



Your Photonics Partner

Raman Accessory

Raman Video Micro Sampling System



Features:

- Compatible with all B&W Tek Raman Systems
- Dual laser wavelength port
- Coarse and fine XYZ adjustments
- Video camera for sampling viewing
- Tripod mounting accessories with 1D, 2D, and 3D adjustment
- Accepts standard microscope objectives

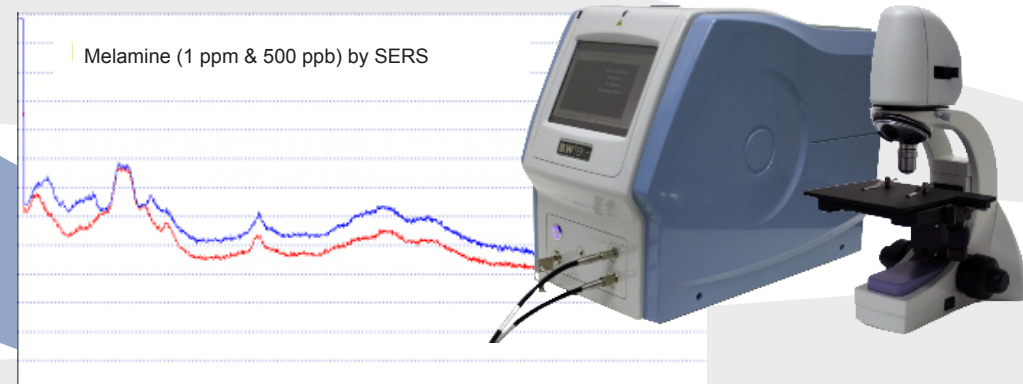
Raman Video Micro Sampling System:

The BAC151A is a Raman micro-positioning system that is compatible with all B&W Tek Raman systems. It was designed to offer the highest level of flexibility in facilitating Raman sampling in various applications. BAC151A can be configured in different ways so that the system can be tailored for the exact requirement for your applications. The unique feature of dual laser wavelength port provides flexibility for one system to be coupled with two different laser wavelengths. The integrated camera allows precision Raman sampling through camera monitoring of the laser beam and imaging details. When coupled with B&W Tek's portable Raman spectrometers, this video microscope system provides the advantages of a Raman microscopy at a fraction of the cost of most research instrument. With tripod accessories available, the video head can be mounted to the tripod easily.

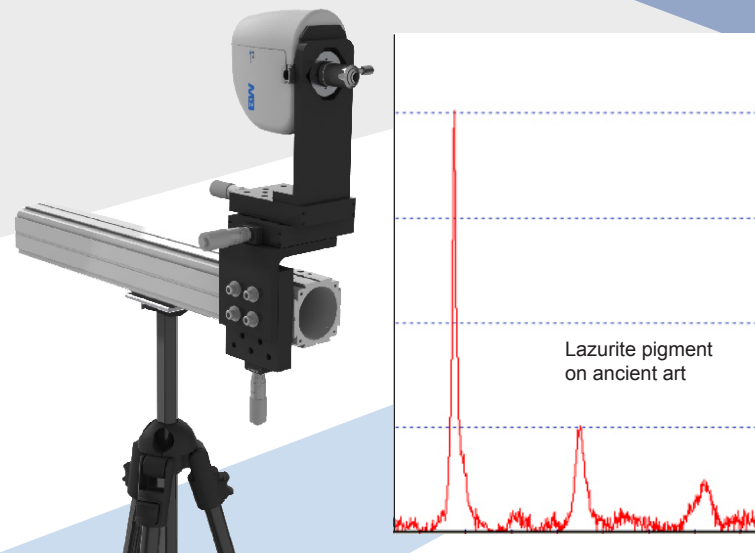
Flexibility:

BAC151A was designed to meet your application need of Raman spectroscopic analysis. The configuration flexibility provides true convenience for applications such as SERS, Forensics, Art and Archeology thin film, defect analysis, etc.

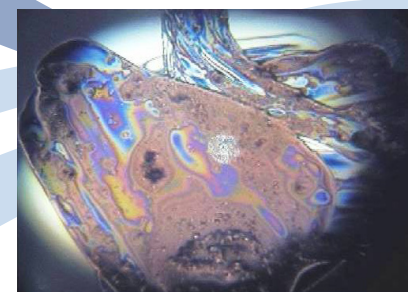
SERS:



Art / Archeology:



Defect Analysis:



Contamination on silicon
20X magnification
True color

Specifications:

SYSTEM		
Wavelength	Standard	Optional
	<ul style="list-style-type: none"> 532 nm 785 nm Custom 	Dual wavelengths
Raman probe interface	Ø3/8"	
Power Input	5VDC, 300mA	
Ambient Temperature	0-45°C	
Humidity	<85%RH	
Dimensions	243mm x 208mm x 376mm (9.6" x 8.2" x 14.8")	
Weight	~4.8 kg (10.6 lb)	
MICROSCOPE		
Nosepiece and Turret	Quadruple nosepiece	
Illumination	Epi-illuminator, LED with condenser	
Objective Lens*	long working distance Infinite-corrected Plain field achromatic	
	Objective Lens Magnification	Working Distance (mm) Laser Beam Spot Size (µm)
	5X	18.30 192
	10X	8.90 93
	20X	8.70 91
	40X	3.70 39
	50X	2.02 21
	80X	0.96 10
Focusing	Coaxial fine and coarse adjustment with lock	
Travel in Z direction	24 mm	
Resolution in Z direction	1 µm	
XY Stage	Double layer mechanical stage	
XY Stage Size	150mm x 140mm	
Travel in X/Y direction	75 mm (X), 50 mm (Y)	
Resolution in X/Y direction	2 µm	
CCD CAMERA		
CCD type	Color, 1/4"	
Active pixels	768x494 (NTSC); 752x582 (PAL)	
Viewer display	720x480 max (NTSC); 720x576 max (PAL)	
Interface	USB 2.0 or 1.1	
Gain control	Automatic 36dB	
Shutter speed	1/60 – 1/100,000	
Video image display	Via BWSpec™ Software	
Power consumption	<1.3w through USB bus	
TRIPOD MOUNTING ACCESSORY OPTIONS		
Tripod	Tripod with 1/4"-20 thread	
1D adjustment with mounting platform	1/2" (13mm) Travel	
2D adjustment with mounting platform	1/2" (13mm) Travel	
3D adjustment with mounting platform	1/2" (13mm) Travel	

* Extra long working distance objectives are available upon request



Your Photonics Partner

To find out more:

Contact our Application Team for your unique solution

Let us run your sample! - Feasibility Studies Available

B&W Tek, Inc. · 19 Shea Way, Newark, DE 19713 USA · Web: www.bwtek.com
Phone: 302-368-7824 · Fax: 302-368-7830 · Email: www.bwtek.com/contact

Copyright 2010 B&W Tek, Inc. · Doc-Rev: 280001188-A01 (06/24/2010)