# 508 PV™

# Microscope Spectrophotometer

## Microspectroscopy and Imaging With Your Microscope



The 508 PV™ can be added to any microscope or probe station with an open photoport. This gives you the ability to take spectra and capture images...or even video and full-range kinetic spectra, quickly and easily. Depending upon the microscope's configuration, you will be able to take absorbance, transmittance, reflectance, polarization and even fluorescence and emission microspectra<sup>TM</sup> of microscopic samples. CRAIC Technologies also supplies microscopes that have been specially designed for microspectroscopy resulting in greater spectral range, enhanced signal-to-noise and superior imaging results.

The 508 PVTM microscope spectrophotometer can also be used to upgrade older microspectrophotometers with cutting edge technology. The 508 PVTM replaces the old spectrometer, electronics, software and computer equipment with state-of-the-art capabilities and features.

The 508 PV™ offers Lightblades™ spectrophotometers specifically designed for microspectroscopy, TE cooling for long term stability and lower noise levels, scientific grade interface optics to the microscope, universal c-mount adapters, and integrated spectral analysis, image analysis, and instrument control software package. The instrument is solid state, simple-to-use, and designed to give many years of trouble-free service.

#### **■ 508 PV™ Key Features:**

- Variable Sampling areas with Absolute Reproducibility
- Transmittance, reflectance, and fluorescence capable
- Spectroscopy with your optical microscope
- All solid state for reliable service
- High resolution color imaging

Instrument Options
☐ Detector Thermo Electric Cooling
Permanently Calibrated Variable Aperture Package
X-Y-Z Centerable Universal C-Mount Adapter
☐ Programmable XY Stage

Available Spectral Ranges
200 - 850nm Spectral Range
350 - 900nm Spectral Range
900 - 1700nm Spectral Range
900 - 2100nm Spectral Range



200 nm	2100	nm
~	Gold Nanoparticles Exhibiting Surface Plasmon i	Resonance
V		

Gold Nanoparticles exhibiting Surface Plasmon Resonance spectra in UV-vis-NIR absorbance with 508 PV $^{\text{IM}}$  and CRAIC UVM-1 $^{\text{IM}}$  Microscope .

### 508 PV™ SPECIFICATIONS

Spectrophotometer Ranges* (select one)	200 to 900 nm 350 to 1000 nm 900 to 1700 nm 900 to 2100 nm		
Fluorescence Excitation	365 to 546 nm		
Laser Illumination	Available		
Sampling Area	Variable from 1 to 10000 microns <sup>2</sup>		
Spectral Resolution	User selectable from 1 to 15 nm		
Detectors	CCD and InGaAs Arrays		
Detector Cooling	Available		
Scan Time (Full Range)	8 millisecond minimum		
High Resolution Color Imaging	Included		
Image Resolution	Up to 5 Megapixels		
Programmable Stage	Available		
Operating System	Windows 7 Pro, Windows 8		

Calibration Standards	System Softwa	re	Service Contracts	
☐ Transmittance Standards traceable to NIST	☐ rIQ <sup>™</sup> Glass Refractive Index		☐ One Year Extended Warranty	
☐ Reflectance Standards traceable to NIST	☐ CRAIC CoalPro™		☐ One Year Service Contracts	
☐ White Diffuse Reflectance Standard traceable to NIST	☐ Thin Film Thickness Measurement		☐ Platinum ☐ Gold ☐ Silver	
☐ Vitrinite Coal Reflectance Standards	☐ Spectral Database	☐ Spectral Surface 3D Mapping		
☐ Fluorescence Standards	☐ Colorimetry	☐ CRAIC TimePro™		

