

2DQuick Microscope

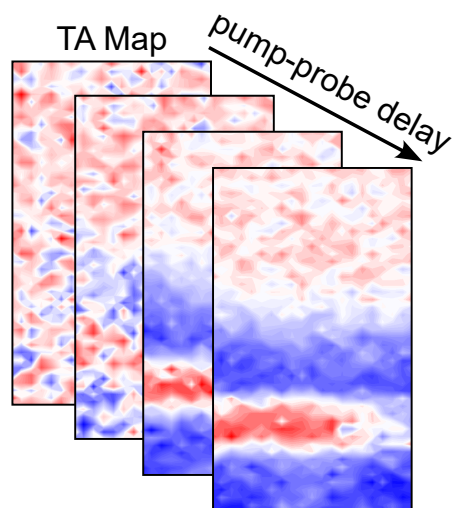
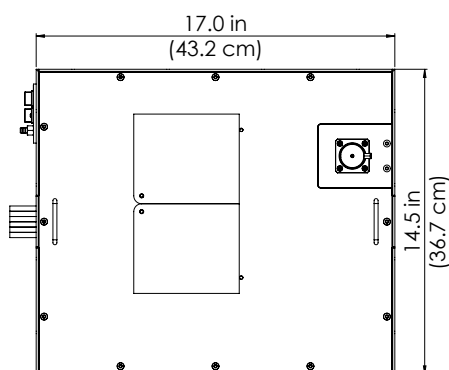
ULTRAFAST TRANSIENT ABSORPTION & 2D MICROSCOPY



Module that enables TA and 2D spectroscopy of heterogeneous samples with $< 1.5 \mu\text{m}$ spatial resolution. Designed for use with 2DQuick spectrometers or independently.

FEATURES

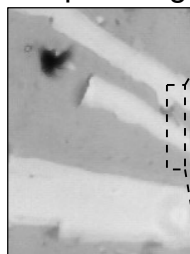
- Transmission mode
- Magnification 52X
- The 20-mm sample area supports large samples
- High-resolution motorized XYZ sample stage
- Direct imaging of sample with 2D camera to easily find areas of interest
- Compact design
- Customizable optical setup
- Easy-to-use software with advanced features



TECHNICAL SPECIFICATIONS

Input Polarization	Linear, vertical
Input Beam Size ($1/e^2$)	4.5 mm, collimated
Spectral Range	390–780 nm (visible option) 2–10 μm (mid-IR option)
Focusing Objective	Reflective, 52X, 0.65 NA, 1.7 mm WD
Collimating objective	Refractive, 20X, 0.42 NA, 20 mm WD; on a motorized translation stage with 0.2 μm minimum step
Spot Size	$< 2 \mu\text{m}$
Spatial Resolution	$\sim 1.5 \mu\text{m}$ (TA, at 650 nm) $\sim 1.2 \mu\text{m}$ (2D, at 650 nm)
Temporal Resolution	$\sim 300 \text{ fs}$ (160 fs laser pulse)
Sample Stage	Motorized XYZ micropositioner with 50 nm resolution encoders, 25 mm travel range, 96 nm minimum step
Cameras	View top and bottom of sample; Monochrome, 1440 $\times$ 1080 pixel sensor
Sample Viewing Window	120 $\mu\text{m} \times 88 \mu\text{m}$
Dimensions	14.5 $\times$ 17.0 $\times$ 6.8 in (36.7 $\times$ 43.2 $\times$ 17.1 cm)

Sample Image



Transmission
& TA maps at
different
wavelengths

