

EMCCD

Digital Monochrome Scientific Frame Transfer EMCCD

1024 x 1024 • 10 μ m x 10 μ m pixels • Cooled to -100°C • 1MP Scientific •



Key Features and Benefits

NEXT GENERATION photon counting sensitivity

- **Lower read noise of <0.01e-**

Best sensitivity of any camera technology

- **Faster readout in full resolution**

x 3 times faster than previous generations

- **Higher EM gain of x 5000**

See single photon events

- **Up to 95% QE from back-illuminated sensor**

Optimum Photon collection

- **Strong UV and NIR response and ultrawide bandwidth**

From 200nm through to 1100nm

- **Deep cooled to -100°C**

For minimal background events

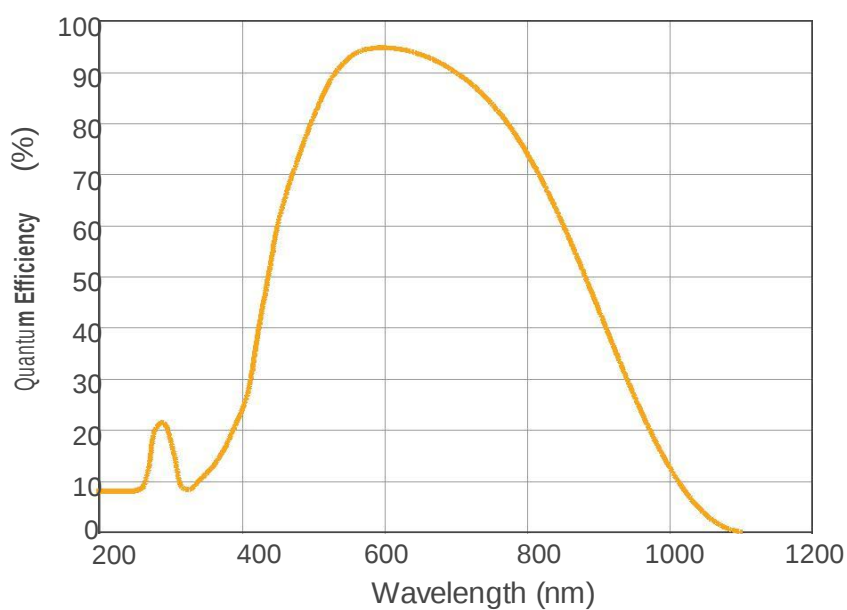
Resolution	1024 x 1024
Pixel Size	10 μ m x 10 μ m
Readout Noise	<0.01e-
Frame Rate	34fps
Cameralink	16bit

Specification for EMCCD

Sensor Type	1" Back Thinned Frame Transfer EMCCD
Active Pixel	1024 x 1024
Pixel Size	10μm x 10μm
Active Area	10.2mm x 10.2mm
Full Well Capacity	35,000 electrons
Shift Register Well Depth	200,000 electrons
Non-Linearity	<1%
Readout Noise	<0.01 electrons with EM gain ON, <60 electrons with EM gain OFF
Full Resolution Frame Rate	34fps
Dark Current (@ -100°C)	0.0002 e/p/s
Digital Output Format	16 bit CameraLink (base configuration)
Peak Quantum Efficiency	95%
Spectral Response	200 - 1100nm
Cooling	-100°C with +10°C coolant
Binning	1x1 up to 32x32
Lens Mount	C-Mount
Synchronisation	Trigger IN and OUT - TTL compatible
Power Supply	12V DC ±10%
Total power consumption	<100W
Operating case temperature	-20°C to +55°C
Storage Temperature	-30°C to +85°C
Dimensions	129mm x 112mm x 94mm
Weight (no lens)	<1.5Kg

详细的技术图纸可以在西安立
鼎光电科技有限公司官网下载
www.leadingoe.com

Quantum Efficiency



Applications

- Adaptive Optics and Astronomy
- Calcium signaling
- Fluorescence imaging / spectroscopy
- Flow cytometry
- FRET / FRAP / TIRF
- Genome sequencing
- High content screening
- High resolution fluorescence imaging
- Hyperspectral imaging
- Live cell imaging
- Photon counting
- Single molecule detection
- Solar cell inspection
- X-ray & High energy