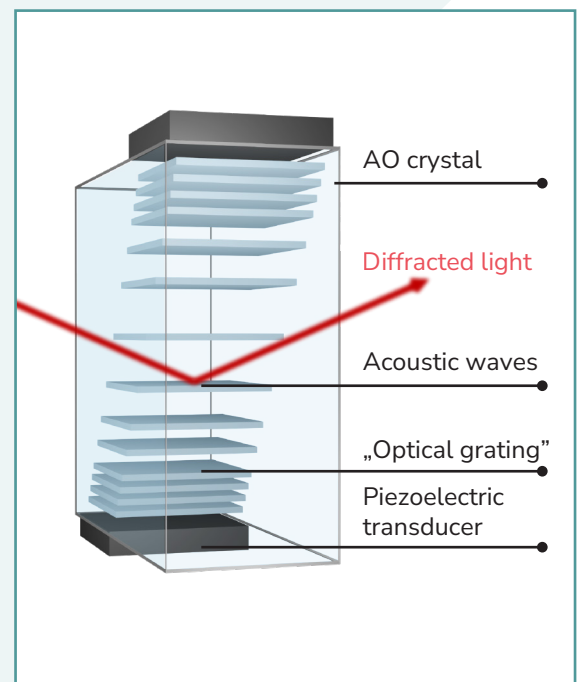
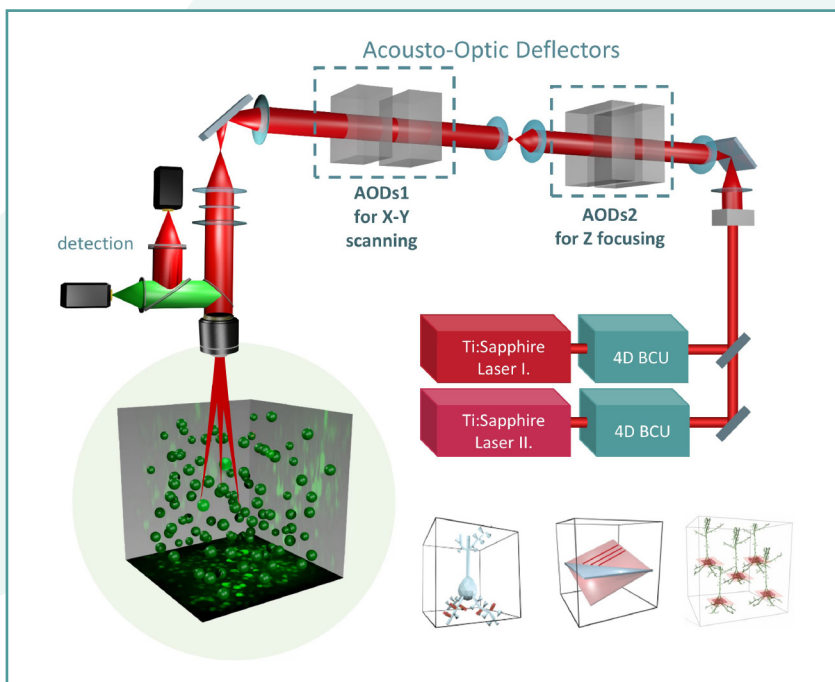
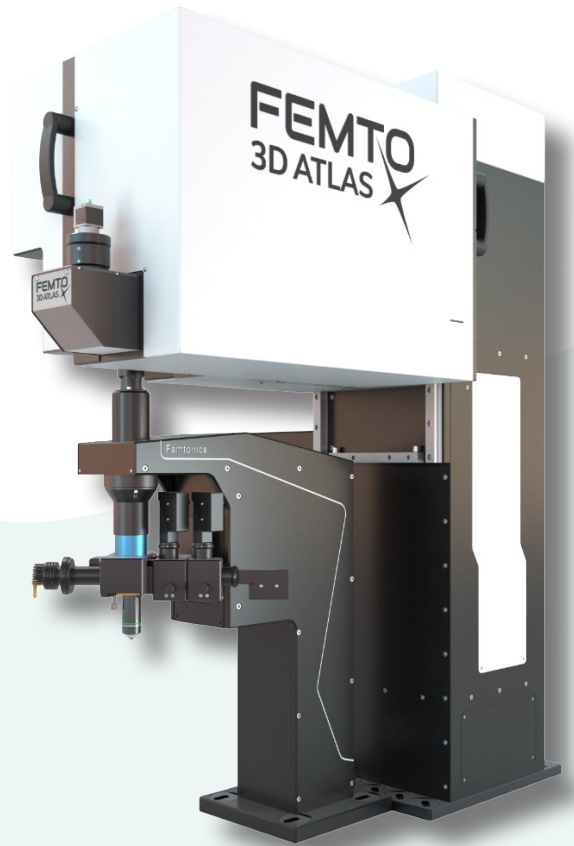


ADVANTAGES OF AO TECHNOLOGY

FEMTO 3D ATLAS

What is AO technology?

- **Principle:** Uses acousto-optic modulators (AOMs) 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.



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

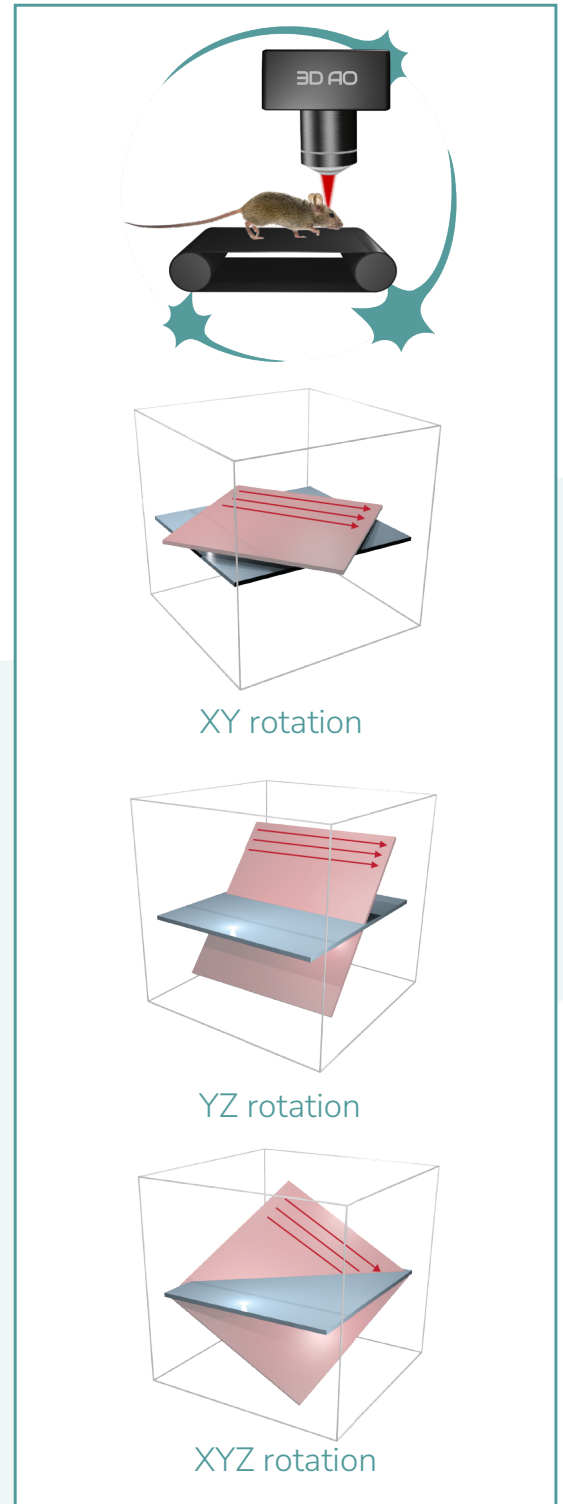
The Atlas enables high-resolution imaging at a 100 kHz point scanning speed.

➤ Maintenance of Sharp Image Quality

The Atlas ensures uncompromised image quality at any scanning speed, provided by our FocusPinner.

➤ Silent Operation

Atlas operates silently, by eliminating mechanical scanning elements.



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Learn more:



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