



R&D ULTRAFast LASERS KFT.

## FemtoRose 20 MDC Compact

Femtosecond pulse single wavelength Ti:sapphire laser



- Stable modelocking with a starter electronics
- Soliton-like, nearly transform-limited pulses
- Negative dispersion mirror™ optics – high stability owing to our patented mirror dispersion control™ (MDC) technology
- Built in DPSS pump (2W, 4W at 532 nm) – diode-pumped stability, reliability
- Sealed, purgeable enclosure – reliability, free from dust particles
- Integrated pump steering optics – ease of pump alignment
- Turn-key, truly hands-off operation

**FemtoRose 20 MDC Compact** combines a 532 nm pump laser and our patented mirror dispersion controlled mode-locked Ti:Sapphire oscillator into one integrated box. This is a fixed-wavelength version of the FemtoRose 20 MDC operating at around 800 nm. It is available in 2 W and 4 W pumped versions. In this configuration, material dispersion of a 4 mm thick gain medium is compensated by a low loss negative dispersion dielectric mirror compressor with no intracavity prism pairs. The laser provides mode-locked output powers up to 550 mW when pumped by a 4 W built in 532 nm laser.

### Laser applications used:

- Multiphoton microscopy
- Ultrafast spectroscopy
- Seed for CPA systems

### System Specifications:

Output Power (2 W pump) > 150 mW  
Output Power (4 W pump) > 450 mW  
Operation wavelength: ~ 810 nm  
Pulse duration at laser output: ~ 100 fs  
Repetition Rate: ~ 80 MHz, nominal  
Noise < 1 %  
Spatial Mode: TEM00  
Polarization: Horizontal  
Physical Dimensions: 100 x 42 x 18 cm<sup>3</sup>