

Multiphoton Microscopy at its Best - The High-Speed and High-Precision fluoview fvmpe-rs System

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Imagine a multiphoton system that allows you to work with highest speed, deeper focus and extended IR wavelength range for simultaneous multicolor MPE imaging. With its high speed and precision, the Olympus FluoView FVMPE-RS is designed to satisfy a myriad of performance needs in multiphoton imaging studies. Its design offers excellent adaptability for researchers who intend to design their own custom-built systems as well.

The FluoView FVMPE-RS is a dedicated resonance scanning multiphoton system that offers ideal spot excitation with intense energy up to 1300 nm – even very deep in the sample. The integrated resonance scanner enables high-speed imaging with 438 fps at 512x32 px for the capture of rapid in vivo responses. It also captures full-frame, 512x512 px images at 30fps without any reduction of the field of view, a critical feature for many functional imaging studies.

In addition to speed, the FVMPE-RS offers optimal performance when imaging living cells and tissues. It provides multicolor, multiphoton excitation and imaging with a choice of IR lasers, along with an industry-first four-axis auto-alignment optics for precise colocalization and coalignment without any pixel shift. With its multiple laser-line performance, researchers can work with two IR laser lines simultaneously. An optional third galvanometer scanner is also available for applications requiring simultaneous imaging and 3D stimulation or uncaging.

The FluoView FVMPE-RS system is now available with upright and inverted microscopes, as well as with a special bridge-type Gantry frame (see image) providing maximum sample space. Uniting speed, precision and sensitivity with an extended IR range, this Olympus multiphoton system is ideally suited to a variety of deep-observation, in vivo imaging applications.

