EOS

Sub-Nanosecond
Transient Absorption Spectrometer

EOS is a broadband pump-probe sub-nanosecond transient absorption spectrometer with an extended time window. Its patented design utilizes a photonic crystal fiber for probe light generation. Researchers using femtosecond transient absorption for studying ultrafast kinetics of photoinduced processes can now extend the time window of investigation beyond several nanoseconds.

EOS, with its ~500 ps time resolution and the electronically controlled pump-probe delay is a perfect solution, and in combination with **HELIOS** provides continuous temporal coverage from femto- to milliseconds and beyond.

We have been extremely happy with the EOS from Ultrafast Systems. For groups already equipped with a femtosecond amplified Ti:sapphire laser system, EOS offers a cost-effective, elegant, and high S/N solution for measuring transient spectra and kinetics beyond 1 ns.

The ability to study systems from femtoseconds to tens of microseconds (and longer) is important for many problems, including charge separation and recombination dynamics in photovoltaic and photocatalytic nanomaterials.

Dr. Tim Lian
Emory University

Specifications . . .

- **Probe Spectral Range: UV-NIR (350-1600 nm)**
- **Spectral Resolution: VIS – 1.5 nm, NIR – 3.5 nm**
- **Time Resolution – 500 ps**
- **Time Window – 400 Microseconds (With 1 kHz Lasers)**
- **Data Format: 3-D Wavelength-Time-Absorbance Data Matrix In A Form of An ASCII CSV File, Which Can Be Easily Processed With Surface Xplorer Or Third Party Software**
- **Detectors: Fiber Coupled Multichannel High Speed Spectrometers With kHz Scan Rates**
- **Software: EOS 2.x LabView Based Software For Instrument Control And Data Acquisition – The Software Allows For Full Experiment Automation And Has Two Levels of User Access**
- **Dimensions: W-24" x L-36" x H-10" (W-610 x L-915 x H-250mm)**

Features

User Friendly Software

Broad Probe Spectral Range (UV-NIR)

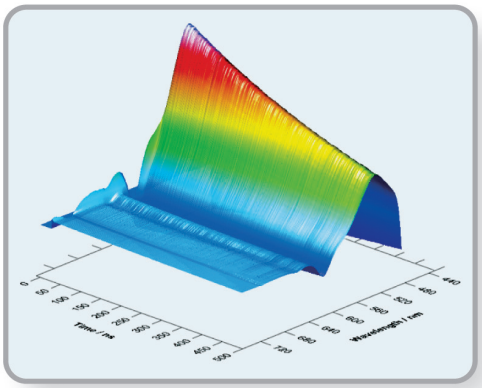
Time Resolution – 500 ps

Multi kHz Data Acquisition Rates

Fiber Coupled High-Speed Multichannel Detectors

Time Window - 400 Microseconds (With 1 kHz Lasers)

Can Be Fully Integrated With **HELIOS**





Ultrafast Systems LLC / 1748 Independence Blvd. Bldg G / Sarasota, FL 34234 / USA
Tel: + (1) 941-360-2161 / +(1) 941-360-2191 / **Fax:** + (1) 866-668-9926 / **E-Mail:** sales@ultrafastsystems.com

www.UltrafastSystems.com