



A Passion for Precision.

Press Release

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New: FemtoFiber pro – Next generation of FemtoFiber lasers

TOPTICA presents the youngest member of its pro-family: the FemtoFiber pro. The ultrafast laser features the highest peak power of its class along with fully hands-off operation. The commendation “pro” labels excellent performance combined with ease of use.

The basic all-fiber laser system (FemtoFiber pro IR) emits pulses at 1560 nm with a pulse width well below 100 fs and an average power exceeding 350 mW. The standard repetition rate is 80 MHz, but also 40 MHz or custom frequencies can be selected.

With a focus on reliability and robustness, new technologies have found their way into the professional graded product, e.g. the saturable absorber mirror (SAM). The device ensures self-starting and stable mode-locking under all laboratory conditions. In addition, all fiber components are polarization maintaining. These are robust against environmental changes. Both techniques keep the laser always in a well-defined state of operation. The latter is supervised by the computer that is integrated into the control unit. It can be easily accessed with state-of-the-art communication interfaces (Ethernet, USB or RS 232). It provides the user with many functions like the pulse width control via the motorized prism compressor.

Three models of the FemtoFiber pro are available: The fundamental output at 1560 nm (FemtoFiber pro IR), the second harmonic at 780 nm (FemtoFiber pro NIR) and an octave-spanning supercontinuum ranging from 980 nm to 2200 nm (FemtoFiber pro SCIR). All models come in a single box with a compact letter / A4 format footprint. For convenience, the SHG model features a manual switch between 780 nm and 1560 nm w/o re-alignment. Up to three fiber coupled seed ports turn the FemtoFiber pro into a complex laser system for multi-color experiments with optically synchronized laser pulses.

The FemtoFiber pro serves as reliable performer for many applications like life sciences, time domain terahertz, ultrafast spectroscopy, metrology or optical coherence tomography.



FemtoFiber pro – versatile Erbium doped ultrafast fiber laser.

Author:

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This new product will be shown live at the TOPTICA booth 517 during BiOS and Photonics West.

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.

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