

NS MiniTracer Specifications

Fluorescence excitation laser	638 nm, 100 mW standard Other wavelengths available
Fluorescence configuration	High numerical aperture epifluorescence
Fluorescence spectral range	900-1600 nm
Near-infrared detector type	512 element TE-cooled InGaAs array
Limit of detection	$< 10^{-9}$ g single-walled carbon nanotubes
Minimum sample volume	120 μ L
Absorption light source*	Stabilized tungsten-halogen lamp
Absorption spectral range	900-1600 nm
Absorption spectral resolution	6 nm
Absorption ceiling	3 AU
Absorbance noise (rms)	$< 2 \times 10^{-4}$ AU at 0 AU for 10 s integration
Power consumption	40 W max (excluding computer)
Main Module dimensions	6.5" W x 8.5" D x 5.5" H (165 x 215 x 140 mm)
Spectrometer Module dimensions	7.2" W x 4.3" D x 1.9" H (182 x 110 x 47mm)
System weight	8 lbs (3.7 kg), excluding notebook computer

*Absorption capability is optional