



# MWFLIM-GaAsP

## 16-Channel Multi-Wavelength FLIM Detector with GaAsP Cathode

**Fluorescence lifetime imaging and single point decay recording with spectral resolution**

**Simultaneous detection in 16 wavelength channels**

**Based on BH's multi-dimensional TCSPC technique**

**High efficiency GaAsP cathode**

**Picosecond time resolution**

**Confocal laser scanning microscopes**

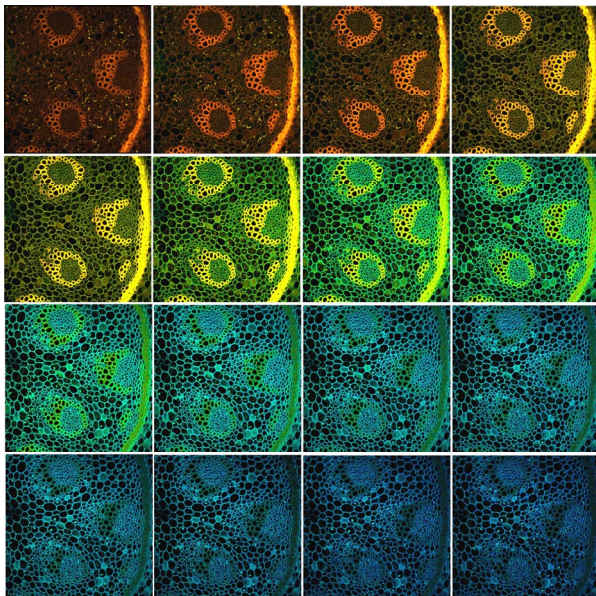
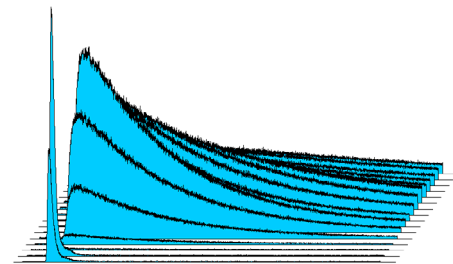
**Multiphoton microscopes**

**Upgrade for existing bh FLIM systems**

**Compatible with SPC-130EM, SPC-150, SPC-150N, SPC-160, SPC-830 TCSPC modules and**

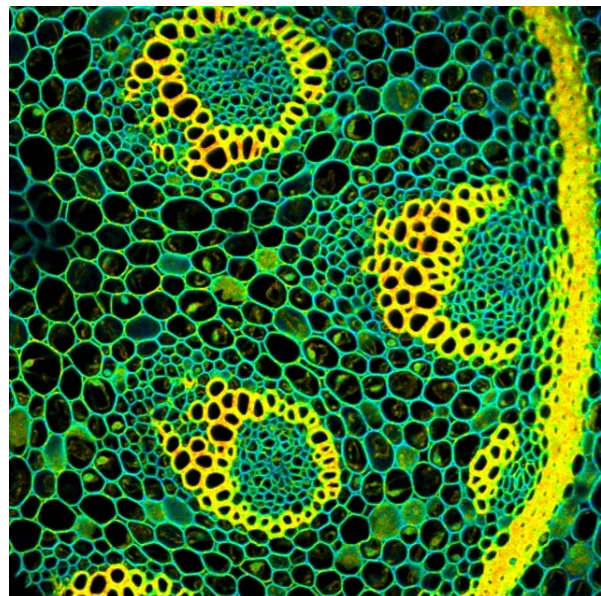
**Simple-Tau systems**

The MWFLIM GaAsP module detects fluorescence decay data in 16 spectral channels simultaneously. It uses an input fibre bundle for light collection, a grating polychromator for spectral dispersion, a Hamamatsu 16-channel multi-anode GaAsP PMT, and routing electronics for bh's multi-dimensional TCSPC technique. The detector can be used for multi-wavelength FLIM in combination with confocal or multiphoton laser scanning microscopes and for single-point multi-wavelength fluorescence decay measurements. The MWFLIM-GaAsP detector is controlled by a bh DCC-100 detector controller. It connects directly to the bh SPC-130EM, SPC-150, SPC-150N, SPC-160 and SPC-830 TCSPC / FLIM modules, and to the bh Simple-Tau 130EM, 150, 150N, 160, and 830 table-top TCSPC systems.



ti = 1000 ps ti = 5000 ps

Convallaria sample, 16 wavelength channels, 490 to 690 nm  
bh DSC-120 confocal FLIM system. Each channel 512x512 pixels



ti = 2000 ps ti = 4000 ps

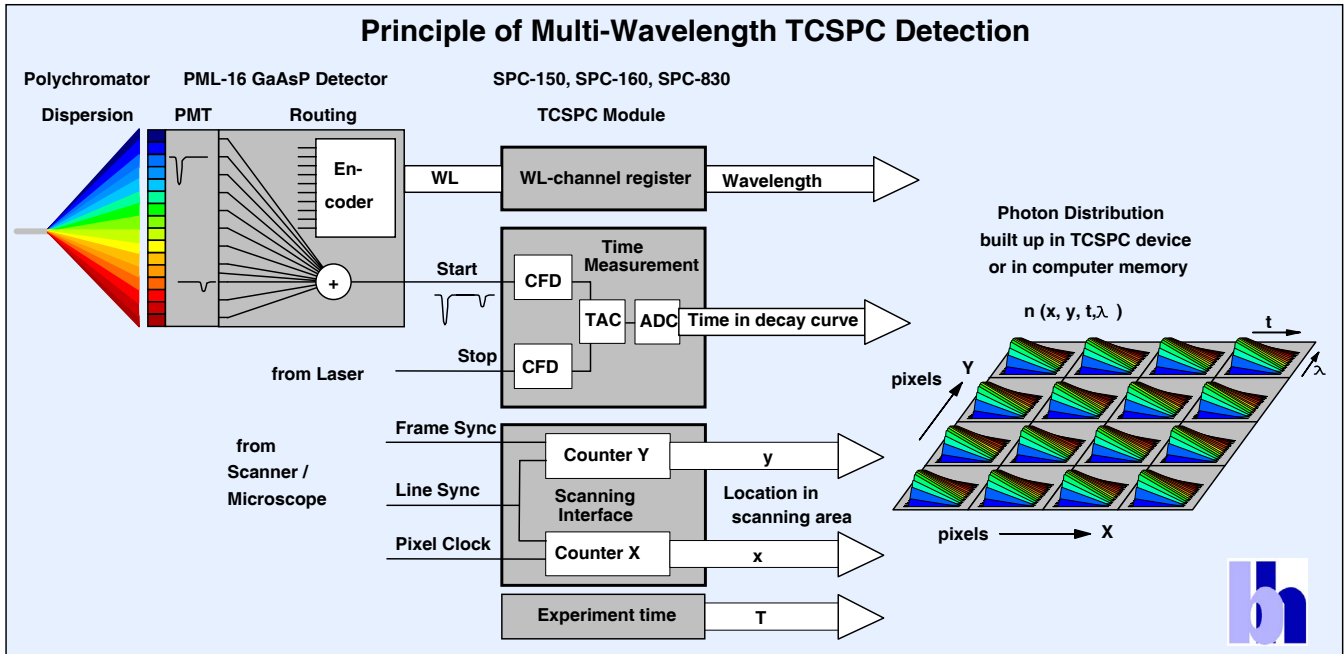
Image in 565 nm channel of data shown left. 512x512 pixels

**Technology Leader in TCSPC**





# MWFLIM-GaAsP Multi-Wavelength FLIM Detector

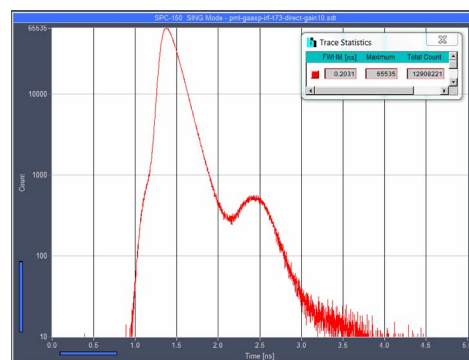
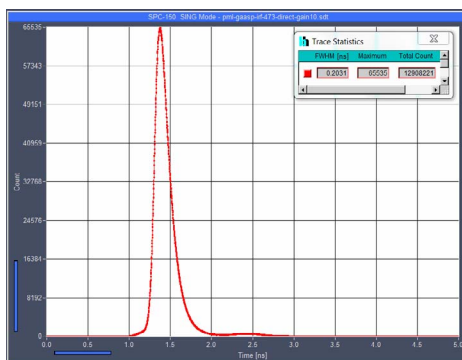


## Wavelength range and resolution

Grating Part No.	Primary wavelength region adjustable by set screw	Wavelength channel width	Width of recorded wavelength interval, channel 1 to 16	Blaze wavelength
77417	340-820 nm	18.75 nm	300 nm	500 nm
77414 (standard)	340-820 nm	12.5 nm	200 nm	400 nm
77411	340-820 nm	6.25 nm	100 nm	350 nm

## TCSPC instrument response function (IRF, single channel)

IRF width 200 to 250 ps FWHM



## International Sales Representatives



US:  
**Boston Electronics Corp**  
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