

Transient Absorption Spectrometer (TAS)

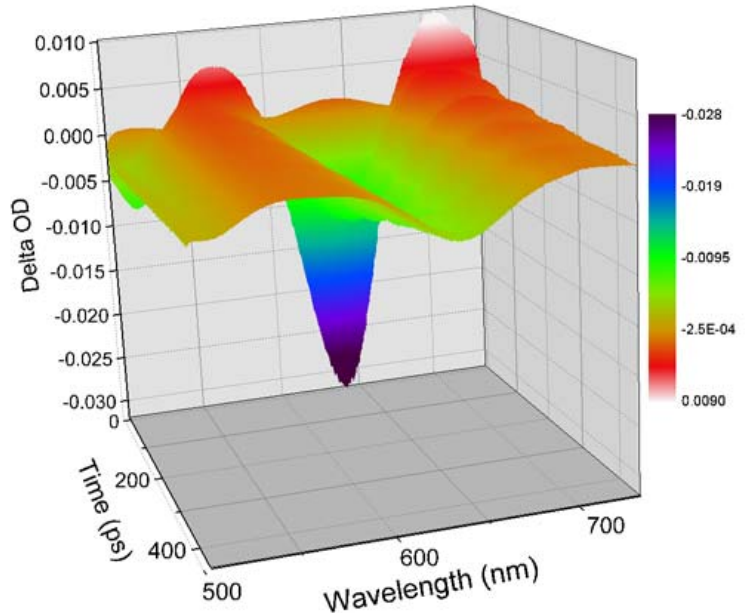
ULTRAFAST SPECTROSCOPY SOLUTIONS FOR RESEARCHERS



Features and Benefits

- Flexibly designed for various input sources to meet your specific research needs
- UV-VIS spectral range standard
- Broad pump-probe delay range with standard or enhanced pump-probe delay resolution
- High-resolution spectrometer supports broad spectral range
- Designed to work with ultrafast amplifiers and OPAs
- Robust, stable device is factory assembled and aligned for easy integration in your ultrafast spectroscopy setup

Newport's Transient Absorption Spectrometer (TAS) is a state-of-the-art instrument for femtosecond pump-probe spectroscopy. In an ultrafast pump-probe experiment using TAS, the sample of interest is excited by the pump pulse and the dynamics of the sample are monitored as a function of time at many wavelengths by a white-light supercontinuum probe routed with reflective optics to minimize chirp. The probe light is sensed as a function of wavelength by the combination of a fiber coupled multichannel detector and Oriel's MS127i imaging spectrograph, offering the optimum combination of sensitivity and dynamic range. Since TAS was designed with the scientific research community in mind, there is substantial flexibility in the configuration of the optical layout, detection range, and spectral resolution. TAS is designed for Ti:Sapphire based amplifiers with repetition rates ranging from 1-5 kHz and comes with straightforward LabView®-based software.



The ultrafast dynamics of gold nanorods courtesy of Newport's Technology and Applications Center (TAC).

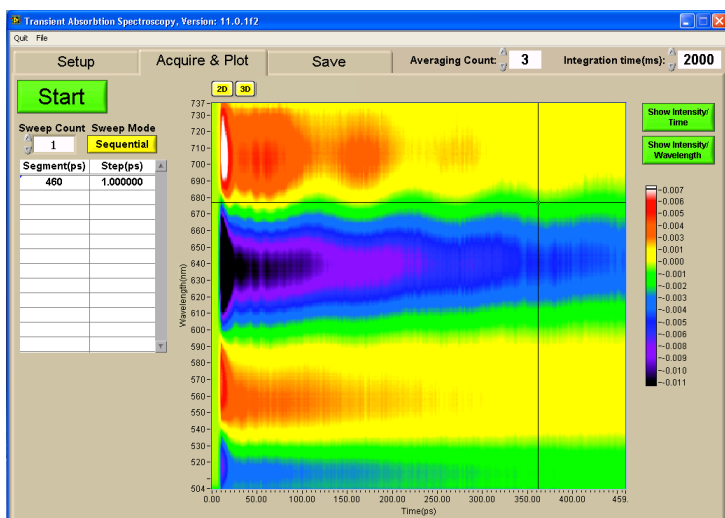
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Specifications:

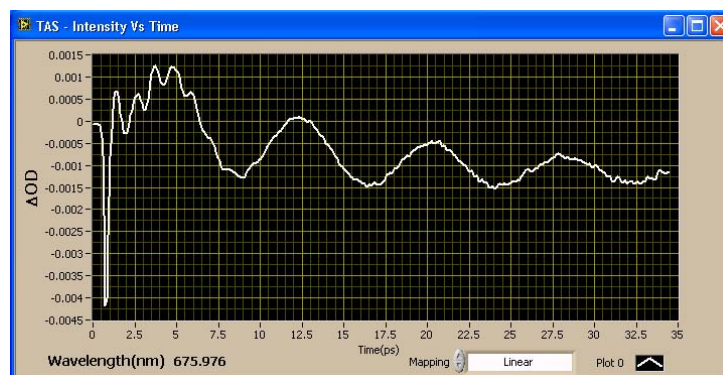
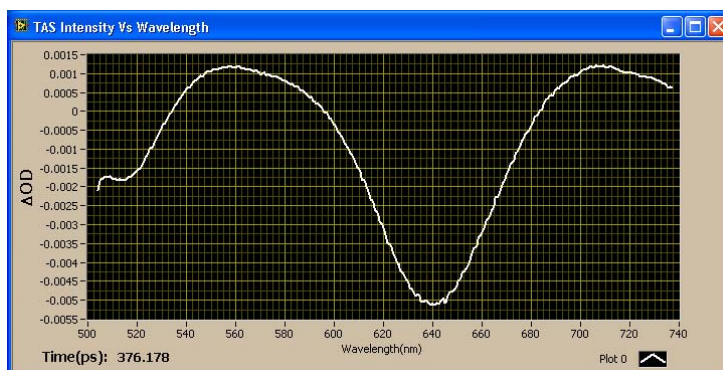
Specifications:

Probe Spectral Range	370 - 775 nm
Pump-Probe Delay Range	≤ 3.33 ns
Pump-Probe Delay Resolution	13.3 fs standard, 2.2 fs optional
Intrinsic Time Resolution	< 10 fs
Time Resolution	1.4 times the pump or probe duration
Supported Pulse Repetition Rate	10 Hz - 5 kHz standard
Spectrometer Supported Spectral Range	180 - 2900 nm
Spectrometer Supported Spectral Resolution	0.17 - 1.05 nm

Ordering information: please contact Newport or your local Newport Distributor for a customized quote on standard or special versions of the TAS.



TAS software GUI showing acquisition of gold nanorods data



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all been certified compliant with ISO 9001 by the British Standards Institution.

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