

GREEN

Just got a whole lot better
with the **GPD Green Laser Diode Module**



The GPD series **green laser diode module** is a high stability, cost effective replacement for DPSS applications. The GPD features wavelengths of 405-520nm with 1mW – 50mW of output power.

Our GPD provides you with higher stability than most DPSS modules thanks to an internal photodiode which allows for Automatic Power Control. The GPD's stability is unmatched by inexpensive DPSS lasers.



Applications

- Aiming, Pointing & Alignment
- Dimensional Scanning
- Road & Rail Inspection
- Fluorescence
- Illumination

The GPD Series laser modules are designed exclusively to host green laser diodes that do not have their own internal photodiode. The GPD overcomes this challenge by integrating an internal photodiode after a collimating lens. This configuration allows for Automatic Power Control (APC) mode of operation. APC Control is not available on a majority of competing DPSS lasers at these wavelengths. The stability of this configuration can not be matched by inexpensive DPSS lasers.

They can deliver from 1mW to 50mW of output power with a wavelength of 405nm to 520nm.

Additional design features include

great wavelength stability, excellent optical power stability, and CW output. Output power is adjustable by turning a potentiometer on rear of the unit.

For Machine Vision applications, PTI suggest our PNF™ Series laser module at 510nm. It offers even intensity line generators and other features specific to the machine vision industry.

In addition, Power Technology, Inc. provides custom design and manufacturing services that include high and low volume production, custom engineering, and customized connectors. Find out more. Call Power Technology today.

Specifications	GPD(405-50)	GPD(450-40)	GPD(510-30)	GPD(520-40)
Wavelength (nm)	405nm	450nm	510nm	520nm
Color	Violet	Blue	Green	Green
Output Power (mW)	1mW - 50mW	1mW - 40mW	1mW - 30mW	1mW - 40mW
Output Power Stability @ 25°C	<±0.2%			
Output Power Stability, over temp range	<±0.5%			
Noise rms (10Hz - 5MHz)	<±1%			
Beam Properties	Collimated			
Beam Size (collimated)	1.17 x 2.28 mm	.92 x 2.3mm	0.81 x 2.36	0.81x2.36mm
Divergence (collimated)	<1mRad	<1mRad	<1mRad	<1mRad
Spatial Mode	TEM ₀₀			
User Focusable	No			
Output Parameter	CW			
Vibration (non-operating)	6 G (20 - 200Hz)			
Shock	TBD			
Operating Voltage (VDC)	8VDC			
Maximum Operating Current (mA)	200mA			
Temperature Range (°C)	0-35°C			
Beam Pointing Stability	<10µRad/°C			

