



Diode Lasers

GB-530

BRILLIANT GREEN SINGLE FREQUENCY MODULE



Key Performance Features

- 530 nm Emission Wavelength
- Single Frequency/Single Mode
- Excellent Power & Wavelength Stability
- Fully Integrated OEM Solution
- Digital & Analog Control Functions
- Free-space or Fibered Outputs

Applications

- Raman Excitation Source
- Flow Cytometry
- Confocal Microscopy
- Interferometry
- Metrology
- Fluorescence Excitation

Center
Wavelength
(+/- 0.5 nm)

530nm



	Units	Value
Operating Specifications		
Output Power*	mW	50-80
Spectral linewidth (typical)	MHz	<100
Wavelength stability (max)	pm	<3
ASE suppression (typical)	dB	40
Optical power stability (typical)	% pk-pk	<2
Noise (10Hz-10MHz)	% rms	<0.2
Power adjustability	%	50-100

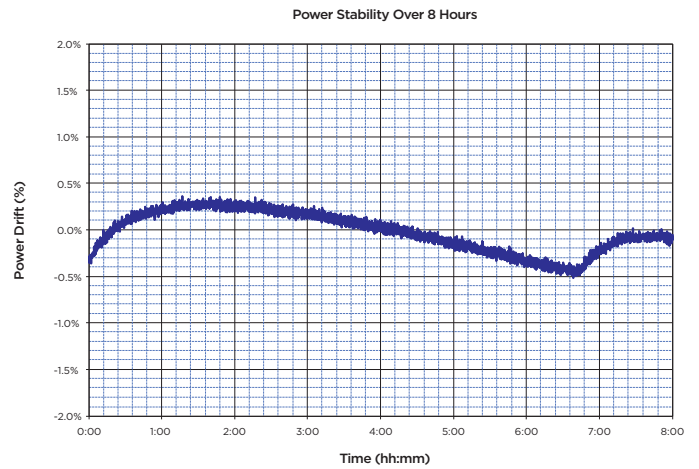
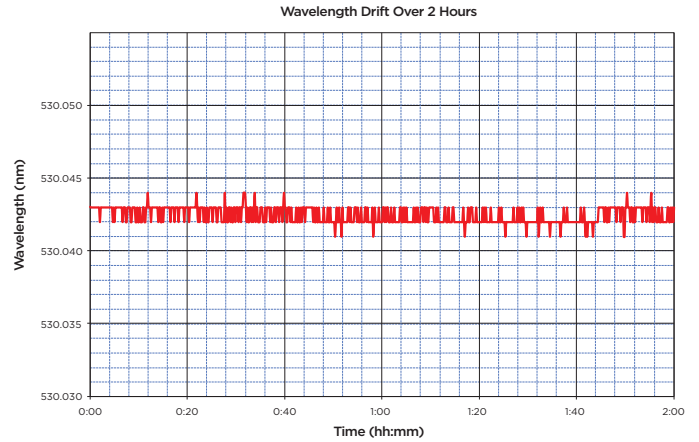
* See Ordering information for Options.

	Units	Value
Free Space Optical Specifications		
Beam quality (m^2 typical)		1.2
Beam diameter	mm	0.8 x 1.5
Beam aspect ratio		2:01
Beam divergence—vertical	mrad	0.8
Beam divergence—horizontal	mrad	1.5
Beam pointing stability	rad	<50
Polarization ratio	linear	

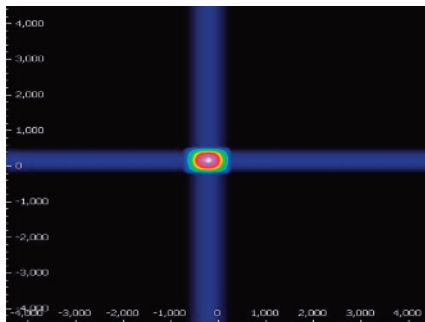
	Units	Value
Electrical Specifications		
DC input (max)		2A @ 5V
Warm-up time (typical)	min	<3
Power consumption (typical/max)	W	5
Interface—USB, TTL, Analog		

	Units	Value
Environmental Specifications		
Ambient temperature*	°C	+10-+40
Humidity (non-condensing)	%	5-95

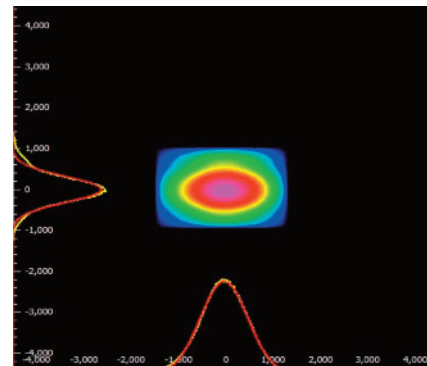
* Must be operated on a heat sink.



Free Space Beam
Near Field



Free Space Beam
Far Field



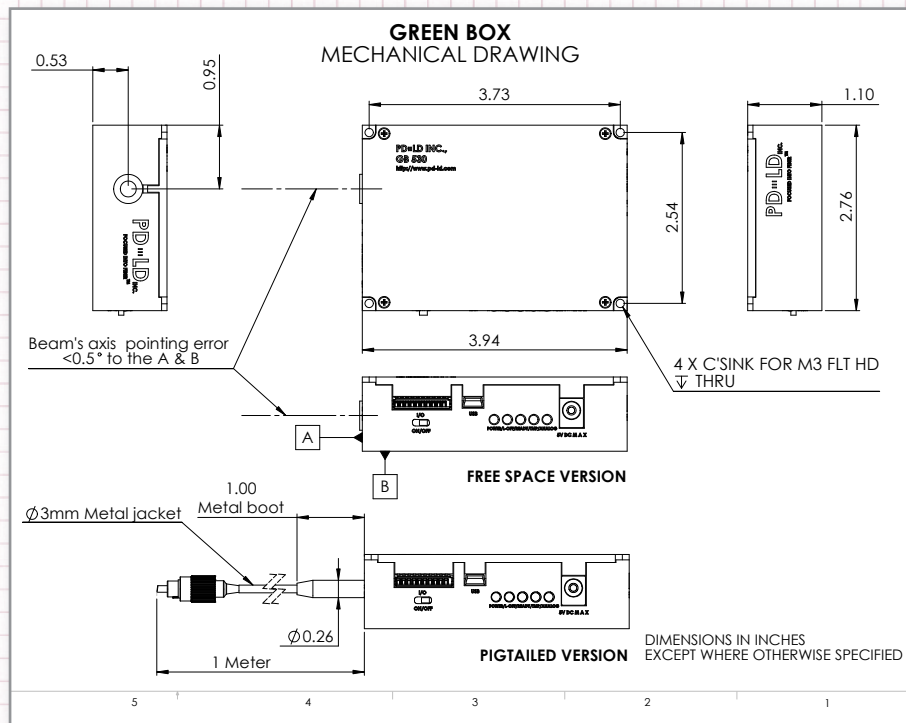


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Weight = 320 grams Dimensions = 196cm³ (12 in³)





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Ordering Information

Part Number	
GB530-MMf	105 μ m core fiber with FC/APC
GB530-SMF	3.3 μ m core fiber FC/APC
GB530-PMF	3.3 μ m polarization maintaining fiber with EC/APC
GB530-FS	Free Space Output

