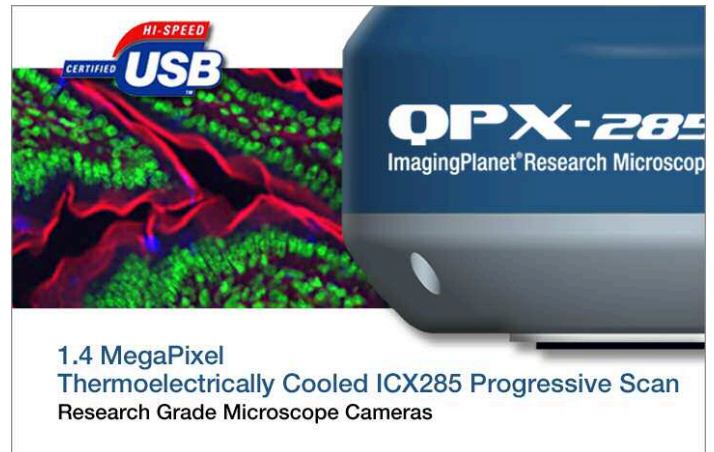


## Quantitative Progressive-Scan Microscope Camera Series

A New Frontier in High-Speed  
**USB 2.0 Digital Imaging**



### *Overview*

The QPX-285™ Series progressive scan cameras feature superior visible and IR quantum efficiency resulting in a highly sensitive\* quantitative camera designed specifically for low-light and fluorescence imaging applications.

*\*Peak spectral response at 500nm. See reverse side for details.*

### *Features & Benefits*

- High-Resolution Progressive Scan 1.4 Million Pixel CCD  
Superior image detail and clarity
- High-Speed USB 2.0 Interface  
Versatile interface requires no frame grabber card or specialty PCI card installation
- Thermoelectrically cooled  
Provides noise-free images during long integration
- 12-Bit Digital Output  
Provides 4096 grey levels for quantitative image analysis
- Three Independent Binning Modes  
Delivers increased speed and sensitivity for low-light imaging applications
- Twain Compatible Image Capture and Full-Featured Measurement and Analysis Software Included  
No additional software required

**QPX-285M™** & **QPX-285C™**  
*monochrome* *color*

# Technical Specifications

**Image Sensor** - Sony® - ICX285 2/3" format, 1.4 megapixel color or monochrome progressive scan CCD sensor

**Effective Pixels** - 1392 X 1040, 1.4 million pixels

**Integration Time** - 2/1000 to 20 minutes

**Auto Exposure** - Automatic / Manual

**White Balance** - Automatic / Manual

**Gain** - Programmable / 1 to 10X optimizable

**Frame Rate** - 15 fps at 1392x1040, increased through binning and ROI

**Binning Options** - 2x2, 3x3, 4x4

**Digital Output** - 8 and 12-bit

**Dark Current (e-/s)** - 0.15 electrons / pixel / s when cooled

**Pixel Size** - 6.45µm X 6.45µm

**Full well capacity** - >18,000 electrons

**Readout Noise** - 8 e- rms

**Cooling type** - Thermoelectrically cooled to 25 degrees below ambient with temperature read-out, fan on/off switch

**Readout Frequency** - 2.86 MHZ

**Interface** - USB 2.0 high-speed interface

**Power Requirement** - External 5VDC - 3amp

**Power Consumption** ~2.5 watts uncooled / ~8.5 watts cooled

**Operating Temperature** - 0° C to +50° C

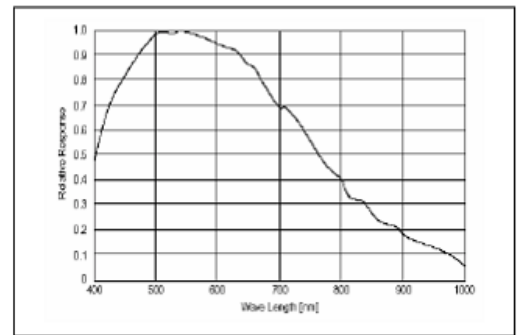
**Operating Humidity** -5%-95%, Non-condensing

**Lens Mount** - C-Mount

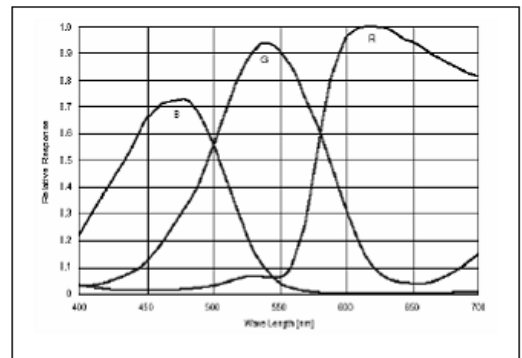
**System Recommendations:** Pentium 4, 1.3 GHZ or better

512mb Ram, 60 GB HardDrive, USB 2.0 port

Windows 2000 or Windows XP. Twain Compliant Capture Software



QPX-285M Response Curve



QPX-285C Response Curve

**Rincon™** Simple Image Analysis Software Included.



- Live Measurement
- 3D-Visualization
- Z-Axis Focus Enhancement
- 3D Morphometric Measurements
- Time Lapse Capture with Time Stamp Features
- Auto Tiling for Seamless Image Montaging

**IMAGINGPLANET®**  
RESEARCH MICROSCOPY GROUP

QPX285M™ and QPX285C™ is distributed exclusively through ImagingPlanet and its network of authorized resellers worldwide.

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