

FAQ : Excelerate®

1. Who is Lumen Dynamics?

Lumen Dynamics is a global leader in the design, manufacture, and marketing of light-based delivery systems. Our focus is within the following market applications:

- Life Science Cellular Imaging and Micromanipulation
- Medical Device and Optoelectronics Manufacturing
- Graphics Digital Printing

We are a technology company propelled forward by our commitment to providing customer solutions through the innovative application of light.

2. What is Excelerate®?

Excelerate® is a new product family that offers UV Curing solutions for graphics digital printing. It utilizes Lumen Dynamics' extensive UV technology expertise and development resources to assist our industry partners with generating sustainable competitive advantages for their print systems.

3. What are the types of products offered under the Excelerate® brand name?

Products offered in the Excelerate® product line are UV curing solutions for the industrial digital print market.

4. What is UV Pinning?

UV Pinning is the process of applying an interim dose of lower intensity UV light correctly matched to the ink's photochemical properties. This causes the UV ink drop pattern to be moved to a higher viscosity state, but stops short of full cure. Thickening or gelling of the ink can be achieved effectively by using an array of high power UV light emitting diodes (LEDs), strategically placed right next to the ink jet head, ensuring immediate effect after the UV ink droplets have been jetted onto the substrate. This thickening or gelling is now more typically known as Pinning.

5. What are the benefits of Pinning?

UV Pinning immediately after jetting enhances the management of drop size and image integrity, minimizing the unwanted mixing of drops, providing the highest possible image quality and sharpest color rendering.

6. What are the differences between Excelerate® PIN-100 and Excelerate® PIN-101?

The Excelerate® PIN-100 Series is a group of products that is used for UV pinning applications. The following table highlights the primary differences:

Model Number	Number of UV LED Modules per Controller	Pinning Area
Excelerate® PIN-100	12	55mm (2.17inch)
Excelerate® PIN-101	6	71mm (2.80inch)

7. How do I evaluate one of the Excelerate® products?

We frequently work closely with print press integrators, ink jet head manufacturers, UV ink providers, and any other key partners involved in the development of UV based print presses. To find out more about our key partners including how to become one, please send us an email at Excelerate@LDGI.com.