



Model: DP-532NM-200MW



Free Space or Fiber Coupled Models Available

Low Noise 532nm Scientific Series Laser Module; 200mW Output Power with Excellent Beam Quality

- High Stability 532nm Diode Pumped Solid State Laser Module, Beam Mode TEM₀₀
- User Adjustable Output Power up to 200mW
- Includes Power Supply, USB Interface and Control Software for Fast Simple Set-Up
- Ultra-Compact Module: 63.5mm × 31.0mm × 32.5mm

WORLD LEADING PRODUCTS
FOR LASER SCIENTISTS AND ENGINEERS

Product Overview:

The model DP-532NM-200MW is a high stability 532nm DPSS green laser which delivers up to 200 mW of low noise output power. These modules are designed for demanding applications that require both high stability and excellent beam quality. They offer user adjustable output power, a USB interface (RS232 optional) and control software. These modules are also offered at other maximum output powers from 75 mW up to to 200 mW. The standard model is 200mW.

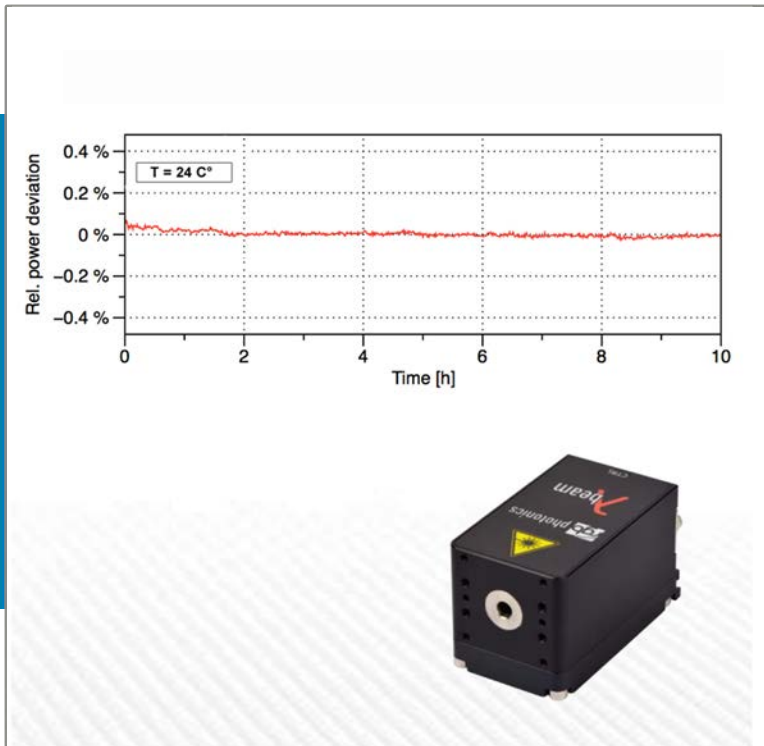
The design and small footprint are optimized to provide easy integration into OEM systems or in a lab R&D set-up. The included PowerBox power supply module and the control software make set-up and operation of this laser quick and simple. These lasers have a wide range of options including a mechanical shutter and a fiber coupled output adapter.

All operating parameters can be set, monitored and controlled from your PC using the included Ltune laser control software for Windows. A simple to use graphical interface allows you to adjust the laser power, the temperature (*temp. control not available on DPSS models*) and all configuration parameters. The laser can also be controlled from your own application software. Please request the Operating Manual for a detailed description of the communication protocol.



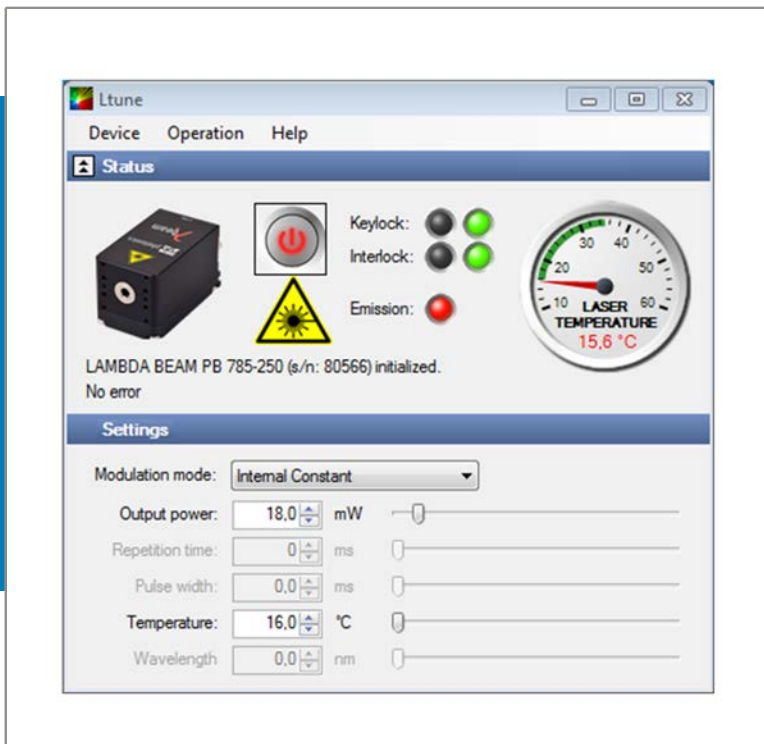
FIBER COUPLED OR FREE SPACE OUTPUT

The DP-532NM-200MW can be ordered with a free space output (standard) or with a fiber coupling adapter and fiber pigtail.



HIGH STABILITY OUTPUT

The DP532NM-200MW is designed to deliver industry leading power stability over both short and long time intervals. The low noise power supply and careful attention to electro-optical design provides a high stability output for the most demanding applications.



SIMPLE SET-UP AND CONTROL

All operating parameters can be monitored and controlled from a PC using the Ltune laser control software for Windows. Alternatively, the laser can easily be controlled from your own application software.

DP-532NM-200MW SPECIFICATIONS

Beam specifications		
	Diode lasers	DPSS lasers
Beam diameter	1.1 × 2.2 to 1.2 × 4.3 mm	Round beam 1.2 mm
Divergence	< 1.2 mrad	
Beam mode	TEM ₀₀ (except multi-mode lasers)	
Polarization	Linear, > 100:1	Linear, > 10:1
Beam alignment	< 5 mrad and < 0.1 mm (compared to base mount)	
Pointing stability	< 5 μrad/K	
Noise	< 2 % RMS	
Power stability	< 1 % (10 h)	< 3 % (8 h)
Temp. accuracy	< 10 mK	
Warm-up time	Ready for use after 5 s, calibrated operation after 5 min	
Drive mode	Active current control	Active power control
Modulation	Adjustable constant power, analog & digital external modulation up to 1.5 MHz	Constant nominal power, switchable up to 1 kHz ^{*3}
Control modes	Power, temperature and modulation mode via USB, optional remote control available	Power and modulation mode via USB

The actual emission wavelength may deviate from the specified wavelength by up to ± 5 nm (± 1 nm on request). It depends on the actual output power and can be fine-tuned by adjusting the temperature (except DPSS lasers).

General specifications	
CDRH classification	3b, 4 (for laser output > 500 mW)
Dimensions	63.5 × 31.0 × 32.5 mm (technical drawing available on our website)
Weight	94 g (laser head)
Operating temperature	0 °C to 45 °C (non-condensing)
Storage temperature	-25 °C to 70 °C

^{*1} multi-mode ^{*2} Water cooler recommended

^{*3} Acusto-optical modulator recommended for stable and faster modulation

DP-532NM-200MW POWER SUPPLY

PowerBox



The model DP-532NM-200MW includes the PowerBox DC power supply module. This power supply is required in order to safely and accurately power the laser head module. It connects to the laser head module through a d-Sub connector.

Modulation input	analog and digital 0 – 5 V DC
Modulation	up to 1.5 MHz
Digital interface	USB*1 (RS-232 optional)
Further control inputs	Interlock
Power consumption	12 – 36 V DC, up to 2 A (depending on laser output power)
Dimensions	39.0 × 31.0 × 32.5 mm (technical drawing available on our website)
Weight	69 g

For more details, please see the PowerBox data sheet.

Please contact us if your requirements are not matched by these specifications. Custom modifications are available for any quantities. All specifications are subject to change without notice. The latest versions can be found on our website.

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AVAILABLE WAVELENGTH AND POWER OPTIONS

Type	Wavelength	Maximum output power
Diode	375 nm	20, 75, 200 ^{*1} mW
Diode	395 nm	120 mW
Diode	405 nm	75, 125, 175, 200, 300 ^{*2} , 500 ^{*1*2} , 1000 ^{*1*2} mW
Diode	415 nm	120 mW
Diode	422 nm	120 mW
Diode	430 nm	50 mW
Diode	445 nm	75, 100, 250 ^{*1} , 500 ^{*1*2} , 1000 ^{*1*2} mW
Diode	450 nm	75, 250 ^{*1} , 500 ^{*1*2} , 1000 ^{*1*2} mW
Diode	455 nm	100 mW
Diode	473 nm	100 mW
Diode	488 nm	25, 75, 200 mW
Diode	505 nm	75 mW
Diode	515 nm	25, 75 mW
Diode	520 nm	50, 120, 250 ^{*1} , 500 ^{*1*2} mW
DPSS	532 nm	75, 100, 125, 175, 200 mW
Diode	633 nm	75 mW
Diode	635 nm	75, 125, 300 ^{*1} mW
Diode	638 nm	75, 125, 175, 250 ^{*1} , 500 ^{*1} mW
Diode	642 nm	75, 125, 175 mW
Diode	650 nm	150, 200 ^{*1} mW
Diode	660 nm	75, 125, 175, 250 ^{*1} mW
Diode	670 nm	15, 250 ^{*1} , 500 ^{*1*2} mW
Diode	685 nm	40 mW
Diode	690 nm	350 ^{*1*2} mW
Diode	705 nm	40 mW
Diode	730 nm	40 mW
Diode	760 nm	20 mW
Diode	785 nm	75, 125, 250, 375 ^{*2} mW
Diode	805 nm	500 ^{*1*2} mW
Diode	808 nm	75, 125, 175, 1000 ^{*1*2} mW
Diode	830 nm	45, 75, 125, 1000 ^{*1} mW
Diode	852 nm	75, 125 mW
Diode	905 nm	100 mW
Diode	915 nm	75, 125, 175, 250, 1000 ^{*1*2} mW
Diode	940 nm	75, 125, 175, 250 mW
Diode	976 nm	75, 125, 175, 250 mW
Diode	980 nm	75, 125, 175, 250, 1000 ^{*1*2} mW
Diode	1064 nm	125, 175, 300 ^{*2} , 500 ^{*2} , 1000 ^{*1*2} mW

These high stability laser modules are available at many different wavelengths and power levels. Please request information if you are interested in receiving price information or more detailed product information on another wavelength or output power model listed in this table.

Product Warranty:

This product is offered with a 12 month warranty for all materials and workmanship, all parts and labor. The warranty does not include customer induced product damage.

Our Customer Commitment:



You Get Direct, Fast Tech-Support from a Product ENGINEER ... Not a Sales Person

You get DIRECT access to the correct factory engineer for your product. We eliminate the sales person "middle-man" back and forth time delays resolving technical issues. No more "Contact Us" forms. Every product has an assigned engineer in our auto-messaging data base to give you direct, immediate access to the correct tech-support info.



Warranty

All products from Laser Lab Source come with a 12 month factory warranty. The warranty is honored and transacted directly by Laser Lab Source.



You Get the Lowest Factory-Direct Prices Worldwide

All of our 3rd party global suppliers set & quote their own direct pricing. There are NO Mark-Up's. You get their lowest direct price.

Product Manufacturer:

This product is manufactured by **RGB Photonics, GmbH**. It is offered for purchase in select regions from Laser Lab Source. If you would like to contact RGB Photonics directly, please use the contact details below:

RGB Photonics GmbH
Donaupark 13
93309 Kelheim
Germany

Tel.: +49 9441 17 50 33 - 0
Fax: +49 9441 17 50 33 - 92
sales@rgb-photonics.com
www.rgb-photonics.com

