



KrF Scanner

NSR-S210D

Throughput Improved 20% with Tandem Stage



A 176 Wafers per Hour Throughput Facilitates 110 nm or Smaller Device Mass Production

KrF Scanner NSR-S210D

The NSR-S210D KrF scanner employs an acclaimed tandem stage to improve throughput by 20% over conventional models, delivering 176 wafers (300 nm devices) per hour. With alignment accuracy upgraded to 9 nm or better, the NSR-S210D mass produces 110 nm or smaller devices with high productivity and accuracy.

Key Features

- **Nikon-original Tandem Stage Ensures High Throughput and Accuracy**

The Nikon Tandem Stage—renowned for its performance on ArF immersion scanners—uses an exposure stage and separate calibration stage to achieve a high throughput of 176 wafers (300 nm devices) per hour. Because calibration is provided frequently, high stability is ensured.

- **Exceptional Imaging Performance**

Nikon projection optics (NA 0.82) and illumination system ensure exceptional imaging performance with low flare, and the system is highly immune to thermal changes.

- **Minimal CoO**

High throughput and long-term stability through the use of a tandem stage, and production-proven exceptional imaging technology greatly contribute to the reduction of cost of ownership (CoO).

- **Common Platform Cuts Running Costs**

The NSR-S210D is built on a platform common to all Nikon scanners. This improves production efficiency and cuts running costs. The common-platform tandem stage shortens installation time—a factor that is becoming increasingly important for device manufacturers. The shared software simplifies field support.

Performance

Resolution	≤ 110 nm
NA	0.82
Exposure light source	KrF excimer laser (248 nm wavelength)
Reduction ratio	1:4
Maximum exposure field	26 mm × 33 mm
Overlay	≤ 9 nm
Throughput	≥ 176 wafers/hour (76 shots)

CLASS 1 LASER PRODUCT



WARNING

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

The export of this product is controlled by Japanese Foreign Exchange and Foreign Trade Law and International export control regime. It shall not be exported without authorization from the appropriate governmental 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. March 2016
©2016 NIKON CORPORATION

<http://www.nikon.co.jp/pec>

NIKON CORPORATION Semiconductor Lithography Business Unit Marketing Department

Shinagawa Intercity Tower C, 2-15-3, Konan, Minato-ku, Tokyo 108-6290, Japan
Tel: +81-3-6433-3639 Fax: +81-3-6433-3759

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