

Heidelberg Instruments VPG 300 DI – the maskless direct laser writer for high-accuracy and high-resolution

Matthias Wahl – Product Manager VPG

Derived from the VPG+ Volume pattern generator series mask making tools, the VPG 300 DI is specially designed for direct writing high-resolution microstructures in i-line resists. It includes all advanced VPG+ system components for high precision exposures as well as features needed for direct write applications of sub-micron structures.

The target usage of the VPG 300 DI system is primarily in academic and industrial research & development, where high flexibility and features smaller than 2 μm are required. This system caters to the needs of various applications, including product prototyping, MEMS, mix and match with other tools, and writing of structures with quasi-stitching-less unlimited die sizes. The VPG 300 DI performance is comparable to a mask-based i-line stepper that is traditionally used for these applications, while providing the advantages of a maskless patterning technology.

This presentation is a short introduction to Heidelberg Instruments new maskless writer and will give an overview of the writing strategies, components, and features.

