



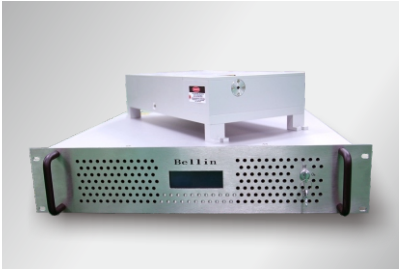
LASER SOURCES CATALOGUE

Suzhou Delphi Laser Co., Ltd.

www.delphilaser.com



Suzhou Delphi Laser Co., Ltd. is a joint venture funded by investments from Australia and China. We are devoted to the development, manufacturing, and marketing of high-end laser products for applications in the semiconductor, consumer electronics, medical, solar cell, LCD, and LED/OLED industries as well as for use in scientific research and R&D. In addition to UV and ultra-fast DPSS lasers, the company offers customized laser systems and services for fine cutting, micro-drilling, etching, marking, and welding.



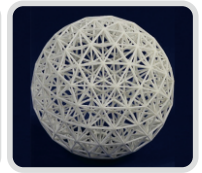
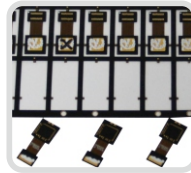
The ultraviolet series lasers take advantage of an advanced resonant cavity design and cutting-edge laser control system technology to deliver better beam divergence and narrower pulse widths at high-power work settings. The gain medium is composed of Nd:YVO₄. Pulse repetition rates can be adjusted, ranging from 20kHz to 150kHz depending on the model.

* Features

- Available in a variety of power outputs
- TEM₀₀ (M²<1.3)
- Long-run working stability
- Small size and compact structure
- Controlled by PC terminal through RS232 port using GATE, TRIGGER, and PWM signals
- Laser diode module can be replaced rapidly

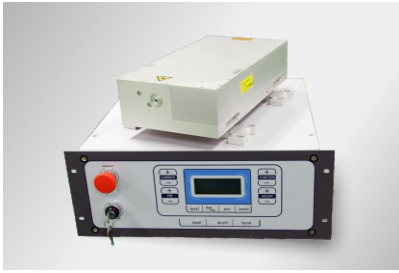
* Applications

- Stereolithography (3D printing)
- Scientific research
- Film cutting and etching
- Ceramics cutting
- Material micromachining
- Wafer cutting



* Specifications

Model	DP101	LP104	MP101	HP102-10	HP102-15
Wavelength (nm):	355				
Pulse Repetition Rate (kHz):	20-100			40-100 (up to 150kHz)	
Pulse Width (ns):	<20@30kHz		<25@30kHz	<20@40kHz	
Average Power (W):	0.5@100kHz	2.0-3.0@30kHz	5.0-7.0@30kHz	10.0@40kHz	15.0@40kHz
Average Power Stability:	<±3% over 8 hours				
Pulse-to-Pulse Instability:	<3% rms				
Spatial Mode:	TEM ₀₀ (M ² <1.3)				
Beam Divergence:	<2 mrad(full angle)				
1/e2 Beam Diameter:	0.6±0.1mm	0.5±0.1mm	0.8±0.1mm	1.2±0.1mm	
Beam Roundness:	>90%				
Pointing Stability:	<50 urad				
Polarization Direction:	Horizontal				
Polarization Ratio:	100:1				
Cooling:	Water-cooling				
Ambient Temperature (°C):	15-30				
Storage Temperature (°C):	-10-50				
Relative Humidity:	10%-80% (non-condensing)				
Warm-up Time (mins):	<10				
Electric Supply:	90-260 VAC				



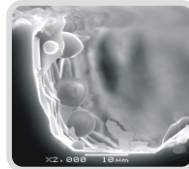
The green series laser diode end-pumped acousto-optic Q-switched lasers employ a leading-edge resonator design and advanced laser-control technology to achieve excellent beam quality and pulse widths at high power work settings. Special thermal compensation and frequency conversion technologies enable these devices to perform harmonic conversion at high rates of efficiency and stability. Nd:YVO₄ crystals are used for the gain medium and pulse repetition rates are adjustable.

* Features

- Specialized for glass cutting and drilling
- TEM₀₀ (M²<1.3)
- Long-run working stability
- Small size and compact structure
- Controlled by PC terminal through RS232 port using GATE, TRIGGER, and PWM signals
- Laser diode module can be replaced rapidly

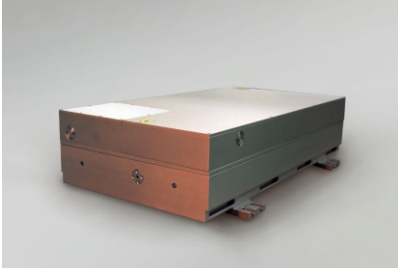
* Applications

- Glass cutting and drilling
- Thin film solar scribing
- Monocrystalline silicon scribing
- Glass/ceramics marking
- Micro-drilling
- PCB drilling



* Specifications

Model	GR108	GR120
Wavelength (nm):	532	
Pulse Repetition Rate:	40-100kHz	10Hz to 150kHz (optional: single shot to 200 kHz)
Pulse Width (ns):	12@50kHz	18@30kHz
Average Power (W):	8.0@50kHz	20.0@30kHz
Average Power Stability:	<±3% over 8 hours	<±3% over 12 hours
Pulse-to-Pulse Instability:	<3% rms	
Spatial Mode:	TEM ₀₀ (M ² <1.3)	
Beam Divergence:	<2 mrad (full angle)	
1/e ² Beam Diameter:	0.6±0.2 mm	0.5 mm
Beam Roundness:	>90%	
Pointing Stability:	<50 urad	
Polarization Direction:	Vertical	
Polarization Ratio:	100:1	
Cooling:	Water-cooling	
Ambient Temperature (°C):	15-30	
Storage Temperature (°C):	-10-50	
Relative Humidity:	10%-80% (non-condensing)	
Warm-up Time (mins):	<10	
Electric Supply:	90-260 VAC	



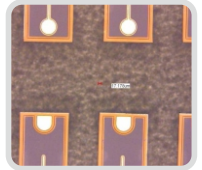
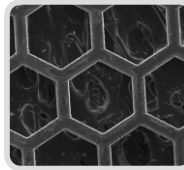
The picosecond series lasers employ an advanced resonant cavity design and leading-edge laser-control system technology to achieve better beam divergence and very narrow pulse widths at high power work settings. Nd:YVO₄ crystals are used for the gain medium. With pulse widths in the low picoseconds range, these lasers are capable of delivering superior processing results with smaller heat-affected zones. Adjustable pulse repetition rates range from 50 to 1000kHz depending on the model.

* Features

- For precise material processing requirements
- TEM₀₀ (M²<1.3)
- Long-run working stability
- Controlled by PC terminal through RS232 port using GATE, TRIGGER, and PWM signals
- Laser diode module can be replaced rapidly
- Small size and compact structure

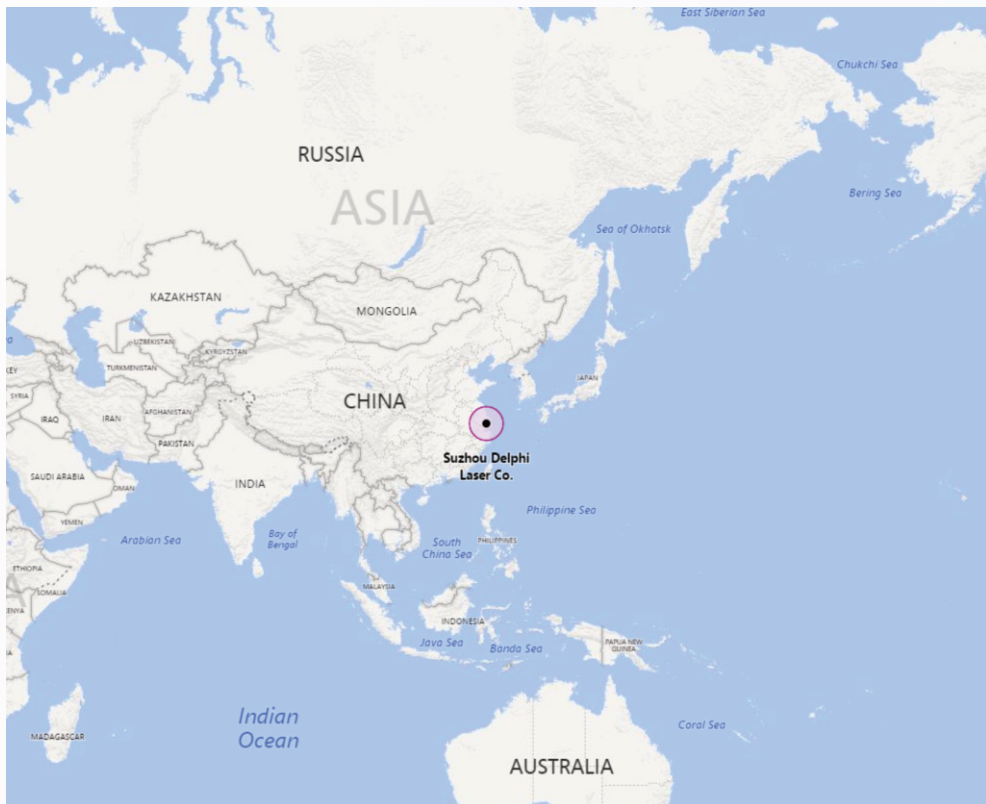
* Applications

- Ceramics cutting
- Glass/sapphire cutting
- Material micromachining
- Wafer cutting
- Polyethylene cutting
- Scientific research



* Specifications

Model	PS100-C	P302	P303
Wavelength (nm):	1064		
Pulse Repetition Rate (kHz):	50-500	100-1000	150-1000
Pulse Width (ps):	<50	<15	
Average Power (W):	>1.5@100kHz >3.0@500kHz	10@500kHz	30@500kHz
Average Power Stability:	<±4% over 8 hours	<±3% over 8 hours	
Pulse-to-Pulse Instability:	<5% rms		
Spatial Mode:	TEM ₀₀ (M ² <1.3)		
Beam Divergence:	<2 mrad(full angle)		
1/e2 Beam Diameter:	1±0.2mm		1.6±0.2mm
Beam Roundness:	>90%		
Pointing Stability:	<50 urad		
Polarization Direction:	Vertical		
Polarization Ratio:	100:1		
Cooling:	Water-cooling		
Ambient Temperature (°C):	15-30		
Storage Temperature (°C):	-10-50		
Relative Humidity:	10%-80% (non-condensing)		
Warm-up Time (mins):	<10		
Electric Supply:	90-260 VAC		



Address: No. 98 Xinglin Street
Suzhou Industrial Park
Suzhou, Jiangsu 215021
China

Website: www.delphilaser.com

Telephone: +86-512-87179109

Fax: +86-512-87189097

Email: worldwidesales@delphilaser.com
summit320@gmail.com

