## **CRAC** TECHNOLOGIES

## "Microscopy in a Whole New Light."

The **UVM-1** is the world's first true broadband microscope. It is capable of imaging from the deep ultraviolet to the near infrared...all with the same optics and at many magnifications. The user is able to view samples directly by eye in the visible range while simultaneously imaging in the deep UV region and the NIR range. Imaging can be conducted in a broadband mode or at individual wavelengths or even groups of wavelengths. This allows for unprecedented experimental flexibility and power.

Broadband microscopes are used to image samples, such as protein crystals, that have no color and are therefore difficult to analyze with common optical microscopes. Since most biological samples absorb in the UV range, imaging and studying them becomes a simple matter. And by selecting particular wavelengths, specific proteins can be selectively imaged. All this is a simple matter with the **UVM-1** microscope from CRAIC Technologies.

And because the **UVM-1** uses much shorter wavelength light than the visible range, it is able to resolve much finer details. This allows you to see sub-micron features clearly and fills the resolution gap between regular optical microscopes and electron microscopes. This ability is very useful with such samples as semiconductors and nanotechnology. And with the ability to resolve extremely fine details at high magnification, without the bother of plating and drawing a vacuum, the UVM-1 can also be used with fragile samples...it can even be used to map features in specimens in vivo and without damage.

The **UVM-1**, due to its robust and flexible design, can image samples in transmission, reflectance, polarization and even fluorescence beyond the normal visible range. The **UVM-1** can be equipped with high resolution, broadband digital imaging systems in addition to normal eyepieces. With the addition of powerful image analysis software, this truly is a microscope like no other...able to capture the finest details that are not apparent in the visible range.

Applications: • Protein Crystals • Nucleic Acids • Photomask Inspection • Semiconductor Quality Control • Flat Panel Display Imaging • Surface Plasmon Resonance Imaging • OLED Development • Biotechnology Development • Nanotechnology Development

| UVM-1 <sup>™</sup> Specifications   |  |
|---|--|
| Microscope Spectral Range   | 200 to 2500 nm   |
| Transmission Imaging  | ✓  |
| Reflectance Imaging   | ✓  |
| Fluorescence Imaging  | ✓  |
| Laser Illumination Optics   | Offered  |
| Field of View Variable  | 40 to 2400 microns <sup>2</sup>  |
| UV sensitive Imaging System   | Offered  |
| NIR sensitive Imaging System  | Offered  |
| TE Cooled Solid State Detection   | Offered  |
| Programmable Stage  | Offered  |
| Laser Illumination OpticsField of View VariableUV sensitive Imaging SystemNIR sensitive Imaging SystemTE Cooled Solid State DetectionProgrammable Stage | Offered<br>40 to 2400 microns <sup>2</sup><br>Offered<br>Offered<br>Offered<br>Offered |







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