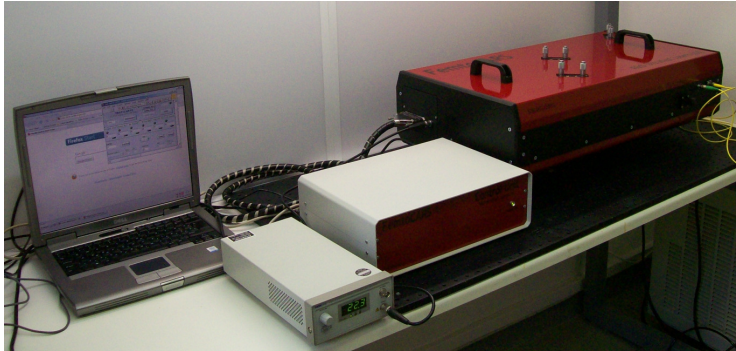




R&D ULTRAFAST LASERS LTD.

## FemtoCARS Unit

*An inherently synchronized wavelength extension unit for two wavelength measurements by CARS spectroscopy or 3D CARS microscopy*

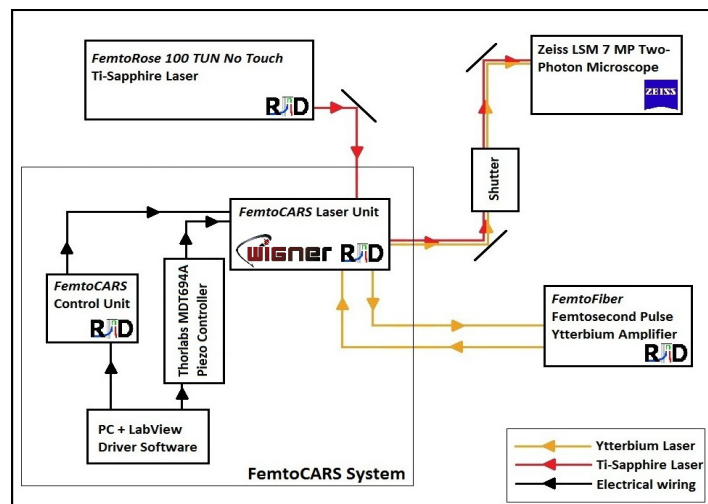


### System applications:

- CARS spectroscopy
- CARS 3D microscopy
- SRS 3D microscopy

The **FemtoCARS** laser unit synchronizes optical pulses of our **FemtoRose 100 TUN NoTouch** tuneable Ti-sapphire laser (or any other femtosecond pulse Ti-sapphire laser) and our femtosecond pulse **Femto-Fybre** Yb fiber amplifier. The laser system along with a Zeiss Axio Examiner LSM 7 MP microscope (product of Carl Zeiss) can be used for high spatial resolution 3D CARS or SRS microscopy.

### System layout:



### System specifications:

Output Power (pump): ~ 30-50% of the Ti:sapphire pump laser power (adjustable)  
Wavelength Range (pump): 680-980 nm  
Output Power (Stokes): ~ 300mW (adjustable)  
Stokes Wavelength: 1030 nm  
Pulse Duration (pump): ~180 fs  
Pulse Duration (Stokes): ~200 fs  
Polarization: Vertical  
Physical Dimension (CARS Unit): 72 x 38 x 24 cm<sup>3</sup>