

# MASKLESS PHOTOLITHOGRAPHY SYSTEM D-light DL=1000



Utilizing Digital Micromirror Device(DMD)Technology





Utilizing Digital Micromirror Device (DMD) Technology for pattern projection with 1µm resolution.



### NanoSystem-Solutions, Inc.

## Leading Edge Direct Lithography by Digital Technologies

#### System Layout



#### **Specifications**

Illumination	LED
Wave Length (Main)	405nm
Exposure Power	1W/cm <sup>2</sup> or more
Resolution	1µm (Standard)
Work Size	□100mm (Standard), Up to □500mm (as Option)
Over layer Accuracy	±1µm or better
Positioning Accuracy	±0.1µm (measured by equipped scale)
Exposure Uniformity	±5% or better
Max Process Speed	50mm <sup>2</sup> /min or faster (%1)
Gray Scale Exposure	Max 256 gradation (*2)
Dimension (Main Unit)	<sup>w</sup> 855mm× <sup>D</sup> 820mm× <sup>H</sup> 1500mm
Weight	approx 520kg

% 1 Scanning Method can perform up to 200mm<sup>2</sup>/min.

%2 For the model which is equipped Gray Scale Data Software

#### Utilities, Installation Environment

Power	AC100V 50/60Hz 15A
Temperature	22 ~ 25°C ±1°C
Humidity	$30 \sim 60\%$ (No Condensation)
Clean Room	Class 1000 or better



Grating

Application Samples



■2µm Line



Micro Lens Allay



Thick Photo Resist





2D Patterns



#### HCP Structure



■Tile Shape



\*\*This Catalog has been issued as of May 2012. The contents, descriptions, specification, or dimensions may be changed without notice. 1-33-3 Ochiai, Tama City Tokyo 206-0033 Japan, TEL: +81 (0) 42-335-8440, FAX: +81 (0) 42-335-8451