

PTI New Product Release

TCSPC Enhancement for QuantaMaster™ and RatioMaster™ Systems

PTI once again introduces a new TCSPC option for its QuantaMaster™ and RatioMaster™ product lines, fully supported by its new FelixGX spectroscopy software package and FAST electronics. Time Correlated Single Photon Counting (TCSPC) offers an alternative to the company's current patented stroboscopic lifetime offering. TCSPC is ideal for fluorescence lifetime measurements if one wants to measure: short lifetimes—typically less than 80 picoseconds, or lifetimes in the NIR—above 900 nm or if one wants to make lifetime measurements rapidly with appropriate laser sources. This system enhancement can be added to older systems, it does require the FelixGX software and a computer that has XP operating system as a minimum.

Our new TCSPC system enhancements have numerous options. One can use economical LED sources or faster, more powerful diode laser sources for illumination. Depending on the laser sources and detectors used, one can measure lifetimes as short as 10 picoseconds routinely. Various NIR detectors are available that can extend the measurement range to cover from 300 nm to 1700 nm.

This is not our first venture in the TCSPC arena—we were the first to offer modern day TCSPC system in 1975 and have sold more lifetime system than any other manufacturer since. In addition to TCSPC we offer patented stroboscopic systems—which offer simplicity of operation and are very affordable.

Having been in the business the longest we can provide our users with some unique benefits:

While the TCSPC technique is not inherently simple, we have endeavored to eliminate as much of the complexity as possible. Our FelixGX software offers turnkey operation—no need to know anything about the technique and electronic parameters. Basic Acquisition menu comes pre-configured and ready to run. (Advanced Menu allows for software control of all parameters.)

The ultimate in versatility, we offer numerous systems and can virtually custom design the right one for you—without the custom designed price. Our sales and technical staff are very well versed in the lifetime technique and can help you to select the most appropriate and economical choice to meet your measurement needs. Our support does not stop with the sale.

While the FelixGX software spectroscopy package tries to make the complicated simple, it offers some really unique features. The software controlled electronic Sync Delay incorporated into the system (automatically calculated or user definable). Enables the user to change easily the time range and use lower less expensive repetition rate sources for longer lifetimes. Unique powerful Maximum Entropy (MEM) and Exponential Series (ESM) lifetime distribution analysis is included as standard.

For a complete description for the TCSPC system enhancement to your QuantaMaster™ or RatioMaster™ system, contact a PTI sales professional near you.

