SE-Laser

StellarElite Raman Laser Platform
Raman Excitation Lasers

The StellarElite Raman Laser Platform is a family of high-stability, continuous-wave excitation lasers designed for laboratory, process, and microscope-based Raman spectroscopy. Available in multiple wavelengths, each laser delivers precise power control, integrated safety features, and USB connectivity for seamless system integration and automated workflows.

Key Platform Features

- Available Raman excitation wavelengths including 532 nm (DPSS), 785 nm, and 1064 nm
- Continuous-wave operation optimized for long-term stability and repeatable Raman measurements
- Precision adjustable output power to accommodate sensitive samples and varying signal requirements
- Integrated LCD display for live status, power setting, and fault indication
- On/Off USB control integrated into StellarPro software
- Built-in E-Stop and safety interlock support for compliant laboratory and process use
- Designed for microscope-coupled, benchtop, and in-line/process Raman applications

Available Wavelength Options

- 532 nm DPSS Raman Laser – ~100 mW continuous output
- 785 nm Raman Laser – ~500 mW continuous output
- 1064 nm DPSS Raman Laser – ~500 mW continuous output

(Additional wavelengths available upon request.)

Typical Applications

- Raman microscopy and micro-analysis
- Materials identification and characterization
- Pharmaceutical and chemical analysis
- Microplastics, polymers, and forensic analysis
- In-line and process Raman monitoring

System Specifications

Specification	Units	Specification
Center Wavelength	nm	532 ±1nm | 785 ±1nm | 1064 ±1nm
Output Power	mW	100 mW | 500 mW | 500 mW
Laser Output Power Stability		<3%
Laser Beam mode		TEM_{00}
TE Mode/Beam profile	FWHM	<0.1 nm
Spectrum Stability		<0.1 nm

www.stellarnet.us +1(813) 855-8687 Fax: +1(813) 855-0394