# UC INSTRUMENTS CORP Double Head DPR CA6056 Series Air Cooled Laser Marking Systems

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## **Double Head DPR CA6056 Series Laser Marking Systems**

The UC INSTRUMENTS CORP. Double Head DPR CA6056 Series are end-pumped air-cooled laser marking systems including double marking laser heads and 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.

The double marking laser heads can operate at the same time with high production efficiency without water cooler and can be controlled by a set of software interface for respective parameter editing and definition. The systems can employ synchronous /asynchronous beam split to mark the same character and figure on 2 different marked articles at the same time or can switch over the 2 laser heads to mark Identical or different character and figure on 2 different marked articles within different periods.

#### **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

Capable of switching-over to single light beam output for high-power operation, reaching twice of operating efficiency by synchronous or asynchronous operation of the double heads, and adjusting marking positions individually with varied scanning heads

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.

# **Double Head DPR CA6056 Series of System Specifications**

| Model#                            | CA6056-7×2                                     | CA6056-10×2         | CA6056-15×2         |
|-----------------------------------|--|---------------------|---------------------|
| Average output power              | 7W×2   | 10W×2               | 15W×2               |
| Output wave length                | 1,064nm  |                     |                     |
| Quality of light beam             | M <sup>2</sup> <1.2                            | M <sup>2</sup> <1.3 | M <sup>2</sup> <1.4 |
| Output stability                  | <2%  |                     |                     |
| Modulation frequency              | 3KHz-200KHz                                    |                     |                     |
| Pulse width                       | 8-40ns   |                     |                     |
| Peak power                        | 25-200KW/10KHz                                 |                     |                     |
| Marking speed                     | 600-1,000Letters/s                             |                     |                     |
| The minimum line width            | 0.025mm  |                     |                     |
| Positioning precision             | <10 µrad                                       |                     |                     |
| Marking scope                     | 50-500mm                                       |                     |                     |
| Outline dimension of rack         | L540 × W176 × H489mm                           |                     |                     |
| Outline dimension of laser cavity | D810 × W350 × H132mm (including scanning head) |                     |                     |
| Supply power                      | 220V/50-60Hz                                   |                     |                     |
| Power consumption                 | 1,000W   | 1,200W              | 1,500W              |
| Cooling mode                      | Air-cooled                                     |                     |                     |

# **Marking Examples:**







## **UC INSTRUMENTS CORP's Support, Service 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**

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 experience, and provide the basic measurement assistance for the use of special capabilities.

## **Contact Information**

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