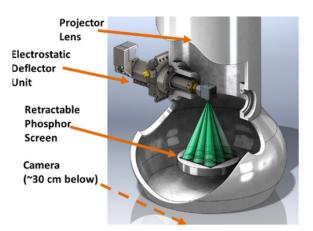


TRANSMISSION ELECTRON MICROSCOPES

Relativity - High Frame Rate Imaging With ANY Camera

The IDES *Relativity* Electrostatic Subframing System multiplies the frame rate of cameras on JEOL TEMs. Microscopes equipped with *Relativity* achieve exceptional time resolution, data throughput, and advanced automation capabilities. Addition of *Relativity* allows current JEOL TEM users to forego expensive camera upgrades to their existing systems, instead relying on installation of an electrostatic optics assembly in a wide-angle camera port. These optics rapidly deflect the image data to different regions (subframes) of the camera in a programmable sequence. Each camera readout contains a tiled array of crisp, blur-free subframes. Raw data is automatically analyzed to give a stack of open format images that are loaded back into the camera control software for viewing or further analysis.



The key features of *Relativity* include:

JEOL

- Simple field installation through accessory port
- **Time resolution** transition between subframe regions in less than 100ns
- **Continuous kHz-scale video** with subframe rates up to 100kHz
- Integration with in-situ holders, laser, EDM, other accessories
- Optics pneumatically retracted when not in use
- Automated data processing (Acuity Edge analysis server) – segmentation, denoising, drift correction – helps the user get the most of the collected data
- sample Deflector 2 3 7 6 5 8 9 10 11 12 Camera 16 15 14 13
- Advanced control software seamless transition between measurements with intuitive interface combined with ability to program and design unique experiments

Applicable models: ARM300F/300F2, ARM200F, NEOARM, F200, 2100Plus, 2100F



About IDES

IDES is a JEOL company and the leader in the field of Ultrafast and Dynamic TEM, specializing in pulsed lasers and high-speed electrostatic beam blanking and deflection technologies. IDES products add time resolution to the TEM imaging capabilities enabling new applications and the exploration of the dynamics of specimens across a range of very fast time scales.