

# μMLA

THE TABLETOP MASKLESS ALIGNER

## KEY FEATURES

### 1. Maskless Laser Lithography

Revolutionary state-of-the-art technology that exposes designs directly from design files via a 2D Spatial Light Modulator (SLM), eliminating the need for expensive traditional photomasks.

### 2. Dual Exposure Modes

Features standard Raster Scan Mode for high-speed, high-fidelity image quality, and an optional Vector Scan Mode to generate curved lines (waveguides) with minimal edge roughness.

### 3. Highly Customizable Setup

Configurable with up to three different wavelengths (LED and/or laser diodes) and variable resolution options, allowing users to optimize parameters specifically for their application needs.

### 4. Advanced Alignment & Handling

Optical autofocus ensures accurate exposure right up to the sample edges. Straightforward small sample handling from 5x5 mm substrates up to 6-inch wafers.

### 5. Versatile Applications

An indispensable tool for R&D in MEMS, micro-fluidics, and micro-optics. Includes a standard Grayscale mode for the creation of sophisticated micro-lenses.

Heidelberg Instruments μMLA



The μMLA tabletop system officially distributed by ADST Vietnam

## SYSTEM SPECIFICATIONS

Parameter	Raster Scan Performance
Min. Feature Size	0.6 μm (Mode I) / 1 μm (Mode II)
Address Grid	20 nm (Min)
CD Uniformity (3σ)	200 nm
Alignment Accuracy	500 nm (over 5x5 mm <sup>2</sup> )
Max. Substrate Size	6" x 6" (150 x 150 mm)
Substrate Thickness	0.1 mm to 12 mm
Light Source	LED (390/365nm) or Laser (405/375nm)
System Weight	Approx. 130 kg (Tabletop design)

### OFFICIAL DISTRIBUTOR: ADST VIETNAM

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