

# **EVG®7200 LA**

Large-Area SmartNIL® UV-NIL System



## Introduction

## Unmatched conformal nanoimprint lithography over large areas

The EVG7200 Large-Area UV Nanoimprint System scales nanoimprint lithography (NIL) to Gen 3 (550 mm x 650 mm) panel-size substrates using EVG's proprietary and volume-proven SmartNIL technology. For applications such as displays, wire grid polarizers, biotechnology and photonic elements, which cannot be reduced in size, it is crucial to increase substrate utilization efficiency by increasing the pattern area. NIL has proven to be the most cost-efficient way to enable fabrication of nano patterns on large areas as it is not limited by optical systems and can provide the best pattern fidelity for the smallest structures.

SmartNIL provides superior conformal imprint results down to 40\* nm utilizing a very robust and controllable tooling process. With unique and proven equipment capabilities, including unmatched ease of use, in conjunction with a high level of process expertise, EVG fulfills industry needs by driving nanoimprinting to the next level.

\*resolution dependent on process and template

#### **Technical Data**

Wafer diameter (substrate size)	200 mm in diameter up to Gen3 (550 x 650 mm)
Resolution	40 nm - 10 μm (resolution dependent upon template and process)
Supported Process	SmartNIL®
Exposure source	High-power narrow band (> 400 mW / cm <sup>2</sup> )
Alignment	Optional optical alignment: $\leq \pm$ 15 $\mu$ m
Automated separation	Supported
Mini environment and climate control	Optional
Working stamp fabrication	Supported

### Contact

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# Features

- Proprietary SmartNIL<sup>®</sup> technology provides unmatched conformal imprinting over large areas
- Proven technology with superior replication fidelity and uniformity
- Multiple-use polymer working stamp technology for longest master lifetime and significant cost savings
- Robust and precisely controllable processing
- Compatible with all commercially available imprint materials