

20/30PV™

Microspectrophotometer

The Perfect Vision™ for cutting-edge analysis



The innovative 20/30 PV™ Microspectrophotometer sets a new standard for UV-visible-NIR microspectroscopy. The cutting-edge technology of the 20/30 PV™ allows the user to take both spectra and images of microscopic sample areas by absorbance, reflectance, Raman, fluorescence and other types of luminescence. With a spectral range from the deep ultraviolet to the near infrared for both imaging and spectroscopy, advanced spectral and image analysis software, automation features, ease-of-use and long term reliability, the 20/30 PV™ Microspectrophotometer is the perfect tool for the production floor or laboratory.

Highly sensitive solid-state array detectors are optimized and cooled thermoelectrically for high signal-to-noise ratios and long term stability. High resolution digital imaging can be used to collect UV and NIR in addition to color images. Sophisticated software that controls the microscope, spectrophotometers and the digital imaging while providing advanced analytical capabilities including thin film thickness measurement. The 20/30 PV™ Microspectrophotometer represents the new state-of-the-art for UV-visible-NIR microspectrophotometers.

◀ 20/30 PV™ Key Features:

- Full UV-visible-NIR microspectroscopy in absorbance, transmission, reflectance, fluorescence and emission.
- Raman microspectroscopy with numerous laser wavelengths offered
- UV, visible and NIR imaging capabilities
- Calibrated variable sampling areas with Absolute Reproducibility
- Dual Reflectance and Transmittance Calibration Standards traceable to NIST

20/30 PV™ Microspectrophotometer

Microspectroscopy Stages

- Manual XY
- Rotating & XY, 360deg/30mm x 40mm
- Semi-Rotating stage, up to 240deg
- Programmable XY Stage



Spectrometer Packages

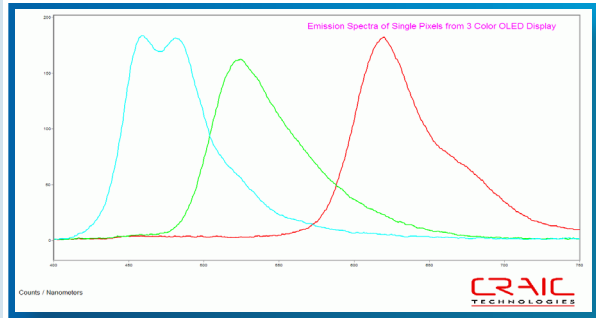
- High Resolution 200-1000nm
- High Sensitivity 200-900nm
- Standard Range NIR 900-1700nm
- Extended Range NIR 900-2100nm
- Standard UV-Visible-NIR 200-1700nm
- Extended UV-Visible-NIR 200-2100nm



Illumination Packs

- UV-VIS-NIR Transmittance/ Absorbance
- UV-VIS-NIR Reflectance
- UV-VIS-NIR Fluorescence
- UV-vis-NIR Polarization
- Laser Adapter Available

20/30 PV™ Spectral Range



Emission spectra of single pixels from a three colored OLED display.

20/30 PV™ SPECIFICATIONS

Microspectrophotometer Range	200 to 900 nm
With NIR option	Up to 2100 nm
Imaging	Deep UV to NIR
Fluorescence Range	300 to 1000 nm
Fluorescence Emission	254 to 546 nm
Sampling Area	Variable from 1 to 10000 microns ²
Spectral Resolution	User selectable from 1 to 15 nm
Detectors Offered	CCD and InGaAs Arrays
Detector Cooling	Thermoelectric
Scan Time (Full Range)	4 millisecond minimum
High Resolution Color Imaging	Included
UV-visible-NIR Imaging	Up to 5.0 megapixels available
Programmable Stage with Mapping	Available
Full Automation	Available
Operating System	Windows 7 Pro, Windows 8

Calibration Standards

- Transmittance Standards traceable to NIST
- Reflectance Standards traceable to NIST
- White Diffuse Reflectance Standard traceable to NIST
- Vitritone Coal Reflectance Standards
- Fluorescence Standards

System Software

- rIQ™ Glass Refractive Index
- Spectral 3D Mapping
- Thin Film Thickness Measurement
- TimePro Kinetics™
- Colorimetry
- Statistical Analysis

Accessories

- Quartz Slides and Coverslips
- CRAIC Certified Lamps
- Quartz Wellplates
- Specular Reflectance Material

