

The Halcyone upconversion system is easy to use. The team at Ultrafast Systems is willing to work with your individual needs.

If I for any reason have difficulty in obtaining a desired signal, they have also been willing to troubleshoot the problem with me until I can get the data I need.

*Dr. Jodi Szarko
Northwestern University*

Features

User Friendly Software

Broad Spectral Range (UV-NIR)

Time Window – Up To 1 ms

Reflection Mode Option

Works With Liquid
And Solid Samples

Fully Automated Spectral
And Kinetic Scanning

Can Measure Anisotropy Decays

Automatic Adjustment
of SFG Crystal Angle



Fluorescence

Lifetime Measurement System

HALCYONE is an all-in-one-box fluorescence measurement system comprising a Fluorescence Upconversion spectrometer and a Time-Correlated Single Photon Counting instrument. In the upconversion mode **HALCYONE** has a time window of 3.3 ns and femtosecond time resolution. In the TCSPC regime the time window can be expanded up to 1 ms with 250 ps resolution.

Switching between the two modes is facile and requires no optical setup changes. A 2D camera is used to ensure highly precise delay stage alignment. The spectral range of **HALCYONE** spans from VIS to NIR. **HALCYONE** can work with either a mode locked Ti-sapphire oscillator or with a regeneratively amplified Ti-sapphire laser.

Specifications . . .

- **Spectral Range: UV-NIR (400-1600 nm)**
- **Upconversion Mode: 400-1600 nm; TCSPC Mode: 160-900 nm**
- **Time Window: Upconversion Mode: 3.3 ns; TCSPC Mode: Determined By Time Interval Between Adjacent Laser Pulses
Typical Values For Femtosecond Oscillators – 12 ns;
For Femtosecond Amplifiers – 1 ms**
- **Intrinsic Time Resolution: 7 fs, 2 fs Optional**
- **Data Format: 3-D Wavelength-Time-Intensity Data Matrix
Or Individual Spectra/Kinetics In A Form of An ASCII CSV File**
- **Software: HALCYONE 3.x LabView Based Software
The Software Allows For Full Experiment Automation**
- **Dimensions: W-24" x L-36" x H-10" (W-610 x L-915 x H-250mm)**

