# **HARPIA** | TB

## **Third Beam Delivery Module**

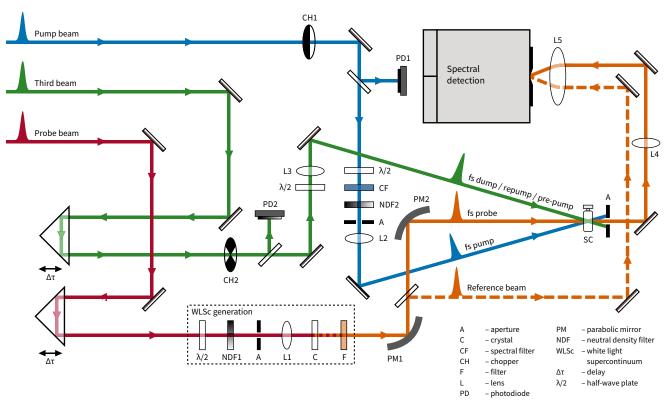
### **FEATURES**

- Delivery of an additional femtosecond or picosecond beam
- Polarization, intensity, and delay control
- Femtosecond stimulated Raman scattering (FSRS) support
- Z-scan support



The HARPIA-TB is a third beam delivery module for the HARPIA-TA unit for an additional dimension to time-resolved absorption measurements. It allows multi-pulse time-resolved spectroscopic techniques, in which the ongoing pump-probe photodynamics are perturbed by a delayed third pulse.

In conjunction with a narrow-bandwidth picosecond pulse source, HARPIA-TB can be used to perform femtosecond stimulated Raman scattering (FSRS) measurements. Furthermore, HARPIA-TB supports Z-scan measurements.



HARPIA optical layout for multi-pulse experiments



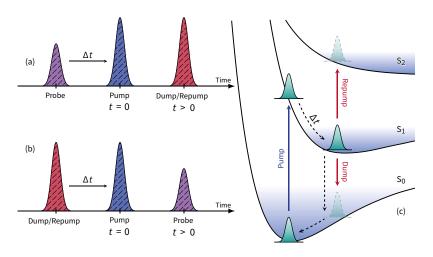
Model	HARPIA-TB
Delay range 1)	2 ns / 4 ns
Delay resolution	2.1 fs / 4.2 fs

#### **DIMENSIONS**

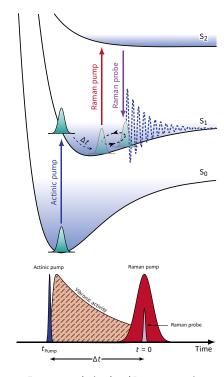
Physical dimensions (L x W x H)	670 x 252 x 183 mm

<sup>&</sup>lt;sup>1)</sup> 8 ns delay range is available on request; contact sales@lightcon.com for details.



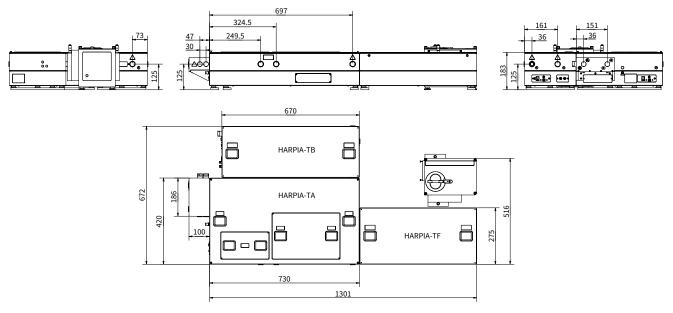


State transitions and pulse timing in multi-pulse time-resolved transient absorption spectroscopy



Femtosecond stimulated Raman scattering (FSRS)

### **DRAWINGS**



Drawings of HARPIA system with HARPIA-TB and HARPIA-TF modules