

## Tabletop Transient Absorption Spectroscopy System



Maintenance-free  
single-box solution



Plug-and-play  
installation



Intuitive measurement  
and data analysis



Femto-to-nanosecond  
temporal resolution

**HARPIA-LIGHT** transient absorption spectroscopy system combines accessibility, versatility, and unparalleled performance in a single-box design. Based on advanced femtosecond laser technology, it allows precise and accurate measurement and analysis of transient events on a femto-to-nanosecond time scale.

**HARPIA-LIGHT** excels in providing exceptional measurement sensitivity, high temporal resolution, and broad spectral coverage. Despite its compact size, **HARPIA-LIGHT** houses an industrial-grade femtosecond laser and a spectrograph with advanced, yet user-friendly data acquisition software. The intuitive interface and streamlined workflow enable seamless

operation, saving valuable time and effort. By simply placing the sample and clicking a button, instant access to a wealth of information is achieved. Moreover, **HARPIA-LIGHT** features flexible polarization control, a 7.5 ns delay line, and advanced analysis algorithms, providing extensive options for further data assessment.

## Specifications

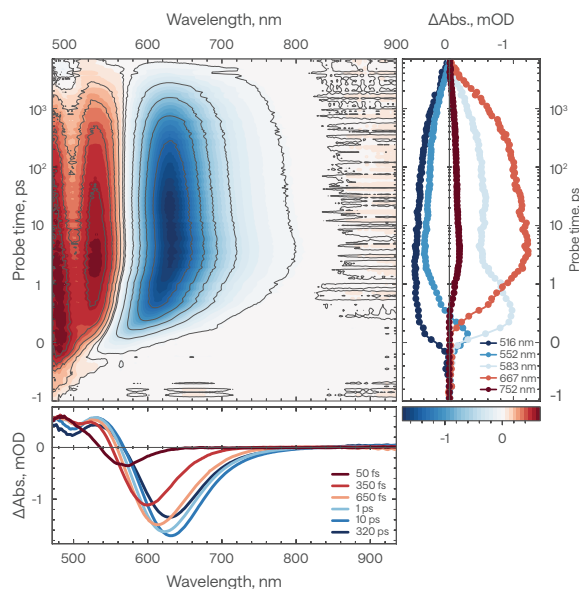
Modes	Transmission and reflection
Probe spectral range	460 – 910 nm
Probe polarization control	Linear (0 – 180°)
Pump wavelengths	515 nm, 343 nm
Delay range (resolution)	7.5 ns (10 fs)
Temporal resolution	≤ 290 fs
Laser repetition rate	60 kHz, any fundamental repetition rate division
Maximum data acquisition rate	3850 Hz

## DIMENSIONS

Physical dimensions (L × W × H)	870.5 x 388 x 346 mm
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CLASS 1  
LASER PRODUCT

## Measurements

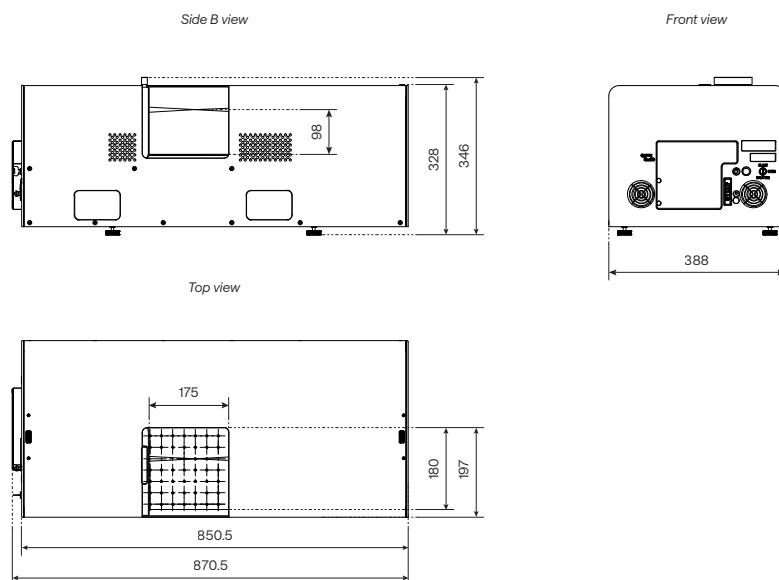


Spectral dynamics of DCM laser dye in solution acquired using HARPIA-LIGHT.

### MEASUREMENT CONDITIONS

Pulse repetition rate: 60 kHz  
 Pump wavelength: 343 nm  
 Acquisition time: 3 s per spectrum (per delay point)

## Drawing



## Processes explored by ultrafast spectroscopy

- Electron and proton transfer
- Solvation
- Vibrational relaxation
- Exciton energy transfer
- Photoreaction dynamics

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