OmniCure®
UV Curing • In Control

OmniCure AC8150P-HD, AC8225P-HD and AC8300P-HD

High-Dose, Large-Area UV LED Curing Systems for Adhesives, Coatings and Inks

- Powerful – achieve unmatched optical output with high peak irradiance and dose
- Easy integration with compact, air-cooled design and streamlined control interface
- Robust and scalable to address multiple cure widths by adjoining UV LED systems
- Unparalleled optical uniformity – along cure length and between adjacent units
- Extraordinary stability and process control

EXCELITAS TECHNOLOGIES®

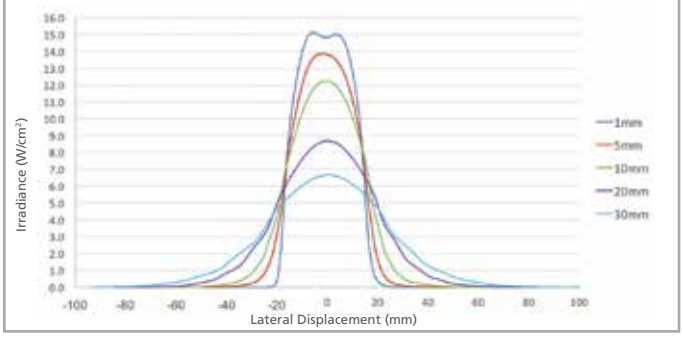
Superior Optical Performance and Output

The OmniCure® AC8-HD Series of products bring air-cooled UV LED curing to the next level. These systems deliver an outstandingly high optical dose, and are designed with a patented technology that enables unbeatable uniformity of output across the irradiation area. Offering three standard cure widths – 6" (150mm), 9" (225mm), and 12" (300mm), these units can be adjoined to customize and achieve countless curing sizes without any compromise in uniformity.

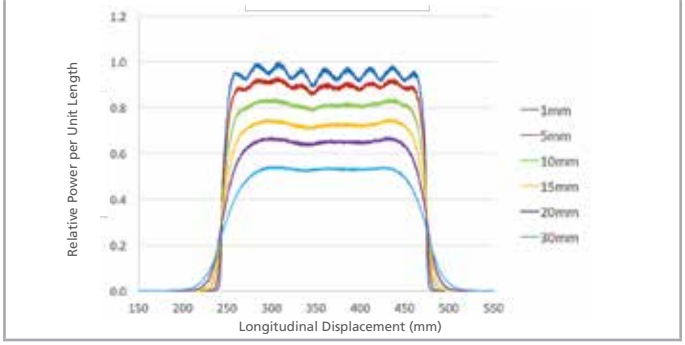
Excelitas Technologies' patented process for addressing individual UV LED module outputs not only enables exceptional uniformity over the entire curing area, but also empowers customers with the ability to customize outputs and benefit from tighter process controls.

The AC8-HD systems deliver over 15W/cm² peak irradiance and double the dose of the standard AC8 Series of products, making these systems ideal for applications that demand high dosage. With the high UV LED output, the AC8-HD Series can support an expanded range of applications, as well as an increase in process speeds. Available in 385nm, 395nm, and 405nm wavelengths, the AC8150P-HD, AC8225P-HD, and AC8300P-HD also bring RS485 functionality for greater flexibility and ease of integration.

Irradiance vs. Working Distance for AC8-HD Series



AC8-HD Series Uniformity



Unprecedented Flexibility

OmniCure's AC8-HD Series offers higher optical power in the same air-cooled mechanical enclosure as its AC8 and AC9 predecessors, allowing existing customers to easily scale production speeds without the inconvenience of implementing any changes in mounting and integration. By sharing the same control interface while also adding RS485 functionality, the AC8-HD systems bring all the benefits of the OmniCure AC Series product portfolio, plus greater dose and flexibility. The systems facilitate the curing of adhesives, coatings, or inks that demand more dose, thus expanding the range of applications that can be addressed with UV LED solutions.

Exceptional Process Control

For a repeatable curing process, precise control of the UV irradiance level and time ensures that the correct dose of UV energy is provided on every exposure. Multiple wavelengths (385nm, 395nm & 405nm) are available to match the requirements of the material to be cured. Intelligent system monitoring and control ensures system reliability meets the demands of any application.

Ease of Integration

OmniCure UV LED curing systems utilize air-cooled LED technology in a compact design allowing for seamless integration into new or existing production lines. The innovative design eliminates the need for costly retooling, external cooling or ozone extraction. The curing systems can also be mounted in any orientation, for maximum flexibility. External mechanical and optical accessories are also available upon request.

Technical Specifications

		AC8150P-HD	AC8225P-HD	AC8300P-HD
LED Peak Wavelengths		385nm +/-5nm, 395nm +/- 5nm, 405nm +/- 5nm		
Active Optical Area		150 x 30 mm	225 x 30 mm	300 x 30 mm
Typical Power Consumption*		1500W	2250W	3000W
Typical Peak Irradiance (W/cm²)				
Working Distance	1 mm	15.1	15.1	15.1
	10 mm	12.2	12.2	12.2
	20 mm	8.7	8.7	8.7
	30 mm	6.7	6.7	6.7
	40 mm	5.0	5.0	5.0
	50 mm	4.0	4.0	4.0
Optical Power*		650W	975W	1300W
Longitudinal Uniformity*		Better than +/-10%		
Operating Voltage		48V DC +/- 2V		
Dimensions (L x W x H)		159 x 80 x 218 mm	235 x 80 x 218 mm	311 x 80 x 218 mm
Weight (kg)		2.8	3.7	5.2
Cooling		Air		
Life Expectancy		> 20,000 hours		
Automation		Integrated PLC controls for UV intensity and system alarms		
LED Warranty		2 years or 10,000 service hours		

*At 100% intensity setting

Mechanical Drawings

Mechanical drawings are available on our website. To find out more about the OmniCure AC Series of UV LED curing solutions, please visit www.excelitas.com/omnicure

Polytec GmbH
Polytec-Platz 1 - 7
Tel: +49 (72 43) 604 1540
E-Mail: ot@polytec.de
D - 76337 Waldbronn
www.polytec.com