

UC INSTRUMENTS CORP. DPG CA6057 Series Air Cooled Green Laser Marking Systems

**Technical Specifications Ver 1.01
February, 2011**



DPG CA6057 Series Green Laser Marking Systems

The UC INSTRUMENTS CORP. DPG CA6057 Series are end-pumped air-cooled green laser marking systems including the newest generation of semi-conductor air-cooled laser technology. The systems can be integrated into the top standard configurations appropriate to various applications in the global market due to their excellent features such as stable performance, delicate carving, long-term laser source, low power consumption and low maintenance cost to adapt to 24-hour operation.

DPG CA6057 series of air-cooled end-pumped green light laser (of 532nm) systems can achieve high conversion efficiency by newest innovative laser cavity and frequency multiplication. With Q-switch pulse output and high-quality light beam and short wavelength, they can provide high quality solutions for industrial applications. As the best light source for wafer marks, they can be widely employed in new processing industries such as semi-conductor, solar energy, battery industries. They also have unique advantages in super-fine processing fields such as flat-panel television and resistor trimming.

Features

- Short pulse, high-quality light beam, high precision, high peak power and high modulation frequency
- Short wavelength and small focal spot suitable to precise processing and micro-processing
- Q-switch pulse output as an ideal tool for industrial processing
- Capable of reducing laser thermal effect on processing surface of materials
- Closed laser cavity and dust prevention without condensation leading to low maintenance and long service time
- Fully shielded laser cavity suitable to industrial production environment with interference resistance
- Semi-conductor laser air-cooling system with high control precision and excellent laser stability for 24-hour operation at ambient temperature
- Semi-conductor laser source with low current and long service life for the pump module
- Modular configuration to facilitate system integration and equipment maintenance
- Powerful application software with user friendly interface, potent functions and free upgradability

Applications

The systems have excellent application characteristics in special material processing fields to reduce thermal effect and increase processing precision particularly on various surfaces.

Key fining marking, glass surface marking, silicon wafer marking, PCB processing, flat-panel display production, fine tuning of electronic elements, processing of solar energy, battery materials, textiles and thin polymer films, etc.

Control software with potent functions

- High-speed real-time processing from generation of processing image signals to precise generation of marking control signals, allowing high quality applications
- Compatible with dot matrix and vector marking modes, supporting various commercial and engineering mapping file formats with rich figure editing functions
- Strong circle & text editing functions
- Import and export files compatible with PLT, DXF, and bitmap formats
- Common and special bar code and two-dimensional code with ability of achieving the maximum reading ratio and efficiency for random code patterns, and supporting various code standards such as

standard industrial code, 2/5 code, ASCII code, 128 code and EAN13 code; EAN8 code, UPCA and UPCE code; DATAMATRIX, Qr code, PDF417 code and 16K code.

DPG CA6057 Series of System Specifications

Model#	CA6057-5	CA6057-7	CA6057-10	CA6057-15
Average output power	3W	7W	10W	15W
Output wave length	532 nm			
Quality of light beam	$M^2 < 1.2$	$M^2 < 1.5$	$M^2 < 1.5$	$M^2 < 2.0$
Output stability	< 2%			
Pulse width	20ns(@20kHz)			
Pulse energy	>150μJ(@20kHz)			
Repetition frequency	10-100kHz			
Power supply	AC90-240V/50-60Hz/1Ph/700W			

Marking Examples:



UC INSTRUMENTS CORP.'s Supports, Services and Assistance

UC INSTRUMENTS CORP. provides high performance, high value, affordable instrument solutions for our customers. Our extensive support sources can help you choose right UC INSTRUMENTS CORP.'s products for your specific applications and apply them successfully. Every instrument /system we sell has a global warranty. All of our instruments are with at least 18 months factory warranty.

Our Promises

All of UC INSTRUMENTS CORP.'s instruments and systems meet their advertised performance and functionality. When you select a UC INSTRUMENTS CORP.' product, we can help your product operation with our extensive experiences, and provide the basic measurement assistance for the use of special capabilities.

Contact Information

United States:

UC INSTRUMENTS CORP.

3652 Edison Way
Fremont, CA 94538
USA
Tel: 1-510-366-7353
Fax: 1-510-795-1795
sales@ucinstruments.com
www.ucinstruments.com

Product specifications and descriptions in this documentation subject to change without notice.
Copyright © 2011 UC INSTRUMENTS CORP. Inc.
June, 2008

31000021 V1.03