



A Passion for Precision.

Press Release

TOPTICA Photonics AG
Lochhamer Schlag 19
D-82166 Graefelfing / Munich

Contact:

Marketing

Elke Marchthaler
Phone + 49 89 85837-123
Fax + 49 89 85837-200
elke.marchthaler@toptica.com

Sales

Dr. Thomas Hellerer
Phone + 49 89 85837-184
Fax + 49 89 85837-200
thomas.hellerer@toptica.com

www.toptica.com/page/news.php

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New: FemtoFiber pro — Next generation FemtoFiber lasers

TOPTICA pushes the outstanding reliability one step further and presents the next generation of ultrafast fiber lasers – the FemtoFiber pro. Hands-off operation with maximum flexibility and highest performance are the key parameters of this next generation fiber laser.

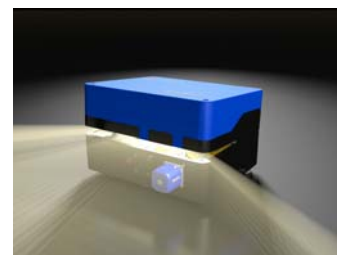
The Erbium doped fiber laser emits femtosecond pulses at 1550 nm with the highest peak power of his class that is available on the market. The average power of the fundamental exceeds 350 mW and the pulse width is well below 100 fs. The repetition rate can be selected between 40, 80 and 100 MHz .

All vital components could benefit from the latest experience of TOPTICA's large installed ultrafast fiber laser base. As a result, this laser satisfies the requirements of even the most demanding applications. For example, the new saturable absorber mirror (SAM) ensures stable modelocking under all laboratory conditions – even humidity and temperature drifts are tolerated to a large extend. In addition, all fiber components are polarization maintaining. This significantly increases the robustness against environmental influences.

The operation also is more user friendly: many functions like the variable dispersion adjustment are now motorized and computer-controlled.

The FemtoFiber pro comes in a compact sealed box with a footprint of only A4. First deliveries are scheduled for end of 2009. Three options will be available which are integrated in the same housing as the laser itself: Fundamental output at 1550 nm, second harmonic output at 780 nm or an octave spanning supercontinuum ranging from 980 – 2200 nm. For the first time, the customer can switch externally between 1550 and 780 nm w/o realignment – by just pushing an external button. Up to three external fiber seed ports can easily turn the FemtoFiber pro into the reliable master for complex multi-beam experiments with perfectly phase synchronized pulses.

The system is equipped with Ethernet and USB customer interfaces.



FemtoFiber pro – versatile Erbium doped ultrafast fiber laser.

Author:

Dr. Thomas Hellerer, TOPTICA Photonics AG

The FemtoFiber pro is the latest product of TOPTICA's pro series. The label "pro" indicates highest specifications with most user friendly hands-off mode of operation. This combination makes the FemtoFiber pro the ideal laser for next generation ultrafast applications. Examples include:

- THz spectroscopy
- Biophotonics
- Metrology
- Ultrafast spectroscopy

This new product will be shown live at the TOPTICA booth during the LASER World of PHOTONICS, hall B1.115.

TOPTICA Photonics AG develops, manufactures, services and distributes technology-leading diode and fiber lasers and laser systems for scientific and industrial applications. Sales and service is offered worldwide through TOPTICA Germany and its subsidiary TOPTICA USA, as well as all through 14 distributors. A key point of the company philosophy is the close cooperation between development and research to meet our customers' demanding requirements for sophisticated customized system solutions and their subsequent commercialization.

Author:

Dr. Thomas Hellerer, TOPTICA Photonics AG