



TriMScope: Real-Time 8D Fluorescence Microscopy Workstation

Multi Parameter Imaging: X, Y, Z, t, λ , p, lifetime, SHG

Unique Features

- up to **64 foci** arranged in a **linear** array
- **single line** arrangement allows XY and XZ scans
- **control of number** of 64, 32, 16, 4, 2 or 1 beamlets
- scan rate up to **1000 images per second**
- wavelength range: **700-1050nm**
- **high (> 75%)** optical throughput
- **diffraction limited** lateral and axial resolution
- **no cross-talk** between different foci in the **excitation path** due to intrinsic time multiplexing
- **Chirp compensation** allows optimal two photon excitation
- **efficient detection** via high QE (>95%) EMCCD cameras
- up to **1000 frames/s** depending on signal and CCD camera
- high resolution **single beam** upgrade
- high resolution **spectral imaging** upgrade via coupling to the input slit of an imaging spectrograph
- second harmonic (**SHG**) imaging upgrade (single beam and multiple beam scan)
- **anisotropy** imaging via selection of s or p polarization for excitation and polarized emission detection
- **wide-field FLIM** upgrade in conjunction with the PicoStar HR camera
- **dual channel** (FRET, ratio imaging etc.) imaging mode
- up to **8 channel** detection in single beam mode
- **FRAP** upgrade allows photobleaching, photoactivation etc.