SPATIO-TEMPORAL CHARACTERISATION OF YOUR ULTRAFAST LASER SYSTEM

ICE

sphere
ULTRAFAST PHOTONICS

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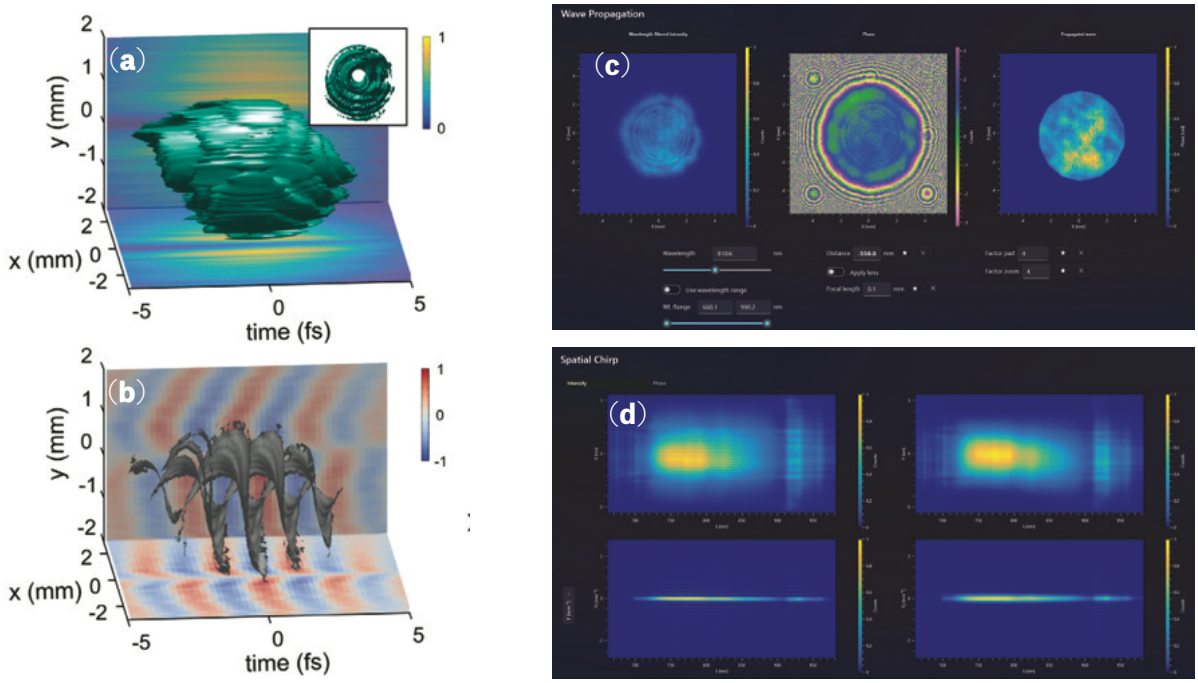
Discover Sphere ICE, the innovative solution for complete spatio-temporal characterization of femtosecond laser pulses. Engineered for speed and precision, Sphere ICE provides high-resolution measurements that offer an intuitive and direct visualization of laser pulses across the spatial, frequency, and temporal dimensions. It expertly reveals spatiotemporal couplings, distortions, and intricate structures born from complex or customized phases.



Three dimensional reconstruction of a sub-two-cycle vortex beam. (a) Intensity profile in space and time. The inset shows the same surface from a viewpoint along the propagation direction, evidencing the phase singularity (b) Isosurface of the real part of the complex field. https://doi.org/10.1364/OL.39.005142 - https://doi.org/10.1080/09500340.2016.1257751.
Software GUI (c) display representing the wave propagation and (d) display of the spatial chirp of the laser pulse along X and Y.

KEY FEATURES

- Wavelength-resolved intensity profile and wavefront
- Spatially resolved spectrum
- Wave propagation, spatial chirp, Zernike polynomials
- Spatio-temporal couplings

TECHNICAL SPECIFICATIONS	ICE
Wavelength range	400-1000 nm
Pulse duration (transform limited)	3 fs to 30 fs
Repetition rate	>10 Hz
Input polarization	Linear
Input aperture diameter	12 mm
Input power	1 mW
Dimensions (WxLxH)	260 x 300 x 100 mm

Contact us to discuss customized solutions for different wavelength ranges, input apertures, and more