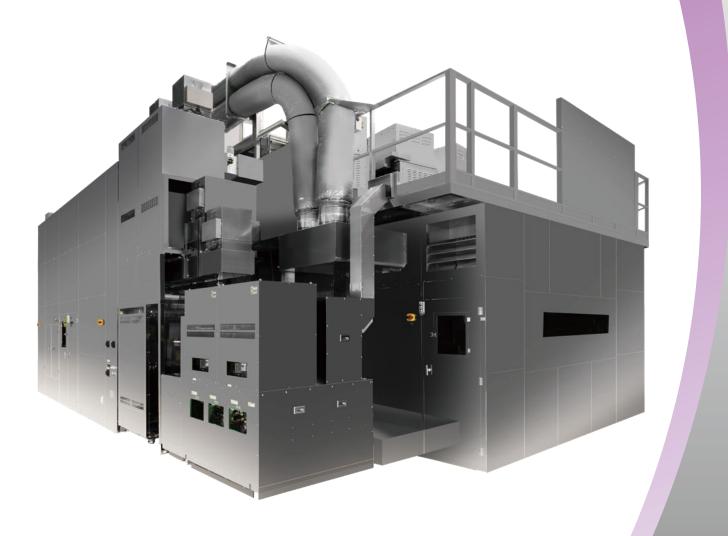


FPD Lithography System



Gen 6 Plate FPD Lithography System with the Highest Level of Resolution



Gen 6 Plate FPD Lithography System with the Highest Level of Resolution

FPD Lithography System FX-6AS

The FX-6AS produces leading edge small-and-medium-sized high-definition panels from Gen 6 plates. The newly-developed projection lens enables the highest level of resolution of 1.0 µm using a phase shift mask, improved productivity and high overlay accuracy.

Key Features

• Multi-lens System

The FX-6AS features the multi-lens system consisting of multiple projection lenses. This design enables a wide exposure field and excellent resolution.

• High Resolution

Nikon has developed a new projection lens with a high NA that has further advanced the evolution of the previous model. The FX-6AS employs an i-line light source which has a track record in high volume production, and an innovative focus correction system that was developed for the FX-68SH/68S. These enable the high volume production of panels with a high resolution of 1.0 μ m (L/S) using a phase shift mask, while ensuring high CD uniformity over the entire surface of Gen 6 plates.

• High Overlay Accuracy

High overlay accuracy is realized by using a new projection lens with reduced aberration in combination with highly accurate measurement and position control performance of the previous model.

• High Throughput

The FX-6AS achieves a high resolution of $1.0 \ \mu m^{*1}$ with the same exposure field as the previous model. It also provides a high throughput of 85 plates per hour due to increased illuminance resulting from optimization of the illumination system, while enabling 4-scan on a Gen 6 plate.

• Stable Exposure Performance

The FX-6AS employs a variety of calibration functions from the previous model, providing stable exposure performance during operation.

Performance

Resolution (L/S)	1.0 μm* ¹ (i-line)
Projection magnification	1:1
Overlay	$\leq \pm 0.23 \mu m$
Plate size	1,500 mm × 1,850 mm
Takt time	42 s/plate Conditions: 1,500 mm × 1,850 mm, 4 scans, i-line, 30 mJ/cm ²

*1 When using a phase shift mask

https://www.nikon.com/business/fpd/



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TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.

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Nikon Corporation Precision Equipment Group

Marketing Department 1-5-20, Nishioi, Shinagawa-ku, Tokyo 140-8601, Japan Tel: +81-3-6743-5533

WARNING

Nikon Precision Korea Ltd.

2, Singal-ro 124beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 16968 Korea Tel: +82-31-288-5601 Nikon Precision Taiwan Ltd.

3F.-1, NO.28, Taiyuan Street, Zhubei City, Hsinchu County 302, Taiwan, R.O.C. Tel: +886-3-552-5888

Nikon Precision (Shanghai) Co., Ltd. 11-12F, Tower 5, Crystal Plaza No. 36, Ping Jia Qiao Road, Pudong New District, Shanghai 200126, China Tel: +86-21-5899-0266