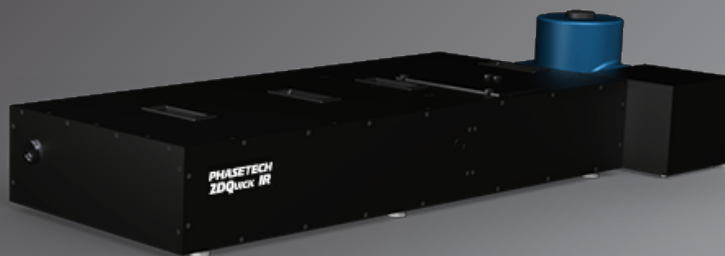
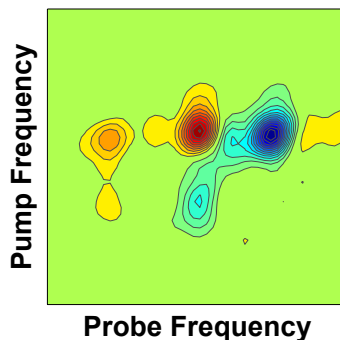


2DQuick IR

FAST & POWERFUL 2D IR SPECTROMETER



2DQuick IR is designed to collect high-quality 2D IR spectra using an array detector. The spectrometer uses mid-IR pulse shaping technology and array detection with a monochromator for fast data collection with high signal-to-noise.



Available with our next-generation MCT detectors:

the 128 x 128 pixel

ZDMCT

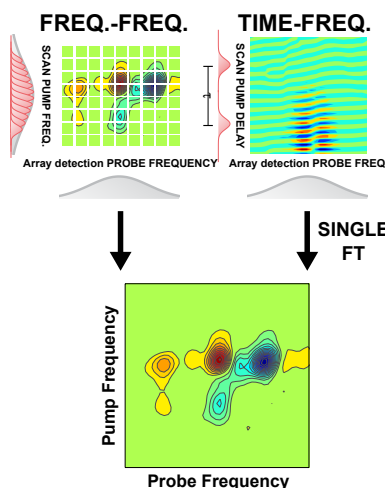
the 100 kHz rep. rate

JACKHAMMER

CAPABILITIES & FEATURES

- Measure mid-IR pump-probe kinetics
- Design custom pulse sequences
- Complete control and transient data acquisition software package
- Reference beam for background correction and greater signal-to-noise with dual-channel detectors
- Capatible with our Transient actinic pulse delay module

**Fast, flexible,
& easy to use**



Pulse shaping technology provides our spectrometers with powerful flexibility.

Tailor your 2D IR experiment to your needs by scanning the pulses in time or frequency:

Use time-domain collection to improve time and spectral resolution,

Use frequency-domain collection to improve signal-to-noise

With the 2DArray, you can switch between different acquisition modes simply through software.

collects a **2D IR** spectrum
in less than **1 second***

Dimensions in inches

Shown with 150 mm monochromator and 128x128 pixel detector. Other options are also available.

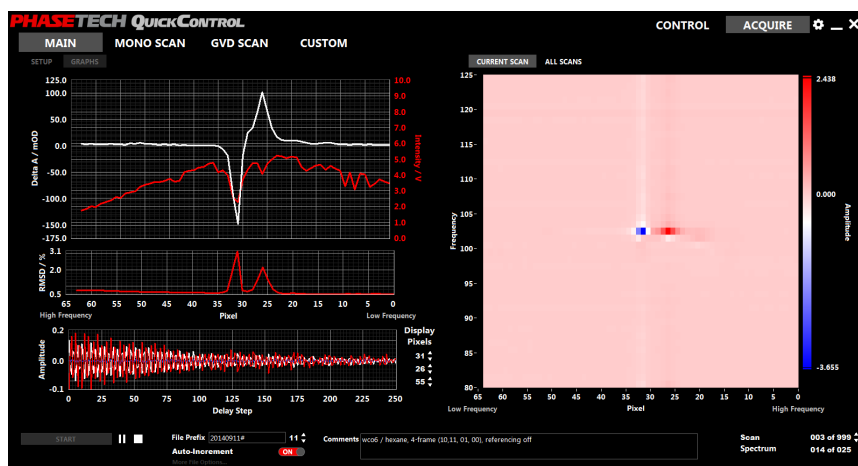
* Minimum acquisition time for a single 2D IR spectrum. Averaging of multiple one-second spectra will generally be required for desired signal-to-noise.

PHASETECH 2DQuick IR

ADDITIONAL INFORMATION

PhaseTech's user-friendly software makes it easy to collect 2D IR spectra while also providing advanced functionality.

- Use built-in phase cycling and rotating frame schemes or design your own
- Switch between experiments with the click of a button



OPTICAL LAYOUT

GENERAL

| | |
|-----------------------------|----------------------------|
| Repetition Rate | ≤ 100 kHz |
| Recommended Pulse Energy | ≥ 8 μ J @ 1 kHz |
| | ≥ 1 μ J @ 100 kHz |
| Input Polarization | Linear, Horizontal |
| Input Beam Size ($1/e^2$) | 7 mm, collimated |
| Pump-Probe Delay | > 150 ps |

DIMENSIONS

| | |
|-------------------------------|--|
| Base Dimensions | 18.0 x 39.0 x 6.3 in (45.7 x 99.1 x 16.1 cm) |
| With Monochromator & Detector | approx. 49.8 x 21.4 x 9.5 in (approx. 127 x 54 x 24 cm) |

(other monochromator and detector options are also available)

SHAPER

| | |
|---------------------|--|
| Standard AR Coating | 2.6 - 10 μ m (1000 - 3850 $1/\text{cm}$) |
|---------------------|--|

(other wavelength ranges are available upon request)

| | |
|------------------------------|--------------------------------|
| Spectral Window ¹ | > 1.5 μ m at 5.5 μ m |
|------------------------------|--------------------------------|

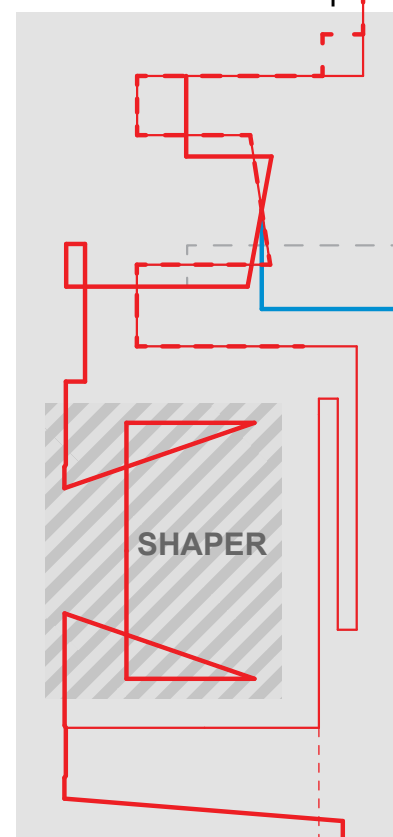
| | |
|----------------------------------|------------------------------------|
| Spectral Resolution ¹ | < 5 $1/\text{cm}$ at 5.5 μ m |
|----------------------------------|------------------------------------|

| | |
|---|--------------------------------------|
| Maximum Double Pulse Delay ² | > 5 ps ¹ at 5.5 μ m |
|---|--------------------------------------|

¹ Specification is based on our standard gratings and an input diameter of 7 mm. Other gratings are available upon request or can be provided by the user.

² Calculated based on effective pixel size with standard gratings.

TO SPECTROMETER
AND DETECTOR



— PUMP
— PROBE
-- REFERENCE*

--- ALT PROBE
— UV/VISIBLE*
--- ALT OUTPUT

* OPTIONAL

FROM
OPA

We follow a policy of continuous product development. Specifications are subject to change without notice. LabView™ is a trademark of National Instruments. Neither PhaseTech Spectroscopy, Inc., nor any software programs or other goods or services offered by PhaseTech Spectroscopy, Inc., are affiliated with, endorsed by, or sponsored by National Instruments.