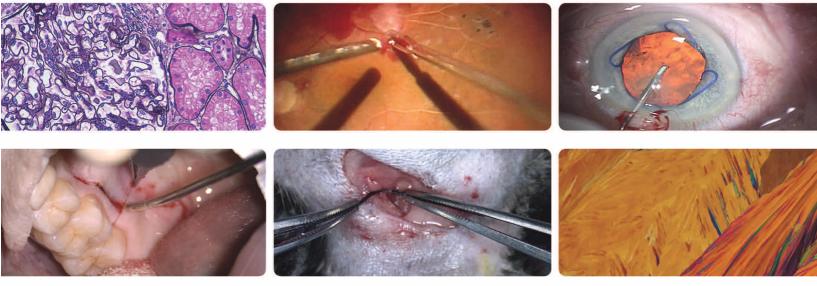
Welcome to the World of High Definition Cinemicrography



Optronics develops premium 3CCD high definition microscope cameras for clinical, research and industrial applications. Our Microcast HD camera platform provides the Investigator with an unparalleled real-time imaging and viewing experience that no other HD camera can deliver.



1080p • Co-Observation • Visualization • Documentation • Presentation • Publication



Microcast® HD Pro-Lite™



Simple Integration to HD Displays + Projectors + Recorders + HD Frame Grabber Cards + Streamers

System Features	Pro-Lite	Print Pro	Studio	Studio Pro
 Dual 1920x1080p Outputs Low Profile C-Mount HD Camera Head Dual Trigger Activation Ports Hot Swappable Camera Interface 8 Programmable User Presets User Programmable Remote Control Keypad 2Megapixel Still Image Capture Direct Connect USB Printing Progressive Scan MPEG4 Video Recording Firewire DV Interface 	X X X X X	× × × × × ×	× × × × × ×	X X X X X X X
HD Applications				

HD Applications				
 Co-Observation 	X	X	X	X
 Visualization 	X	X	X	X
 System Integration 	X			
HD Image Capture		X	X	X

MPEG4 Enhanced Definition Video Recording

MPEG4 Enhanced Definition Video Recording

Microcast® **HD** Print Pro™



Onboard HD Image Capture + HD Printing Simple Integration to HD Displays & Projectors

- No Computer Required

System reatures	1 10-Lite	FIIIILFIO	Studio	Studio i ic	,
 Dual 1920x1080p Outputs 	X	X	X	X	
 Low Profile C-Mount HD Camera Heat 	ad X	X	X	X	
 Dual Trigger Activation Ports 	X	X	X	X	
 Hot Swappable Camera Interface 	X	X	X	X	
 8 Programmable User Presets 	X	X	X	X	
 User Programmable Remote Control Ke 	eypad X	X	X	X	
 2Megapixel Still Image Capture 		X	X	X	
 Direct Connect USB Printing 		X	X	X	
 Progressive Scan MPEG4 Video Reco 	ording		X	X	

Pro-Lite Print Pro Studio Studio Pro-

Pro-Lite Print Pro **Studio** Studio Pro

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System Features

• Firewire DV Interface

System Features

HD Applications				
 Co-Observation 	X	X	X	X
 Visualization 	X	X	X	X
 System Integration 	X			
HD Image Capture		X	X	X

Microcast® **HD** Studio™



Onboard HD Image Capture + HD Printing + MPEG 4 Video Recording Simple Integration to HD Displays & Projectors

- No Computer Required

 Dual 1920x1080p Outputs Low Profile C-Mount HD Camera Head Dual Trigger Activation Ports Hot Swappable Camera Interface 8 Programmable User Presets User Programmable Remote Control Keypad 2Megapixel Still Image Capture Direct Connect USB Printing Progressive Scan MPEG4 Video Recording Firewire DV Interface 	X X X X	X X X X X	X X X X X X X	X X X X X X	
HD Applications					
Co-ObservationVisualization	X	X	X	X	
System Integration	X	^	^	^	
HD Image Capture		X	X	X	

Microcast® **HD** Studio Pro™



Onboard HD Image Capture +
HD Printing + MPEG 4 Video Recording +
Simple Integration to Computers + HD Displays
& Projectors - Rincon™ HD Image Measurement
& Annotation Software Included

System FeaturesPro-LitePrint ProStudioPro-Pro-Pro• Dual 1920x1080p OutputsXXXX• Low Profile C-Mount HD Camera HeadXXXX

MPEG4 Enhanced Definition Video Recording

Low Profile C-Mount HD Camera Head
Dual Trigger Activation Ports
Hot Swappable Camera Interface
8 Programmable User Presets
User Programmable Remote Control Keypad
2Megapixel Still Image Capture
Direct Connect USB Printing
Progressive Scan MPEG4 Video Recording
Firewire DV Interface

HD Applications				
 Co-Observation 	X	X	X	X
 Visualization 	X	X	X	X
 System Integration 	X			
HD Image Capture		X	X	X
 MPEG4 Enhanced Definition Video Recording 			X	X

Microcast® **HDXS**™ Camera Head

Supplied with every Microcast HD camera system, the small low-profile camera head houses highly sensitive 16:9 3CCD HD RGB image sensors. The elegant camera is forged from lightweight anodized aluminum and pro-grade stainless steel designed to withstand the rigors of the operating room and laboratory environment. This revolutionary camera head contains sophisticated FPGA programming developed specifically for microscope imaging applications and creates an unparalleled HD imaging and user experience. Unique software features include an ultra fast automatic shuttering system that instantaneously compensates for rapid changes in illumination. The HDXS Camera can be controlled directly from a tactile rubberized membrane touch panel embedded within the camera head. A ruggedized cable connector facilitates the removal of the camera head cable for customized and discrete installations on most microscopes and optical systems.



User Interface Experience

Microcast HD cameras are designed foremost with the human operator in mind. Easy to navigate user control, user presets and accessory control is handled through our unique custom touchpad with **easily identifiable touch keys.** Stunning **HD video and images are acquired automatically** with the press of 1 button. Other features including white balance and exposure control access are 1 touch away. It's this marvel of simplicity which makes Optronics the **easiest microscope cameras in the world to operate.** With Optronics HD cameras, you're one-click away from a perfect high definition image.



HD Recording & Editing

Because your high definition video needs to be recorded and your images preserved, **Optronics offers many digital HD image capture, recording and editing solutions** to capture every critical moment. Microcast HD enables you to do all of it in stunning high definition. Advanced progressive scan high definition video delivers equally impressive HD video recordings in many microscope settings, this enables the creation of digital HD movies from multiple video clips, provides effortless video editing and enables sharing with colleagues, patients and more....



QUINTUS™ **HD** Video Adapter

The Full Featured Optical Gateway to HD Imaging on Surgical Microscopes.

Unleash the full performance of your surgical microscope with QUINTUS. Assistants, nurses and students can now have the same view as the surgeon or investigator in Full HD video. The innovative features of the QUINTUS are easy to control and make it the most flexible HD Video Adapter available on the market.

5 Unique Features of Quintus:

- Rotating C-Mount clutch: The C-mount interface has a rotatable clutch that permits immediate correction of the camera for precise image orientation
- Focus control: Allows easy adjustment of the camera focus for razor sharp parfocal images
- Iris control: enhance the depth of field of the HD video image
- Pan (X) control: Provides full control over the horizontal position of the video image
- Tilt (Y) control: Provides full control of the vertical position of the video image

With Pan and Tilt, the camera view can be adapted to the preference of the surgeon



Rincon™ **HD**

Rincon HD is fully compatible with Microcast HD camera images. The software features the latest in image acquisition, live digital measurement, HD image capture, and quick, easy reporting of measurement data and statistics. Also included are simple image editing and annotation features. Rincon HD is directly compatible with Microcast HD Studio Pro DV.

Annotation

Line, arrow, polyline, spline, rectangle, ellipse, text

Supported Image File Formats

jpg, jpeg, tif, tiff, bmp, gif, pcx, tga, mpg, mpeg, avi, mov, img, rpt, txt and etc.

Export Into Excel® - A single mouse click exports the original image with measurement, calibration, annotation overlay, measurement data, statistics, and chart

The software is intended to edit non-medical images used for teaching, patient consultation and presentation purposes.



Technical Specifications

Microcast® HD Camera System:

HD Camera Type: Full High-Definition Progressive Scan (Non-Interlaced)

Image Sensors: HD 3CCD RGB (16:9 Format)

HD Resolution: 1920 x 1080p

Frame Rate: 59.94 fps Full-Resolution (50Hz/60Hz)

SNR: 60dB Optical Mount: C-Mount

Exposure: Automatic / Manual

Shutter: Automatic 1/27000 - 1/60 seconds

Manual 1/17000 - 1/60 seconds

Gain: +2, +4, +8, Max White Balance: Automatic / Manual

Scene Files: (8) User Programmable Specialty Settings (Keypad or Menu Accessible)

Digital Processing: 14bit

Brightness: Level 1-15, Max
Digital Enhancement: Off, Low, 1-5, High
Camera Head Cable: 3m or 10m, Removable

Language Settings: English, Deutsch, Espanol, Francais, Italiano, Portugese, Russian, Polish

Digital Image Files:

HD Image Files: JPEG H.264 Enhanced Definition Video: MPEG4

Compatibility:











HD Display & Projector Resolution Requirements:

1920 X 1080 (Native PC Resolution), WUXGA 1920 X 1200

HD Capture & Printer Requirements:

Compatible USB Mass Storage Device

Compatible HP® USB Printers

Dimensions/Weights:

Camera Head: 40mm(L) x 60mm(H) x 50mm(W)

200g

Camera Control Unit: 12"(W) x 12.5"(D) x 3.5"(H)

7.4lb (3.35 kg)

Certifications:

This equipment is certified and manufactured in accordance with UL 60601-1 and CSA 22.2 No. 601. CE marked equipment has been tested and found to comply with the EMC limits for Medical Devices for the Medical Device Directive 93/42/EEC (EN 60601-1-2: 1993 Class A).

Warranty:

2 Years (Extended warranty available)







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