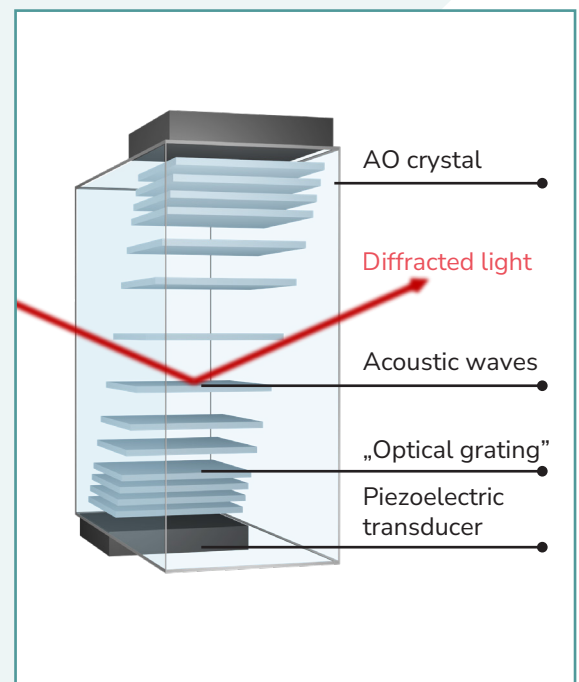
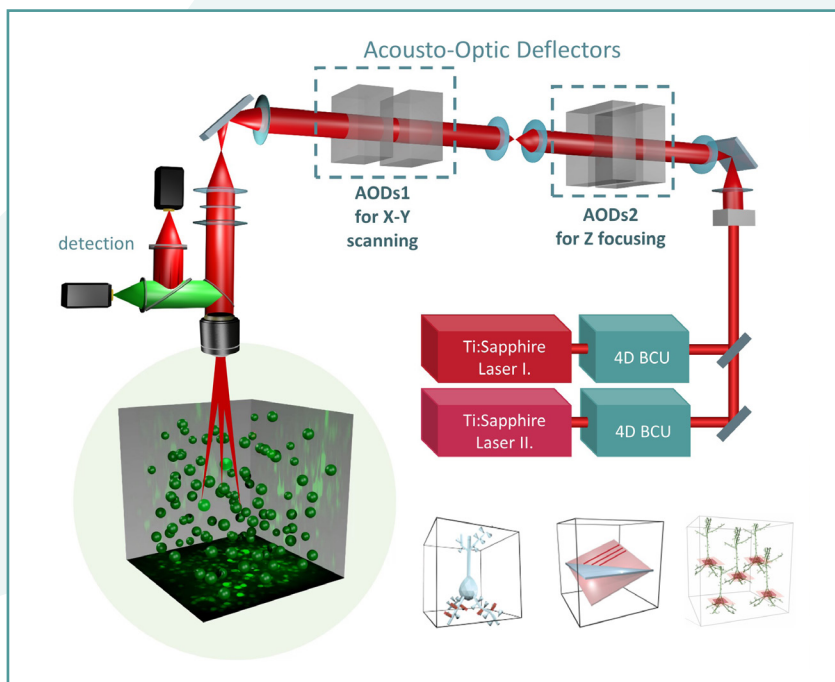
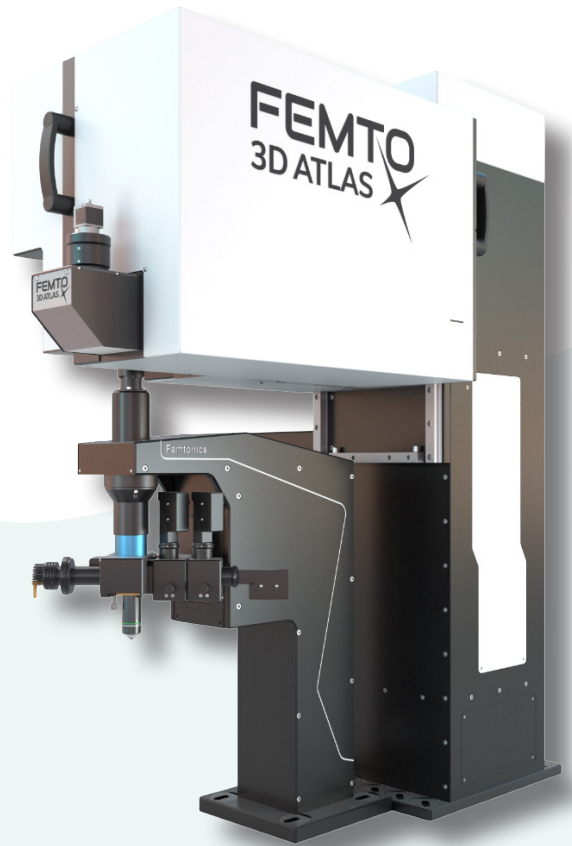


ADVANTAGES OF AO TECHNOLOGY

FEMTO 3D ATLAS

How is acousto-optic technology better, than traditional microscopy?

- **Principle:** Uses acousto-optic deflectors to control laser intensity and positioning in 2-photon microscopy.
- **High Spatial Resolution:** Provides precise 3D targeting with sub-micron accuracy for deep tissue imaging.
- **Fast 3D Beam Steering:** Enables rapid modulation and redirection of the laser beam for 3D real-time imaging and control.
- **Minimized Photodamage:** Reduces exposure to non-targeted regions, lowering tissue damage and photobleaching.
- **Multiple Targets:** Allows quasi-simultaneous 3D stimulation or imaging of multiple regions within the sample.



What are AO-s benefits to full-field imaging?

➤ High-Speed Arbitrary Frame Scanning

The Atlas offers rapid data acquisition at ~40 frames per second (fps), outperforming traditional multiphoton microscopes.

➤ Free Tilting of the Focal Plane

The Atlas has no mechanical constraints so tilting the objective plain is a seamless software-based transition.

➤ High-speed Imaging

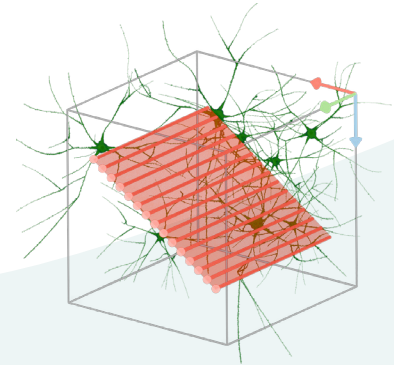
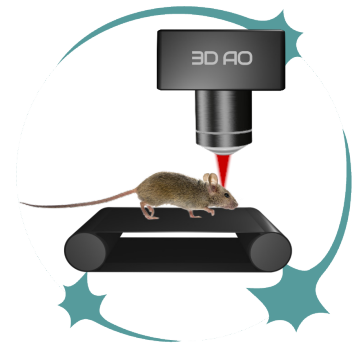
The Atlas enables high-resolution imaging at a 100 kHz point scanning speed.

➤ Continuous Sharp Image Quality

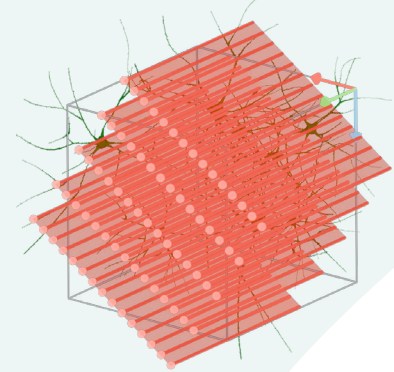
The Atlas ensures uncompromised image quality at any scanning speed, provided by our 3D-RTMC.

➤ Silent Operation

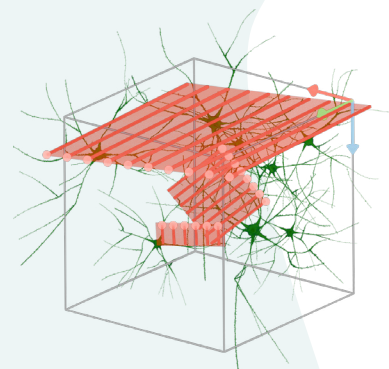
Atlas operates silently, by eliminating mechanical scanning elements.



High-Speed Arbitrary Frame



High-Speed Arbitrary Volume



High-Speed Arbitrary Multi-Plane



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Learn more:



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