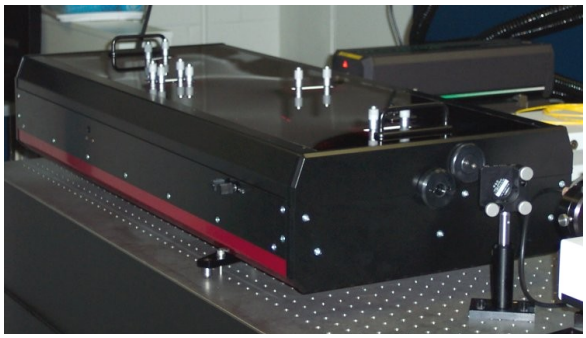
R&D ULTRAFAST LASERS LTD.

FemtoRose 10 PRC/MDC seed

Ultrabroadband, sub-10-fs Ti:sapphire laser



- *Stable, easy mode-locking (with starter electronics)*
- *Soliton-like, nearly transform-limited pulses*
- *Patented chirped mirror technology for intra- and extra-cavity dispersion control*
- *Sealed enclosure, dust free operation*
- *Optional, internal 532 nm pump laser*
- *Optional, built-in continuum generation unit*
- ***Unites States Patent Nr. 5,734,503***

FemtoRose 10 MDC/PRC is developed for applications where sub-10-fs or high bandwidth (FWHM bandwidth > 80 nm) pulses around 800 nm are required. Positive dispersion of a highly doped Ti:sapphire crystal is overcompensated by chirped mirrors (MDC) or, alternatively, by a fused silica prism pair together with properly dispersion engineered chirped mirrors (PRC). The MDC version exhibits higher stability in terms of repetition rate, pulse duration or spectral width, while the PRC version offers adjustable pulse duration (and corresponding spectral width) in the ~8 to ~30 fs range.

Typical applications used:

- Broadband seed for CPA systems
- Broadband femtosecond source for frequency metrology (after stabilization)
- Broadband seed for attosecond (as) laser systems
- Optical coherence tomography (OCT)
- Ultrafast spectroscopy

System Specifications:

Output Power (3.5 W pump) > 230 mW
Operation wavelength: ~ 790 nm
Bandwidth: > 80 nm
Pulse duration at laser output: < 10 fs
Repetition Rate: ~ 76 MHz, nominal
Noise < 1 %
Spatial Mode: TEM00
Polarization: Horizontal
Physical Dimensions: 100 x 42 x 18 cm^3

H-1012 Budapest, Attila str. 73, Hungary
www.fslasers.com
Phone/Fax: +36 (1) 392 2582
r.szipocs@szipocs.com