PixeLINK®
MICROSCOPY CAMERAS

PL-E421CU (1280 x 1024) 1.3 MP | **PL-E422CU** (1600 x 1200) 1.9 MP | **PL-E423CU** (2048 x 1536) 3.0 MP

The **PL-E420** series of Microscopy Cameras are high performance microscopy cameras with resolutions of **1.3**, **2.0** and **3.0** MP. These cameras are designed for a broad range of microscopy applications, and use an Aptina CMOS rolling shutter (progressive scan) sensor.

The CMOS sensor architecture provides superior anti-blooming making the **PL-E420** series of micropscopy cameras an excellent choice for imaging highly reflective objects or scenes with intense illumination. The PL-E420 camera family is equipped with a standard USB 2.0 interface, and ships with the necessary USB cable to connect the camera to your computer.

Key Features

- PixeLINK µScope Essential included
- High quality Aptina sensor
- Broad range of applications
- Compact size
- Total camera control via software
- Ships with cable for ultra fast start up
- C or CS mount

Sensor

Sensor	Aptina (formerly Micron) CMOS
Type	Rolling Shutter, Progressive Scan
Pixel Pitch	3.2 µm x 3.2 µm
Active Area: PL-E421CU	4.07 mm x 3.28 mm - 5.25 mm diagonal
PL-E422CU	5.12 mm x 3.84 mm - 6.40 mm diagonal
PL-E423CU	6.55 mm x 4.92 mm - 8.19 mm diagonal
Peak QE	39 % (color)
Pixel Clock	48 MHz

Optical Format

Optical Format	PL-E421U - 1/3”
	PL-E422U - 1/2.5”
	PL-E423U - 1/2”

Enviromental & Regulatory

Compliance	FCC Class B, CE & RoHS
Shock & Vibration	300 G & 20 G (10Hz - 2KHz)
Operating Temp.	0°C to 50°C (non-condensing)
Storage Temp.	-45°C to 85°C

Power Requirements

Voltage Req.	5 V DC
Power Consumption	1.2 W

Computer & Operating System

Processor	2.0 GHz or better
Memory	512 MB min. 1 GB recommended
Operating System	Windows XP, Vista, 7 (32 & 64 bit)
Hard Drive Space	75 MB

*Frame rates will vary based on host system and configuration

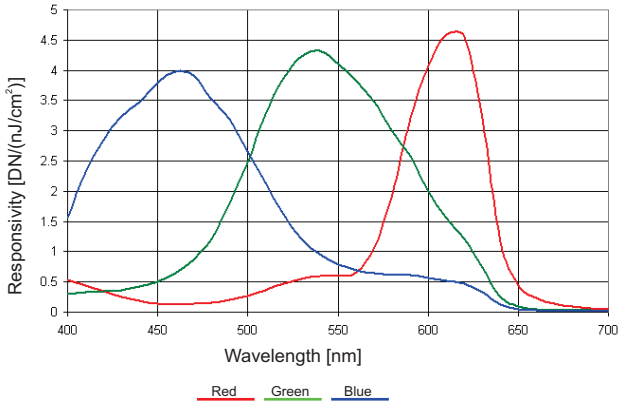
*Frame Rates (Bayer 8)

Camera	FPS
PL-E421	28
PL-E422	20
PL-E423	12

Performance Specifications

Responsivity	Color 4.6 DN/(nJ/cm^2)
FPN	<1 %
PRNU	<1 %
Read Noise	<1 DN
Dynamic Range	60 dB
Bit Depth	8 & 10-bit
Color Data Formats	Bayer 8, Bayer 16 and YUV422
Exposure Range	100 µs to 2.0 seconds free running
Gain	0 dB to 25.1 dB in 45 increments
Image Formats	Bitmap, Tiff, JPEG, PSD
Video Format	Uncompressed AVI

Responsivity Curve - Color



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