

# **vt** infinity<sup>3</sup>

## **2D Array Scanning Laser**

### **Confocal Microscope**

with

### **Selectable Pinhole Sizes**



# **vti**

VisiTech international  
Vision Technology for Science



## Multi-beam laser confocal scanner with selectable pinholes

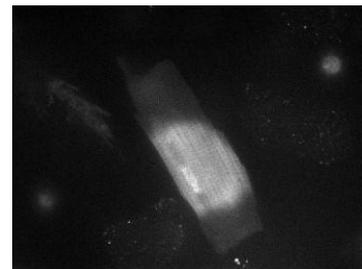
The VT-Infinity<sup>3</sup>, from VisiTech International, is a breakthrough in multi-beam confocal scanning. It combines ultra high speed confocal imaging with patented selectable pinholes to provide users with optimal imaging conditions at all objective magnifications. Nanoscale technology is used to adjust 2500 pinholes producing high resolution confocal imaging at unparalleled speeds, without compromising flexibility.

### Advantages of 2D array confocal scanning

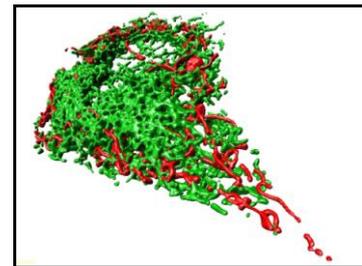
- ✓ Real-time confocal imaging at speeds of up to 1000 fps. This coupled with the 3D-RT™ module supports 'on-demand' 3D reconstruction of experimental data as it is being acquired.
- ✓ The low photo-bleaching characteristics permit long duration experiments of photosensitive samples, with minimal phototoxic effects.
- ✓ Selectable pinhole sizes permit users to vary the degree of confocality and throughput to match their experiment requirements for optimal imaging conditions.
- ✓ The VT-Infinity<sup>3</sup> is a fully self aligning system. The dichroics and filters can be exchanged on-site; there is no requirement for factory returns in order to change the dichroic/filter configuration. The patented dichroic design requires no alignment of the dichroics to maintain image registration.
- ✓ Fully integrated intelligent speed control provides perfect synchronisation between scanner, camera and other devices. Random striping and field to field intensity variations associated with other technologies are a thing of the past. This also makes easy work of synchronising frame transfer cameras, preventing the appearance of image streaking associated with other solutions.
- ✓ When integrated with VisiTech International's AOTF technology it provides complete control and seamless integration of illumination and acquisition.

### Specifications

Pinholes (software selectable)	From 10um to 64 um diameter
Scan rates	Up to 1000 fps
Excitation changer	AOTF (4 or 8 channels)
Dichroic changer	Motorised, 4 positions, user exchangeable
Emission (barrier) changer	Motorised, 5 positions, user exchangeable
Dichroic alignment	Not required (self aligning)
Camera synchronisation	Included
Camera and microscope i/f	C-mount
Interlocks	Key switch and interlock plug
Microscope compatibility	Upright and Inverted
Wavelength range	Near UV to near IR



Isolated Rat Ventricular Myocyte loaded with Fluo4



COS-1 Cell expressing Mit-dsRed1 & Mito-dsGreen1

### For more information contact

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Images courtesy of Prof P. Lipp and Dr L. Kaestner, Molecular Cell Biology, Homburg/Saar Germany