



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.

Main 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 CoO (Cost of Ownership).

- **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
Light source	KrF excimer laser (wavelength: 248 nm)
Projection magnification	1:4
Maximum exposure field	26 x 33 mm
Overlay	M + 3σ ≤ 9 nm
Throughput	176 or more wafers per hour (300 nm devices)

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.

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

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This product was developed and manufactured in the factory certified under ISO 9001.