# **HARPIA** I MM

# Microscopy Module

### **FEATURES**

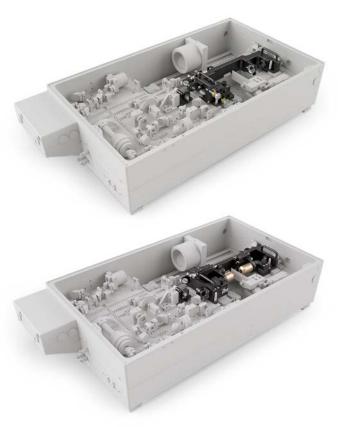
- Down to 2 μm spatial resolution
- Broadband and monochromatic probe options
- Motorized XYZ sample stage
- Transmission, specular and diffuse reflection geometry

#### **SPECIFICATIONS**

Model Spatial resolution 1)	HARPIA-MM	
	monochromatic	polychromatic
	< 2 µm	< 10 µm
Full spectral range	460 – 900 nm	
Temporal resolution	500 fs	
Maximum working distance 2)	13 mm	
Sample motion range	13 × 13 × 13 mm	

Depends on the spectral range and the objective used; provided values represent best-effort cases.

<sup>&</sup>lt;sup>2)</sup> Depends on the objective used; contact sales@lightcon.com for details.

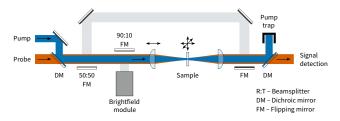


HARPIA with bulk (top) and microscopy (bottom) modules installed

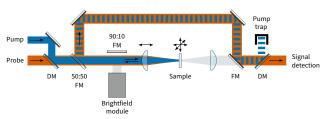
HARPIA-MM is a microscopy module add-on to the HARPIA spectrometer, which enables spatially-resolved pump-probe measurements with a spatial resolution down to 2  $\mu$ m. The sample can be positioned and scanned in a 13 mm range along XYZ axes using a motorized stage. Microscopic transient transmission and reflection signals can be measured using a broadband or a monochromatic probe.

HARPIA-MM allows the acquisition of time-resolved spectra at a fixed position, difference absorption images at a fixed probe delay, and other types of data. Switching between bulk and microscopic pump-probe modes is implemented using self-contained modules, allowing experiment reconfiguration without disturbing the sample. The microscopy module features a brightfield mode to observe the sample and to determine the pump-probe spot location.

#### **TRANSMISSION MODE**



## **REFLECTION MODE**



#### **BRIGHTFIELD MODE**

