



FPD Lithography System

FX-68S

Gen 6 Plate FPD Lithography System
Delivering a High Resolution of 1.5 μm



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The FX-68S supports the production of leading edge high-resolution small- and medium-sized panels from Gen 6 plates. The scanner method enables improved productivity, excellent resolution and high alignment accuracy.

Key Features

• Multi-lens System

The FX-68S features the multi-lens system consisting of multiple projection lenses. This design enables a wide exposure field and excellent resolution.

• High Resolution

While succeeding our well-known multi-lens system, Nikon has developed a new i-line projection lens that enables higher resolution. In addition, we developed an innovative correction system that takes advantage of our multi-lens system in large plate exposure. In this correction system, the focal surface follows inclination changes in a plate. This enables the high volume production of panels with a high resolution of 1.5 μm (L/S) in Gen 6 plates.

• High Alignment Accuracy

The new interferometer system for position measurement is designed to realize high accuracy alignment by enhancing measurement accuracy and position control performance.

• High Throughput

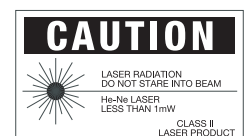
With the new projection lens and stage, the FX-68S achieves high throughput of 78 plates per hour by enabling 4-scan on a Gen 6 plate.

• Improved Exposure Performance

The FX-68S employs a variety of calibration functions developed utilizing our unique technology and provides enhanced exposure performance stability.

Performance

Resolution (L/S)	1.5 μm (i-line)
Projection magnification	1:1
Alignment accuracy	$\leq \pm 0.35 \mu\text{m}$
Maximum plate size	1,500 mm \times 1,850 mm
Takt time	46 sec./plate Conditions: 1,500 mm \times 1,850 mm, 4 scans, 30 mJ/cm ²



WARNING

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

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NIKON CORPORATION FPD Lithography Business Unit Sales Department

Shinagawa Intercity Tower C, 2-15-3, Konan, Minato-ku, Tokyo 108-6290, Japan
Tel: +81-3-6433-3641 Fax: +81-3-6433-3758

NIKON PRECISION INC.

1399 Shoreway Road, Belmont, CA 94002-4107, U.S.A.
Tel: +1-(650)-508-4674 Fax: +1-(650)-508-4600

NIKON PRECISION EUROPE GmbH

Robert-Bosch-Strasse 11, D-63225 Langen, Germany
Tel: +49-6103-973-0 Fax: +49-6103-973-333

NIKON PRECISION KOREA LTD.

17-24 Singal-Dong, Giheung-Gu, Yongin-Si, Gyeonggi-Do, Korea
Tel: +82-31-288-5601 Fax: +82-31-288-5609

NIKON PRECISION TAIWAN LTD.

3F-1, 2, 3, 5 No. 28, Tai Yuen Street, Chu Pei City, Hsin Chu Hsien, Taiwan
Tel: +886-3-552-5888 Fax: +886-3-552-5858

NIKON SINGAPORE PTE LTD.

Precision Division
23 Church Street, Unit #13-07, Capital Square, Singapore, 049481
Tel: +65-6367-4020 Fax: +65-6367-4021

NIKON PRECISION SHANGHAI CO., LTD.

RM. 601 Xin Jin Qiao Tower, No. 28 Xin Jin Qiao Road, Pudong New District, Shanghai 201206, China
Tel: +86-21-5899-0266 Fax: +86-21-5899-1660