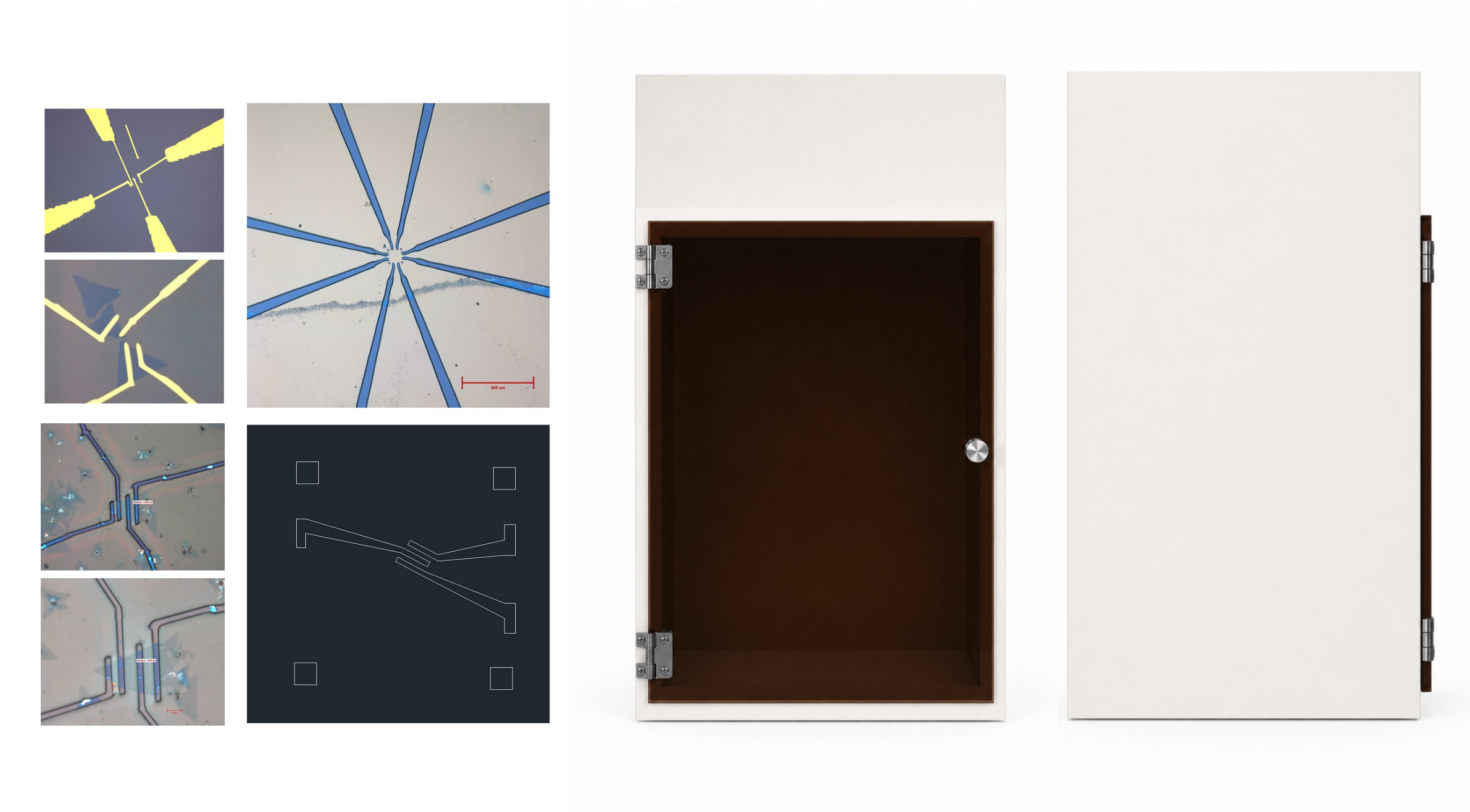


LASER DIRECT WRITER

UVW04







Laser Direct Writer

UVW04

Product Information	Features	Performances	Convenient Features
Photolithography for Various Devices - Research Device Fabrication - Semiconductor Devices, Solar Cells - Microfluidic Channels, Lab-on-a-Chip Optical Microscope + 405 nm Laser Focus Magnification: 5x, 10x, 20x, 50x, 100x Automatic Objective Lens Switching Laser Focus / Sample Focus Switching Available Built-in Autofocus Function Includedv	Affordable Price for Small-Scale Research Open Architecture Design Allowing Modifications for Specialized Research Compact Design (Height: 47 cm), USB Connection → Compatible with Glove Box Installation	Minimum Line Width: Approx. 1 µm Sample Stage Resolution: 0.125 µm Maximum Scan Area: 25 mm × 25 mm Applications Various Semiconductor Devices Solar Energy Device Fabrication Microfluidics, Lab-on-a-Chip	Load CAD (4 layers) or Image Files Direct Line Drawing Using Mouse Automatic Focus Adjustment Fine Patterns and Contact Pads Processed Simultaneously Keyboard Control → Position Adjustment Mouse Control → Move to a Specific Sample Position

Details

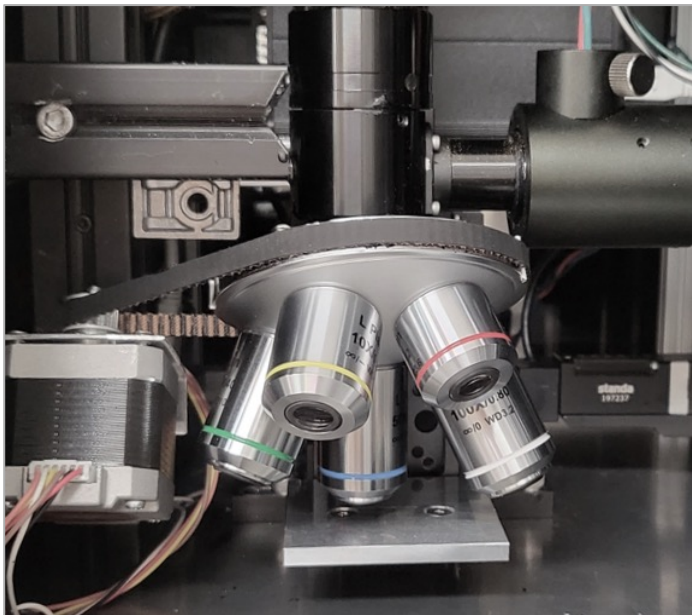
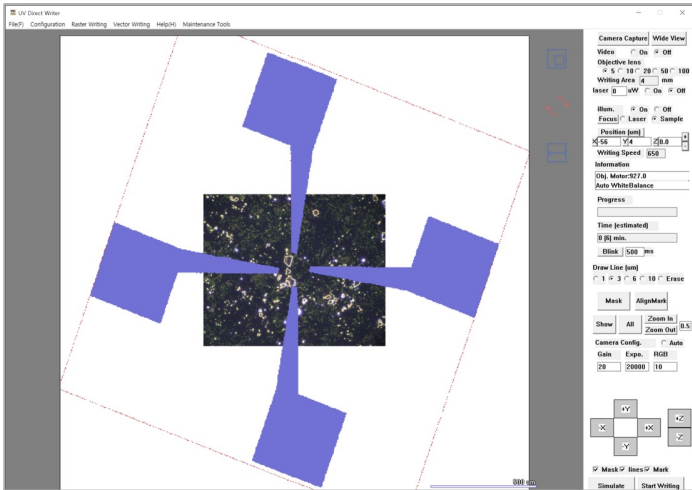
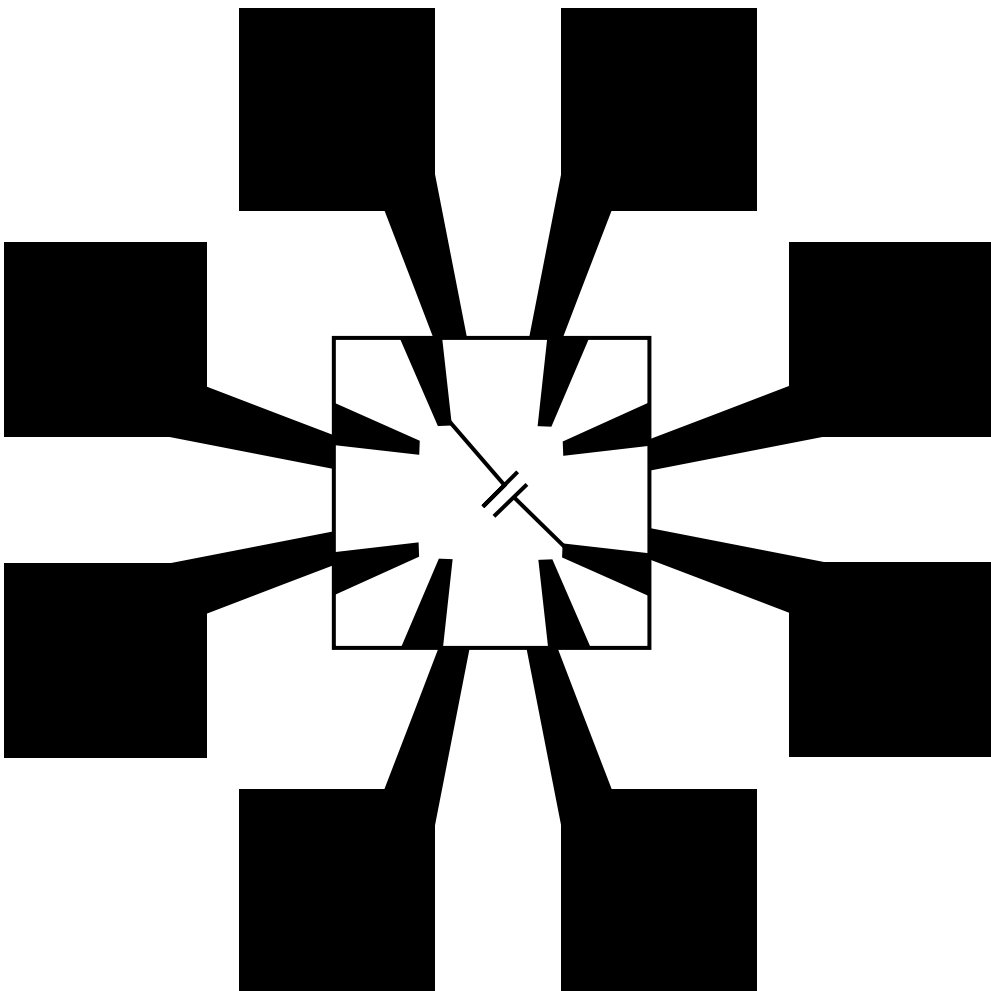
Minimum Line Width: < 1 μm (Depending on PR Thickness)
Objective Lenses: 5x, 10x, 20x, 50x, 100x
Automatic Focal Plane Adjustment with Objective Lens Selection
Laser Diode: 405 nm, 50 mW
Adjustable Laser Power (Up to 500 μW with 100x Objective Lens)
Adjustable Scan Speed
Users Can Draw Patterns While Observing Microscope Images
Zoom In/Out Drawing Capability via Software

Drawing Modes

CAD (.dxf) Pattern Mode
Raster Mode: Area Filling Using Black-and-White Image Files
Vector Mode: Line Pattern Creation by Mouse Click

Hardware

Standalone System (PC USB Interface Supported)
Sample Mount: 5 cm $\times$ 5 cm Flat Stage, Compatible with Large Wafers
Scanner: Motorized XYZ Stage
Wide Field of View Starting from 5x Objective Lens
Precision Alignment Based on 100x Objective Lens
9-Image Patch Autofocus Function
System Size (Including Chassis): 28 $\times$ 36 $\times$ 46 cm³
User Interface with Real-Time Writing Monitoring
Mouse Control of Mask Images: Move, Scale, Rotate (on Camera Image)



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Best Cost- Performanc e Research Device Fabrication System

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Freely Draw Desired Patterns Without Metal Masks

Compatible with Conventional Photolithography Resists

Affordable Fabrication of Various Device Electrodes for Small Laboratories

Standard GPIB and USB Interfaces for External Device Connectivity

Technical Support and Active Assistance for Additional Interfaces and Software Modifications

Compact Design (Height: 44 cm), Single USB Connection Enables Installation in a Glove Box with Gas Atmosphere Control

Toward Independence in Research Equipment.

Standardized components are used to allow researchers to freely modify the system for specialized research purposes.

Built on an open-source platform, enabling customization and specialized research applications.

Software libraries are provided so users can modify programs according to their specific needs.

Program modifications reflecting individual user requirements are available as a paid service.

We provide a 1-year free warranty service and support software updates for up to 10 years when PCs are replaced.

