

## Opto and Laser Systems

### VS-AOTF Unit

The Visitron System GmbH VS-AOTF unit provides a selection of individual laser line, or several laser lines from a multi-line laser or multiple solid state lasers / laser diodes in a merge module and operates in microseconds. It provides individual software intensity control for each selected line, interlock facilities for output blanking and high speed automated shuttering of the illumination. The VS-AOTF controller allows manual or programmable selection of the single laser lines. For manual intensity control of laser power, potentiometer are available as a option. A new "SBT - smear buster technology has been developed by Visitron Systems GmbH for blanking the laser e.g. between the frame transfer of scientific grade CCD cameras.



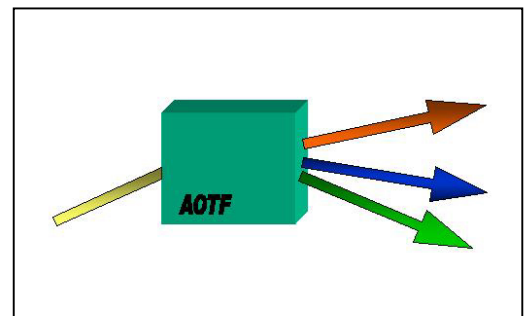
VS-AOTF unit with 4 channels



VS-AOTF unit with 8 channels

### Features of VS-AOTF Unit

- Control of up to four AOTF channels, optional: up to eight channels
- Selection of active AOTF channel(s) via PC(TTL) or manually
- Control of AOTF laser power via PC(D/A board, optional) or manually via front panel pots
- New SBT technology, blanking of laser during frame transfer shift of CCD camera
- Supported by Visitron imaging software

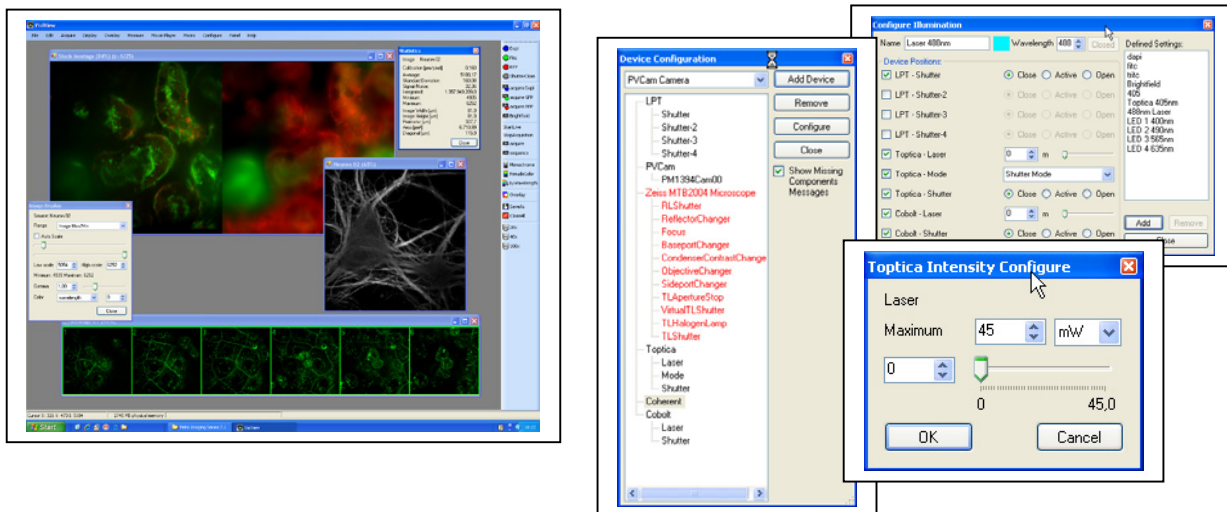


AOTF principle

## Software for AOTF and Laser Control

There are different ways of software support for VS-AOTF or solid state laser systems. At the VS-AOTF the control and fast switching for the different laser channels are done by parallel port with 4/8 TTL signals. The laser power can be selected by additional analog signal which is typically prepared by DAC board.

For stand-alone laser systems the laser power and on/off is supported by RS-232 or USB interfacing. Both control features are supported by the VisiTron imaging software.

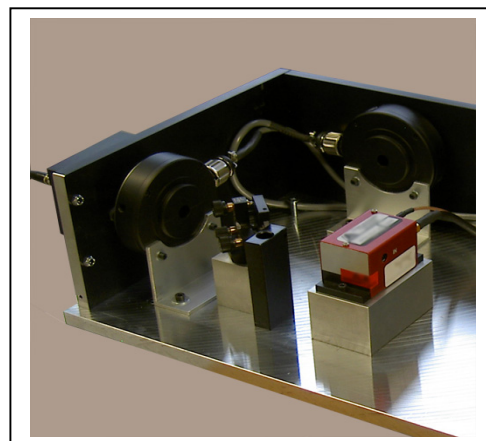


## High Speed Laser Shutter

Where AOTF systems are not required a high speed laser shutter with small aperture can be used. The total opening time of the shutter is about >1,5ms. The control unit offers a TTL control and additionally also RS-232 interface. Typically the shutter is mounted in the VS laser system or VS laser merge module.



High speed laser shutter with different adapter



VS-laser merge module with dual output and high speed laser shutter