



Imaging is NOT just a  
black and white issue.

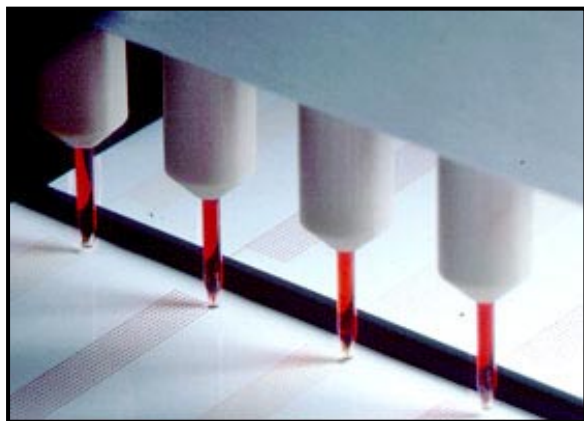
## Dual-Cam™/Quad-Cam™ for high content screening



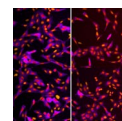
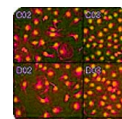
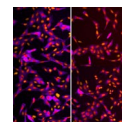
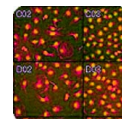
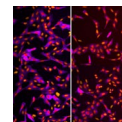
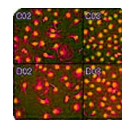
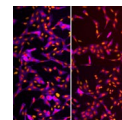
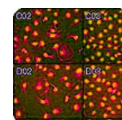
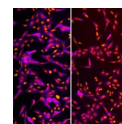
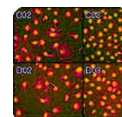
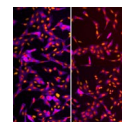
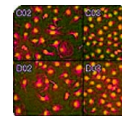
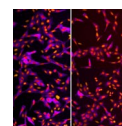
### The Only Multi-Camera Acquisition Solution.....

- Simultaneous acquisition of 2 to 4 **full field-of-view** fluorescence emission images in a single snapshot
- Increase scanning speeds by factor of 2 to 4 without sacrificing resolution
- Easily mounted to any screening system, microscope or CCD
- Uses standard 25 mm diameter emission and polarization filters
- Filter slider (same as Dual-View™) makes configuration for different experiments easy
- Precision opto-mechanical design allows for sub-pixel image-to-image registration and minimizes light loss

### .....To Meet The Demands Of High Content Screening



- Real-time imaging of any multiple probe assays
- Cy3/Cy5 assays
- Voltage sensing assays
- FRET assays
- Polarization assays
- Combined FRET and Polarization imaging
- Combined FLIM and Polarization imaging
- Single Molecule Fluorescence (SMF)
- Multi-Wavelength 3-D Deconvolution



## Product Specifications

Specification	Dual-Cam™ (MSMI-DC) Quad-Cam™ (MSMI-QC)	
<b>Detector Array Options</b>		
Attachment Thread	C-Mount (male)	F-Mount (male)
Max Diagonal Dimension*	16 mm	16 mm
<b>Front Attachment Options</b>		
	C-Mount (female)	
	F-Mount (female) using F-to-C adaptor	
<b>Wavelength Sensitivity</b>	350 nm to 2.2 $\mu$ m	
<b>F-number per image</b>	Microscope dependent	
<b>Efficiency per image**</b>	88 – 92% (Dual-Cam™) 70 – 92% (QuadCam™)	
<b>Image-to-Image Registration</b>	Subpixel	
<b>Weight</b>	3 lbs.	
<b>Dimensions</b>	2.5" (H) x 4" (W) x 8.5" (L)	
<b>Operating temperature</b>	-10° C to 50° C	
<b>External mounting option</b>	1/4-20 tapped hole on bottom	
<b>Filters</b>		
Maximum diameter	1 inch (25.4 mm)	
Maximum thickness	0.39 inches (10 mm)	
Type	Emission/barrier, neutral density, polarization	

Optical Insights, LLC reserves the right to change specifications without notice.

\* Without experiencing measurable distortion.

\*\* Transmission values also modified by filter transmission.

US Patents: 5,926,283 & 5,982,497  
Australian patent: 731,476  
Canadian patent: 2,294,840  
Other Foreign Patents Pending

Anodized aluminum  
finish on all parts

Click-In Filter Cube  
is easily  
interchanged for  
different  
fluorescent labels

Dichroic, amplitude  
or polarizing  
beamsplitter in  
Dual-Cam™ Filter  
Cube

High-reflectivity  
mirror for sending  
100% of the light to  
one camera

High-reflectivity mirror  
behind dichroic, amplitude  
or polarizing beamsplitter

Click half-way out  
to send 100% of  
the light to one  
camera

Z-position adjustment for  
optimal image focus

C-Mount Female Thread:  
- attaches to microscope  
via C-mount adaptor

Click in to split light  
(by amplitude,  
polarization, or color)  
between 2 cameras

C-mount Male Thread:  
- attaches to virtually any  
camera

Adjustments for x-y  
positioning of image on  
camera provides  
optimal registration  
between images

Dual-Cam™ system configured  
for "SINGLE-CAM" imaging.

Dual-Cam™ system configured  
for "SPLIT-CAM" imaging.



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## Optical Insights, LLC

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