



QuantaMaster™ 40

Steady State Spectrofluorometer with Q-4 Phosphorescence Upgrade

The Q-4 Phosphorescence Upgrade includes a pulsed xenon light source and a gated PMT detector as well as excitation and emission flipping mirrors.

Specifications

Steady State

Emission Range	185 to 680 nm (optional to 900 nm)
Detection Limit	460 attomolar
Steady State Light Source	High power continuous Xenon arc lamp
Monochromators	Czerny-Turner design
Focal Length	200 mm
Excitation Grating	1200 line/mm 300 nm blaze
Emission Grating	1200 line/mm 400 nm blaze
Optional Grating	75–2400 line/mm and holographic models available
Bandpass	0–24 nm, continuously adjustable (computer control available)
Wavelength Accuracy	± 0.25 nm
Resolution	0.25 nm
Detection	Photon counting/analog
System Control	Computer interface with spectroscopy software

Phosphorescence

Detection Limit	50 femtomolar
Minimum Lifetime	400 ns
Data Acquisition Rate	0.2 points/sec to 60 points/sec
Light Source	High power Xenon flash lamp
Repetition Rate	1 to 300 Hz (software controllable)
Pulse Width	1–2 µs
Detection	Gated (gate width and position software controlled)
Temporal Resolution	20 ns

Measure lifetimes greater than 400 nanoseconds!

