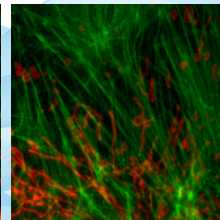
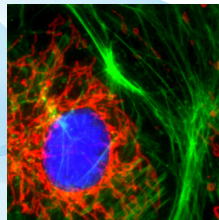
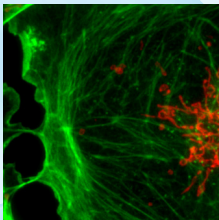
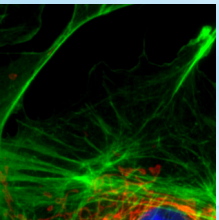
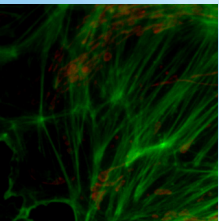


QuantaMaster 800

High Speed Spectrofluorometer

ELEMENTAL ANALYSIS
FLUORESCENCE
GRATINGS & DEM SPECTROMETERS
OPTICAL COMPONENTS
CUSTOM SOLUTIONS
PARTICLE CHARACTERIZATION
RAMAN / AFM-RAMAN / TERS
SPECTROSCOPIC ELLIPSOMETRY
SPR IMAGING



High Performance, Flexible Modular Design



The QuantaMaster™ 800 UV VIS Rapid Excitation is the latest high-speed multi-wavelength ratio fluorescence system from HORIBA. It incorporates our patented DeltaRAM X™ random access monochromator into our standard steady state spectrofluorometer to allow for rapid ratiometric measurements. Together with HORIBA's spectroscopy software, the HORIBA QuantaMaster™ 800 will meet your highest demands and be welcomed in a multiple user environment as well. So, whether you are a beginner, or an experienced fluorescence spectroscopist, the HORIBA QuantaMaster™ 800 is designed to meet all of your needs and your budget!

Applications

- Intracellular ion concentrations (Ca⁺⁺, pH, etc.)
- FRET
- Membrane fluidity
- Beta blockers
- RNA and DNA
- Membrane potential
- Multiple probe experiments
- Oxidants
- Steady state fluorometry
- And many more!

Accessories

- Peltier sample heater/cooler with rapid temperature control
- Solid sample holder
- Powdered sample holder
- Cold finger dewar
- Muscle strip accessory
- Microcuvette
- Polarizers
- Four-position sample holder
- Remote sensing accessory
- Integrating sphere
- Stopped flow accessory
- Titrator

Upgrade Options

- Dual emission (T-format)
- NIR upgrade
- Lifetime upgrade
- Fluorescence microscopy

Specifications

Light Source	High efficiency continuous Xenon arc lamp. 75W standard, 150W optional
Excitation Wavelength Selection	Patented DeltaRAM X™ random access monochromator
Excitation Wavelength Range	290–650 nm under synch-lock computer control. (Optional scanning range: 290–650 nm)
Wavelength Selection Speed	< 2 milliseconds point to point
Acquisition Rate	1MHz single wavelength
Wavelength Accuracy	+/- 1 nm
Stray Light Rejection	10 ⁻⁶
Beam Uniformity	< 5%
Bandpass	Continuously adjustable from 0 to 25 nm
Optical Output	15mW at 10 nm bandwidth
Light Delivery	2 meter length 2 mm core diameter liquid light guide (other sizes and lengths optional)
Emission Wavelength Selection	Coma-aberration corrected, asymmetrical, excitation optimized, Czerny-Turner design
Focal Length	300 mm
Wavelength Range	180 nm to 24 microns
Bandpas	Continuously adjustable from 0 to 15.6 nm
Wavelength Resolution	0.022 nm
Throughput	Approximately 75% multiplied by grating efficiency curve Approximately 52% for the grating blazed at 300 nm
Accuracy	+/- 0.2 nm
Step Size	Can vary, to a minimum of 0.022 nm, micro stepping
Detection	Photon counting/analog
Emission Range	185 nm to 680 nm (optional to 900 nm)
Data Acquisition Rate	1MHz with a single analog detector
Inputs	4 analog (+/- 10 volts) 2 photon counting (TTL) 1 analog reference channel (+/- 10 volts)
Outputs	2 TTL 2 analog (+/- 10 volts)
System Control	Computer interface with spectroscopy software
Signal to Noise Ratio	6,000:1 or better

HORIBA

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