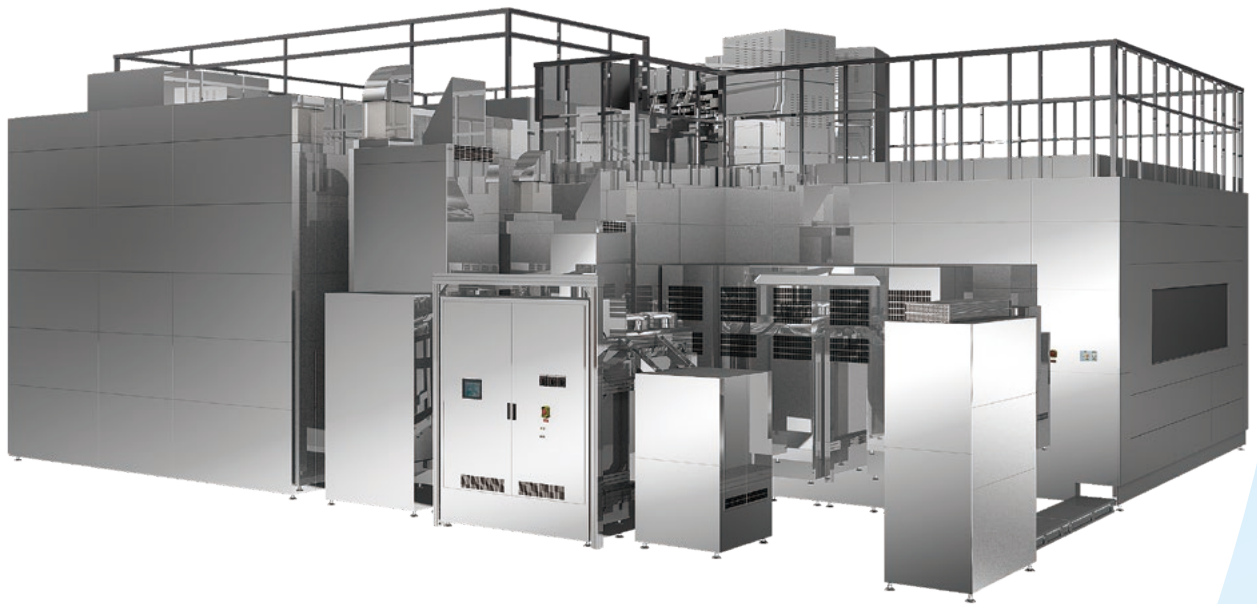




FPD Lithography Systems

FX-86SH2/86S2

Gen 8 Plate FPD Lithography Systems for
Large Panel Production



Gen 8 Plate FPD Lithography Systems for Large Panel Production

FPD Lithography Systems FX-86SH2/86S2

The FX-86SH2/86S2 incorporates techniques from both the FX-67S, which is ideal for high-definition panel production, and our Gen 10 lithography systems, which support ultra-large plates, enabling high-definition large panel production. The FX-86SH2/86S2 enables reduced takt time compared with previous Gen 8 lithography systems. The FX-86SH2 also achieves a high resolution of 2.2 μm .

Key Features

• Multi-lens System

Both models feature the multi-lens system consisting of multiple projection lenses. This design enables a wide exposure field and excellent resolution.

• High Resolution

The multi-lens system paired with the proprietary Nikon focus control system ensures excellent resolution across the entire plate. The FX-86SH2 achieves a high resolution of 2.2 μm (L/S) while also ensuring a wide depth of focus.

• High Overlay Accuracy

The increased number of interferometer measurement axes and the newly designed measurement system have led to improved measurement stability and a high overlay accuracy of $\pm 0.5 \mu\text{m}$.

• High Throughput

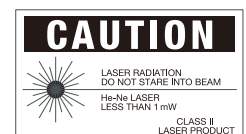
2,200 mm \times 2,500 mm plate size:
587 panels/h (46-inch panels)
378 panels/h (55-inch panels)

• Improved Exposure Performance

The FX-86SH2/86S2 employs a variety of calibration functions developed utilizing our unique technology and provides enhanced exposure performance stability.

Performance

	FX-86SH2	FX-86S2
Resolution (L/S)	2.2 μm (g+h+i-line)	3.0 μm (g+h+i-line)
Projection magnification	1:1	
Overlay	$\leq \pm 0.5 \mu\text{m}$	
Plate size	2,200 mm \times 2,500 mm	
Takt time	49 s/plate Conditions: 2,200 mm \times 2,500 mm, 4 scans, g+h+i-line, 30 mJ/cm ²	



WARNING

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

All of the products in this brochure are under export restriction. The export of these products is controlled by Japanese Foreign Exchange and Foreign Trade and International export control regime. They shall not be exported without authorization from the appropriate government authorities.

Performance and equipment are subject to change without any notice or obligation on the part of the manufacturer. Products and brand names are trademarks or registered trademarks of their respective companies. May 2021
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<https://www.nikon.co.jp/pec/>

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