

Raman Spectroscopy Systems

Equipment name: Raman Spectrometer

Manufacturer: Ocean Optics

Model: Maya2000 PRO

Description: Optical fiber coupled Raman spectrometer is widely used for Raman spectroscopy measurements coupled with the 785 nm mini laser manufactured by PD-LD Inc. (Model: LML-785.0CB-10). The optical power of the system can go up to 500 mW and the Linewidth is 1.3 cm^{-1}

Specifications:

PHYSICAL	
Dimensions (mm):	182 x 110 x 47
Weight:	1.18 kg (2.6 lb.)
DETECTOR	
Type:	Back-thinned, 2D
Detector:	Hamamatsu S11510 (uncooled)
Quantum efficiency:	~85% peak QE @ 700 nm; 40% QE @ 1000 nm
SPECTROSCOPIC	
Spectral range (preset):	700-1100 nm
Optical resolution (FWHM):	~0.82 nm
Signal-to-noise ratio at full signal:	~450:1
Dynamic range:	15000:1 (typical)
Integration time:	7.2 ms-5 seconds
Fiber optic connector:	SMA 905 to 0.22 numerical aperture single-strand optical fiber
ELECTRONICS	
Power requirement:	500 mA @ +5 VDC

Trigger modes:	4 modes
Strobe functions:	Yes
Interfaces:	USB 2.0, RS-232
ENVIRONMENTAL CONDITIONS	
Temperature:	0 °C to +50 °C (operation)
Humidity:	0-90% non-condensing

Please contact person in charge for training and usage.

Equipment Pictures:

