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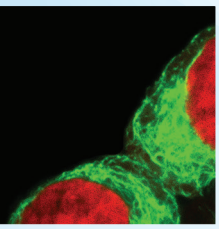
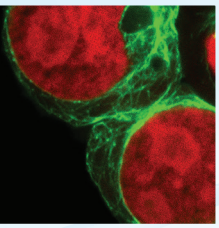
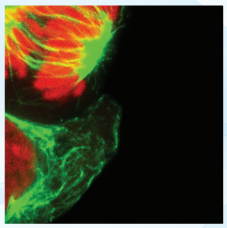
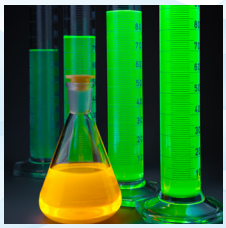


FluoroHub A+

TCSPC Lifetime Controller FL-0105

ELEMENTAL ANALYSIS
FLUORESCENCE
GRATINGS & OEM SPECTROMETE
OPTICAL COMPONENTS
FORENSICS
PARTICLE CHARACTERIZATION
RAMAN
SPECTROSCOPIC ELLIPSOMETRY


The world's highest performance TCSPC electronics!

For the ultimate performance in sub 100 ps lifetime measurements

Best timing resolution: 400fs/point
Low jitter: <3ps RMS
Shortest lifetime: 5ps
Large measurement range: 5ns to 22s

The FluoroHub A+ is the perfect tool for research labs routinely measuring fluorescence lifetimes <100ps. The FluoroHub A+ is also the best controller to fully take advantage of the available performance of MCP based TCSPC systems.

The FluoroHub A+ is simple to operate. It connects to any PC or laptop via a single USB 2.0 connection, since it does not require any PCI slots. This module measures lifetimes over 11 orders of magnitude without any additional cards or costly upgrades—perfect for multi-user facilities with many different application needs. And the entire system is controlled from our easy to use DataStation software.

Features

- Resolve lifetimes from 5ps to 1 second (depending on source and detector)
- Comprehensive sate-of-the-art analysis software
- USB 2.0 data link
- Ultra-low timing jitter (<10ps)
- Connection to other components such as our optional DeltaDiode Picosecond light sources controller via downstream USB socket
- Direct connection to our proprietary SpectraLED phosphorescence sources
- Optional driver card for our NanoLED nanosecond light sources for legacy systems

Of course, the FluoroHub A+ can be directly integrated with all our other TCSPC components:

PPD picosecond pulse detection modules

DeltaDiode™ picosecond light sources

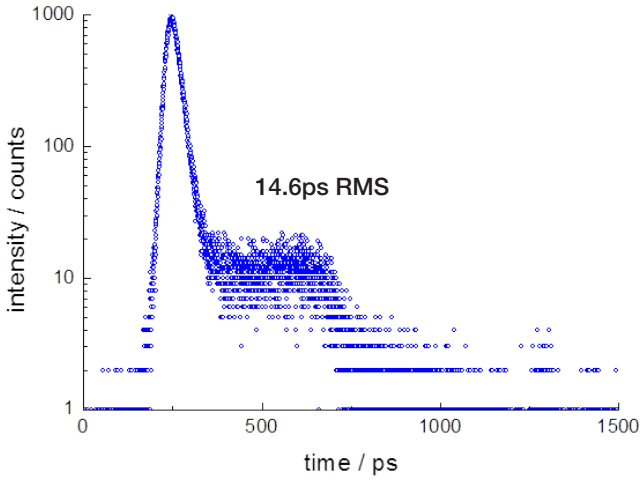
SpectraLED phosphores-cence light sources

JOBIN YVON Technology

Applications

- FRET (Förster Resonance Energy Transfer)
- Stern-Volmer quenching
- Anisotropy
- Protein fluorescence
- Phosphorescence lifetimes and anisotropy
- Acquisition of short lifetimes
- Lanthanide luminescence

Measurement Example



DeltaDiode-405L IRF FHWM 34ps measured with CFD-2G and R3809 MCP-PMT

Specifications

Minimum lifetime	5ps (with femtosecond laser and MCP)
Measurement ranges	5ns–22s
Electrical time resolution (time/pt)	400fs
Timing jitter	<10ps FWHM (<3ps RMS)
Maximum repetition rate	20MHz (recommended)
Maximum histogram size	16k
Phosphorescence resolution	42ns/pt
Interface	USB 2.0
Driver	32-bit and 64-bit Windows®
Dimensions	450 × 500 × 92mm (W × D × H)
Weight	8.8kg

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