

UC INSTRUMENTS CORP. DPR CA6058 Series Air Cooled Laser Marking Systems

**Technical Specifications Ver 1.01
February, 2011**



DPR CA6058 Series Laser Marking Systems

The UC INSTRUMENTS CORP. DPR Series are end-pumped air-cooled 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.

Features

- Short pulse, high-quality light beam, high precision, high peak power and high modulation frequency
- Capable of reducing laser thermal melting effect on processing surface of materials (e.g., plastics)
- 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

- Excellent characteristics in processing of metals (e.g., steel, copper, titanium) and metallic aluminum
- Perfect marking results for non-metallic materials like ABS, Nylon, PES, PVC, Acrylic and Polycarbonate
- Widely used for text and symbol/figure marking in variety of industries such as micro-processing of electronics, computer peripherals, communication, electric appliances, instruments, automobiles, ships, aerospace and aviation; as well as watches/clocks, glasses, jewelry, clothes, and gifts.

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 with:
 - Omni-bearing character styles and international language texts
 - Type, True Type, AFM, CID, CFF, SFNT and PRF
 - Random decomposition, free array, combination and size adjustment for varied marking tasks
 - Figure consolidation & modification
- 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.

DPR CA 6058 Series of System Specifications

Model	CA6058-10	CA6058-15	CA6058-20	CA6058-25	CA6058-30
Average output power	10W	15W	20W	25W	30W
Output wavelength	1,064nm				
Light beam quality	$M^2 < 1.2$	$M^2 < 1.2$	$M^2 < 1.4$	$M^2 < 1.6$	$M^2 < 2$
Output stability	<2%				
Modulation frequency	3kHz-200kHz				
Pulse width	8-40ns				
Peak power	25-200KW/10KHz				
Marking speed	600-1,000 character/second				
Minimum line width	0.025mm				
Positioning precision	<10 μ rad				
Marking scope	50-500mm				
Dimensions	L540×W176×H489mm				
Weight	28.5kg				
Supply power	220V/50-60Hz				
Power consumption	600W	700W	800W	1,200W	1,200W
Cooling mode	Air-cooled				Water-cooled

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 Promise

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. Inc.

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.
June, 2008

31000021 V1.03