NEWSLETTER 1 I 2023 LASER TECHNOLOGY FOR YOUR INNOVATION





ULTRASHORT PULSE METROLOGY

NEW COOPERATION BETWEEN TOPAG LASERTECHNIK AND FEMTO EASY



TOPAG is taking over the distribution of beam profilers, autocorrelators, spectrometers and FROG systems in Germany and Austria for the French manufacturer Femto Easy. The devices for pulse duration measurements and beam characterization are designed in such a way that they are as easy to use as possible without sacrificing measurement accuracy.

Simply place your autocorrelator into the beam path, the measured pulse duration will be shown directly in the included user-friendly software - all in less than two minutes, no adjustment required!

If the properties of a pulse are to be determined more precisely, using Frequency-Resolved Optical Gating (FROG) is recommended. It enables complete pulse characterization, including spectral width, chirp, wavefront tilt, phase modulation and dispersion.

ORPHEUS-VIS

OPTICAL PARAMETRIC AMPLIFIER WITH ULTRASHORT PULSES IN THE VISIBLE RANGE



The introduction of new Orpheus-VIS extends Light Conversion's portfolio of tunable femtosecond laser sources. This OPA delivers pulse durations of <70 fs in the tuning range from 320 to 900 nm, and even <50 fs in the range from 500 to 600 nm. Optionally, wavelength tuning down to 250 nm is available. Thereby, Orpheus-VIS is a complement to Orpheus-HE/Orpheus-HP with pulse durations from 120 to 250 fs in the visible to near-infrared range as well as to Orpheus-F with pulse durations <25 fs which is optimized for NIR.

Orpheus-VIS serves as an excellent high-repetition rate light source for ultrafast spectroscopy such as two-dimensional electronic spectroscopy (2DES) or time-resolved photoemission spectroscopy, and many other applications in the visible spectral range.

NL200

INDUSTRIAL-GRADE NANOSECOND LASER WITH HIGH PULSE ENERGY DOWN TO DUV



NL200 is a well-proven diode-pumped nanosecond laser for scientific and industrial applications. This laser provides up to 4 mJ at 1064 nm with a variable repetition rate of up to 1 kHz and excellent beam properties like $\rm M^2{<}1.3$ and pulse energy stability <0.5% RMS. Optionally, the laser can be equipped with harmonics (0.6 mJ / 600 mW at 266 nm, 5th harmonic on request).

Entirely air-cooled and built with a hermetically sealed housing, this high energy laser is reliable and almost maintenance-free. Typical applications are material processing, LIBS, MALDI and the use as pump source.

TOPAG Lasertechnik GmbH