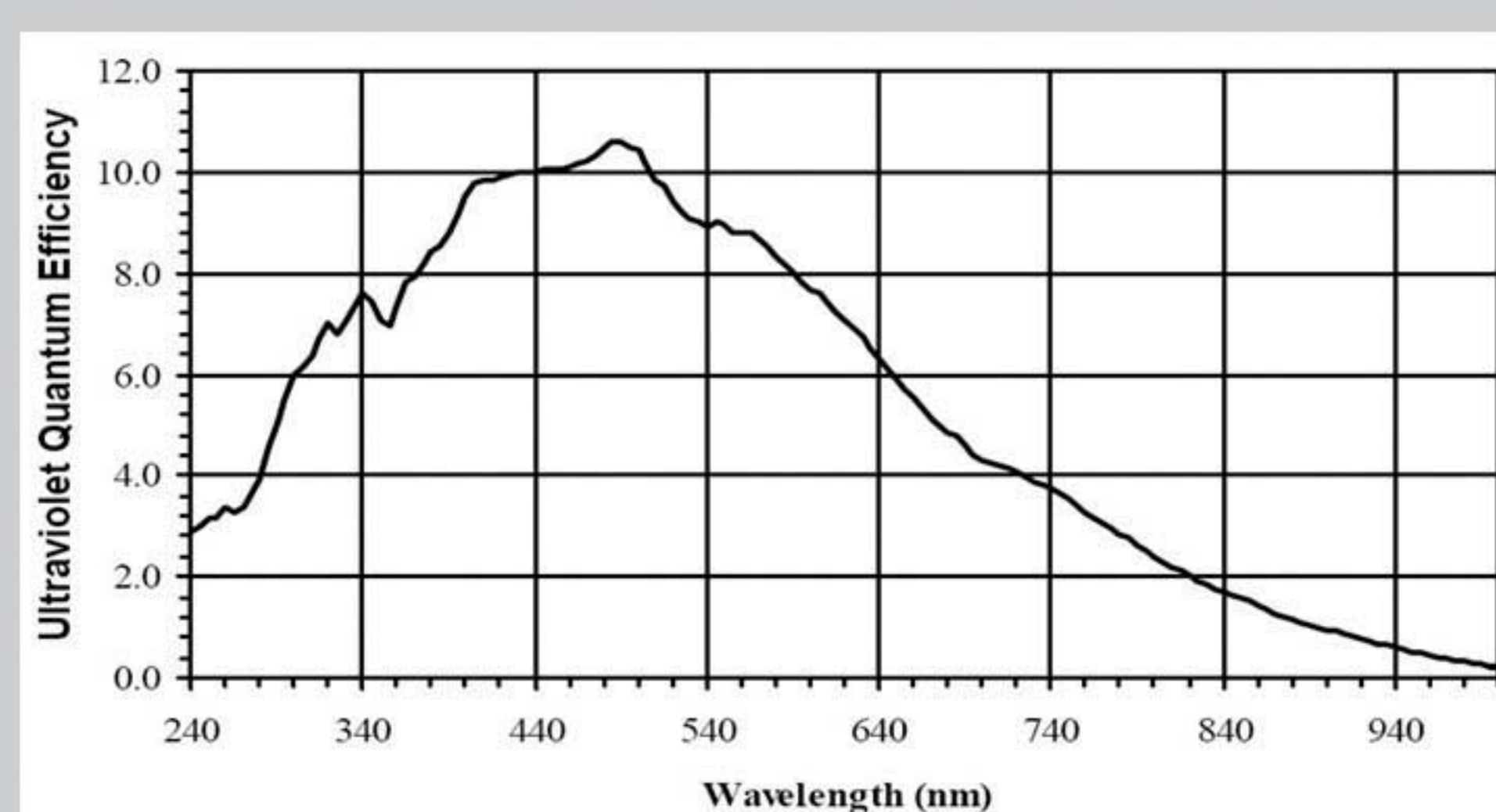
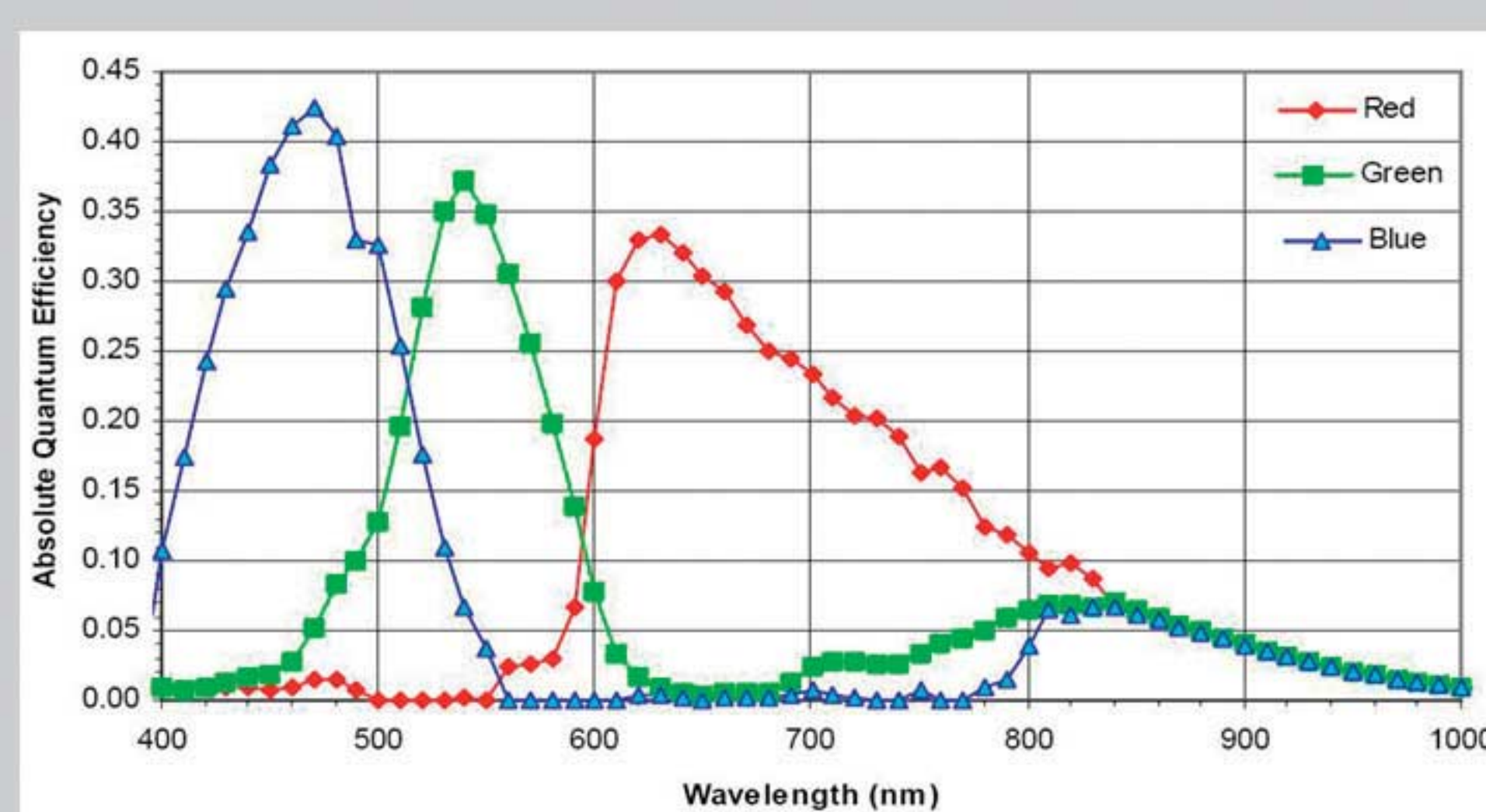
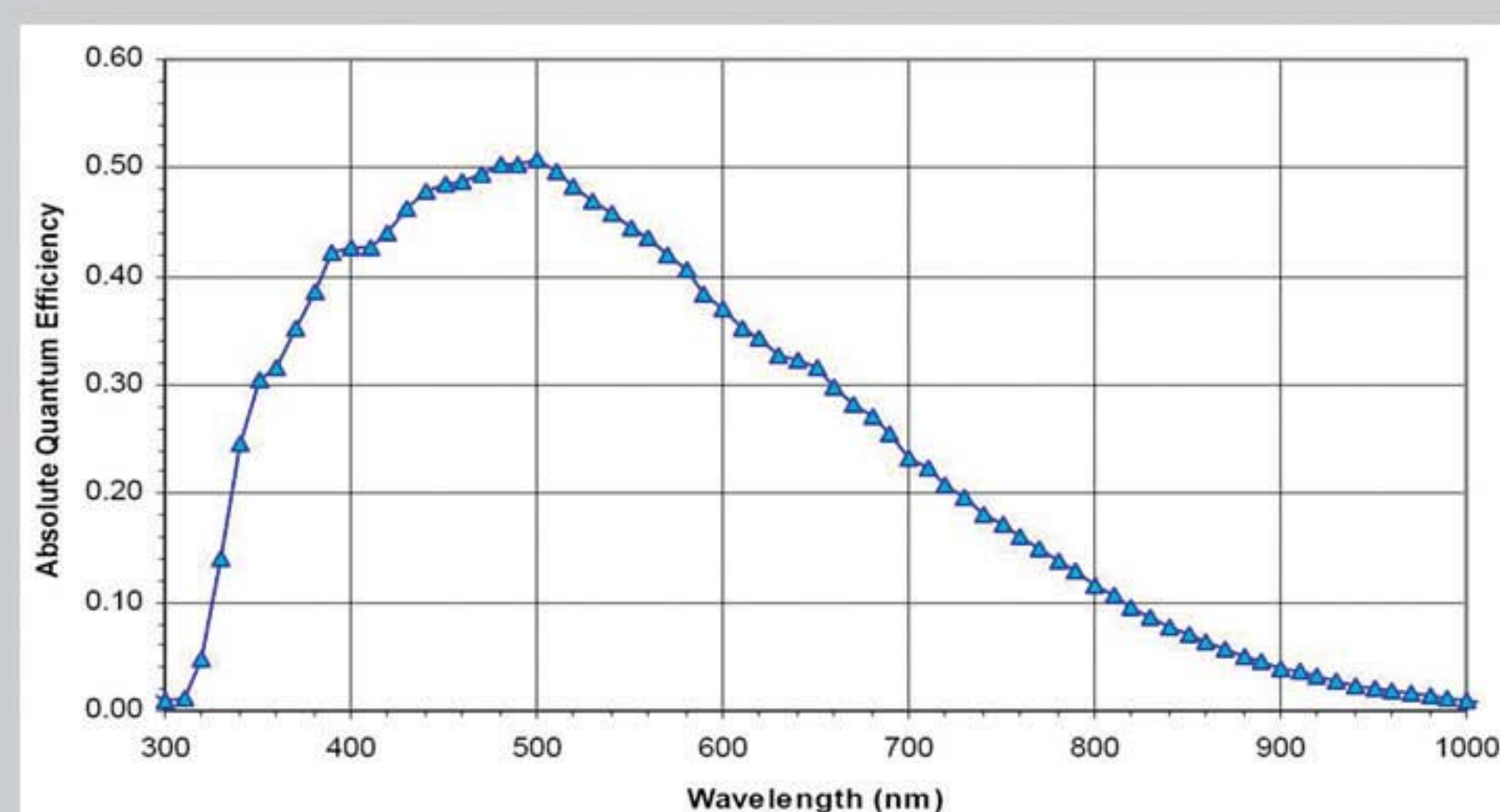
## Power Requirements

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

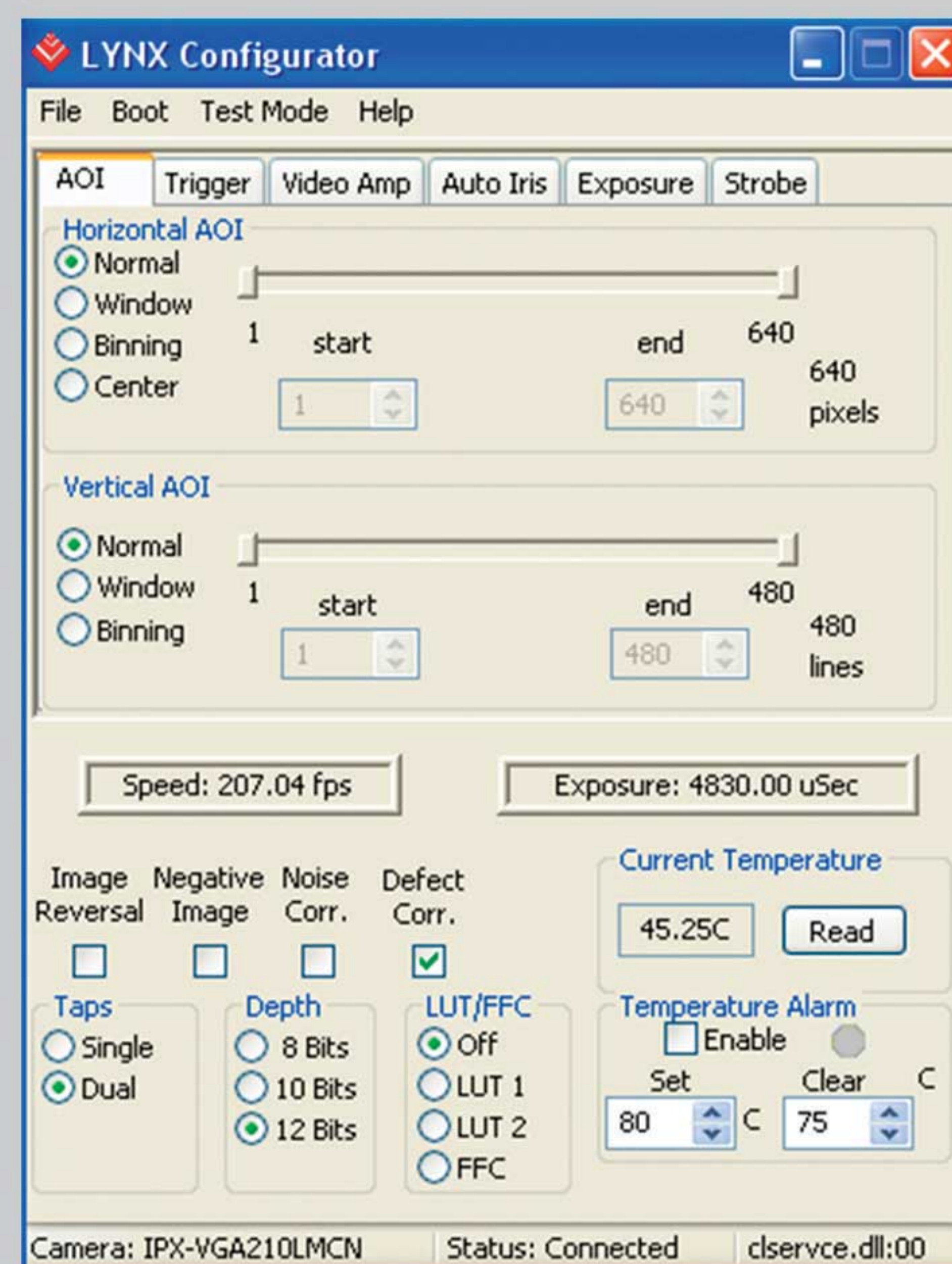
## Mechanical Dimensions



## Spectral Response



## Configuration Utility



- CameraLink protocol compliant
- Control all camera features via:
  - our intuitive, easy-to-use GUI, or
  - simple ASCII commands

## Ordering: IPX-11M5-LMFI

<b>Camera Family</b>	<b>Options</b>
L - LYNX Family	N - silver housing
<b>Sensor Type</b>	B - black housing
M - Monochrome	I - Auto Iris
C - Color	<b>Lens Mount</b>
U - UV sensitive (no glass)	F - "F" mount (default)
S - Special - user filter	O - Open frame

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

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Rev. 3.0, 10/05/06



Imperx Incorporated • 6421 Congress Avenue • Boca Raton, FL 33487 • USA  
 Phone: 1-561-989-0006 • 1-866-849-1662 • Fax: 1-561-989-0045  
[www.imperx.com](http://www.imperx.com) • [sales@imperx.com](mailto:sales@imperx.com)

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