

BRM CleanLaze™ End User Series

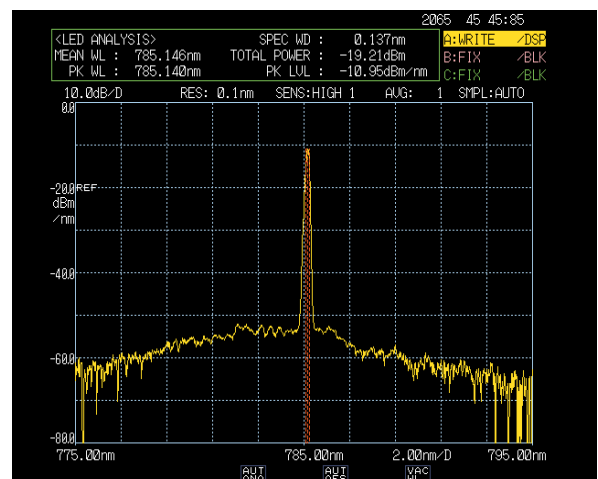
Spectrum Stabilized Laser for Raman Sepectroscopy



The BRM Series Laser is a narrow spectral linewidth, high power laser, specifically developed for the application of Raman spectroscopy. It is based on a novel light amplification and narrowing technology. It is compact and rugged for various industrial applications with an integrated laser driver, thermoelectric cooler, TEC controller and highbrightness fiber coupling.

Features and Typical Applications

- 785nm, 808nm, 830nm, 976nm available
- Fiber coupling: 100 μm @ 0.22 NA or $\sim 5 \mu\text{m}$ @ 0.13 NA
- Narrow spectral linewidth (as narrow as $< 0.03 \text{ nm}$)
- Compact package integrated with laser & driver
- Hermetically sealed laser component
- Rugged design with key component laser welded
- Long lifetime $>10,000 \text{ hrs}$
- Best performance to cost ratio
- For various on-line applications
- Ideal for Raman spectroscopy and laser pumping
- Custom engineering and special configurations



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Spectrum Stabilized Laser for Raman Spectroscopy

Typical Specifications

Preliminary

Optical Specifications	-785-0.30	-785-0.45	-785-0.55	-785-1.0	-785-0.05S	-785-0.07S
Power Output (CW)	> 300 mW	> 450 mW	> 550 mW	> 1000 mW	> 50 mW	> 75 mW
Peak Wavelength	785 +/- 0.3 nm					
Spectral Linewidth (FWHM)	Typically < 0.2 nm Max. < 0.3 nm				< 0.03 nm	
Optical Power Stability	< 3 % p-p over 8 hrs					
Noise	< 0.5 % rms					
Output Fiber	Multi-mode fiber (100 um @ 0.22 NA)				Single-mode fiber (~5 um @ 0.13 NA)	
Connector	SMA 905 (ST, FC/PC optional)				FC/APC	
Expected Lifetime	> 10,000 hrs					
Electrical Specifications						
Input Power	100-240V AC					
Control	TTL modulation 0 - 100 kHz (optional)					
Cooling	Internal Thermoelectric cooled					
Warm-up Time	< 15 min.					
Mechanical Specifications						
Physical Dimensions	155(W) x 89(H) x 255(D) mm					
Weight	2 kg					
Environmental Specifications						
Ambient Temperature	10 to 35°C					
Humidity	5 - 95%, non-condensing					

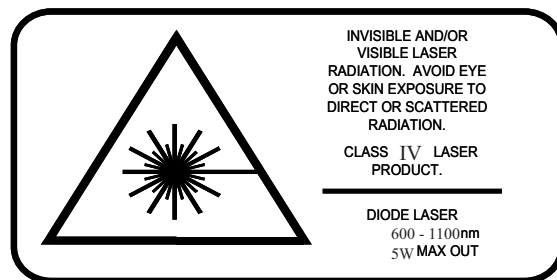
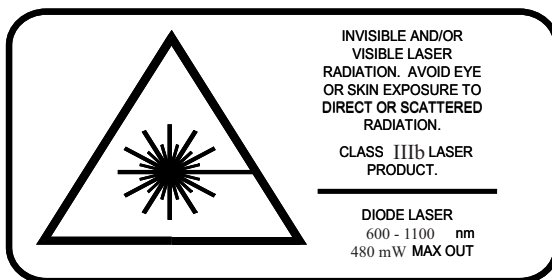
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Spectrum Stabilized Laser for Raman Sepectroscopy

Typical Specifications (Con.)

Optical Specifications	-808-0.45	-830-0.30	-976-0.45	-976-4.0
Power Output (CW)	> 450 mW	> 300 mW	> 450 mW	> 4 W
Peak Wavelength	808 +/- 1 nm	830 +/- 1 nm	976 +/- 1 nm	976 +/- 1 nm
Spectral Linewidth (FWHM)	< 0.3 nm	< 0.3 nm	< 0.3 nm	< 0.3 nm
Optical Power Stability	< 3 % p-p over 8 hrs			
Noise	< 0.5 % rms			
Output Fiber	Multi-mode fiber (100 um @ 0.22 NA)			
Connector	SMA 905 (ST, FC/PC optional)			
Expected Lifetime	> 10,000 hrs			
Electrical Specifications				
Input Power	100-240V AC			
Control	TTL modulation 0 - 100 kHz (optional)			
Cooling	Internal Thermoelectric cooled			
Warm-up Time	< 15 min.			
Mechanical Specifications				
Physical Dimensions	155(W) x 89(H) x 255(D) mm			
Weight	2 kg			
Environmental Specifications				
Ambient Temperature	10 to 35°C			
Humidity	5 - 95%, non-condensing			



DISCLAIMER: Non Medical, Sold in US: This product complies with the requirements with Federal Regulations CDRH 21 CFR 1040.10. This laser is intended for scientific and industrial applications only and is not for use as a medical device.