## UV/Visible Curing System for Industrial Ink Jet Applications

# OmniCure® S2000

### The OmniCure® S2000 For UV/Visible Industrial Pinning is the most versatile system of its kind.

The OmniCure® S2000 UV System designed by Lumen Dynamics provides low-heat curing for fixed-head, single-pass industrial ink jet printers. It controls dot gain and yielding high-resolution printing at the fastest possible print speeds in a small, compact form factor.

The OmniCure® S2000 offers the benefit of UV curing to the print industry, helping ensure a high-quality output every time. The ability to control drop spread results in better ink drop integrity and optimal image quality with fewer mistakes and ultimately, improving client satisfaction.

By combining the OmniCure® R2000 Radiometer, calibration and absolute irradiance levels can be set from a single reference point.


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Excelerate®
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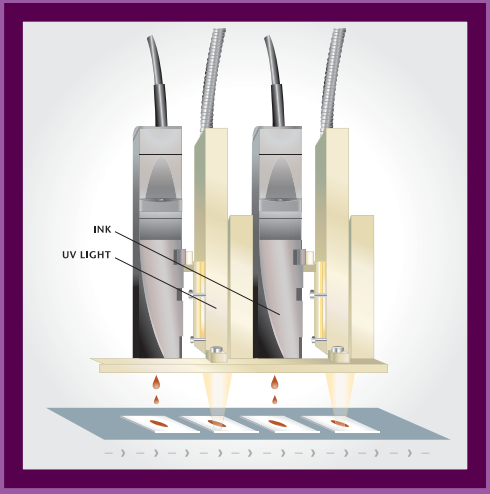
# The OmniCure® S2000

## The OmniCure® Advantage in Industrial Ink Jet Applications

With a small compact form factor, the OmniCure® S2000 provides optimum power, spectrum, control and repeatability required for the most demanding ink jet applications. Offering a powerful 200 Watt lamp with a guaranteed life of 2000 hours, the OmniCure® S2000 provides Closed-Loop Feedback technology and a flexible PC software interface for computer-controlled operation. When combined with OmniCure®'s R2000 Radiometer, the OmniCure® S2000's precision and reliability is unmatched. The OmniCure® S2000 is also designed to adhere to industrial regulatory standards and is RoHS compliant.

**The OmniCure® S2000 is a compact, easy-to-install, UV light system that overcomes the challenges often associated with the installation of UV lamps next to high-precision ink jet.**




The system is comprised of a high-power UV light source that uses ultra-thin fiber optic cables to deliver focused, uniform curing beams exactly where you need them. Since the OmniCure® S2000 lamp is remote to the print site, there are no cooling fans or high voltages next to printheads to interfere with print quality.

The compact fiber head generates no heat and no electrical noise. The small footprint of the fiber cable ensures quick installation just about anywhere, making it the ideal solution for jobs requiring multiple printhead stacking. This technology allows for the sharpest colour rendering in single-pass high-speed, industrial printing. It offers flexibility in selecting the desired optical spectrum through factor configured optical filters.

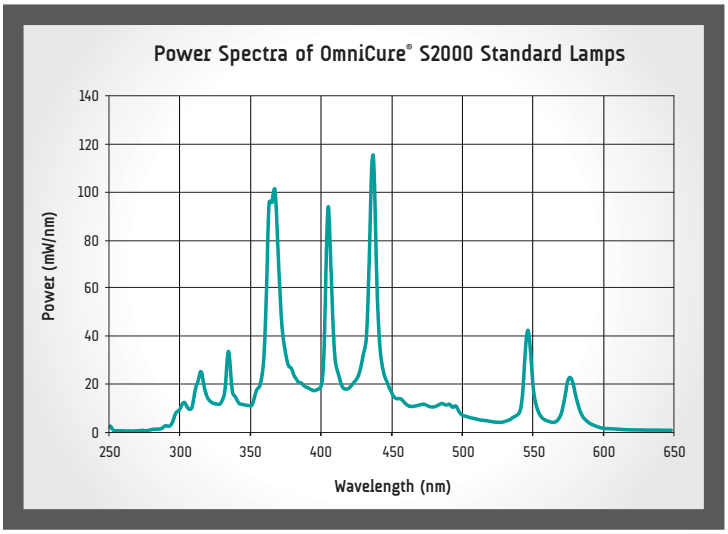
## S2000 Typical Irradiance

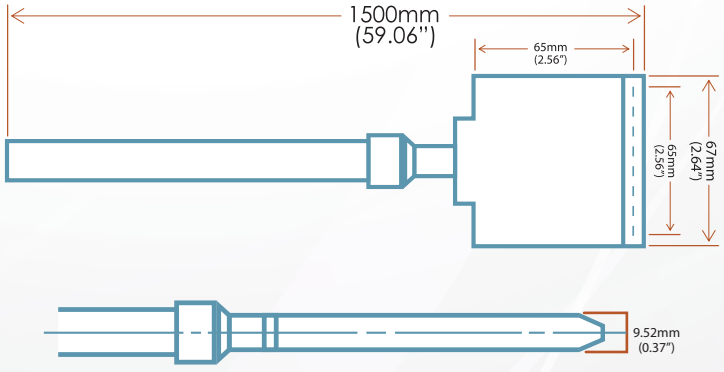
Standard Lamps

| | 5mm LG (working distance 1mm) | 5mm HPFLG (working distance 3~4mm) | 65mm two row HPFLL (without focal optics at working distance of 3~4mm) |
|---|---|---|---|
| FILTER | IRRADIANCE (W/cm²) | | |
| 400-500 | 16.55 | 10.68 | 1.39 |
| 320-500 | 24.70 | 20.00 | 2.60 |
| 365 | 7.28 | 7.29 | 0.95 |
| 320-390 | 9.83 | 7.89 | 1.03 |
| 250-450 | 26.64 | 20.13 | 2.62 |
| No Filter | 37.30 | 27.13 | 3.53 |

## Flexible Spectral Output

The broad spectral output makes the OmniCure® S2000 ideal for a wide range of applications. Selectable bandpass filters allow you to customize the light for your specific application. Two lamps are offered: Standard lamp and Surface Cure lamp.




**PLEASE NOTE:** Dimensions are shown in inches and millimeters. Dimensions relate to standard High Power Fiber Light Lines and are for the purpose of providing fixturing and clearance details. Customized solutions are available upon request.

# Expanding Your Options

## Light Delivery Methods

To accommodate the various needs of customers, the OmniCure® S2000 is adaptable to four different light guide options.

### 1 High Power Fiber Light Guide

Supplies an equal distribution of light energy to multiple cure sites from a single light source. New technology provides over 50% more throughput power than industry-standard fiber guides for greater flexibility in your curing process.

### 2 Liquid Light Guide

Available in 3, 5 and 8mm tip diameters. An economical choice for light delivery. Standard lengths range from 750 to 3000mm. Suitable for full cure, low print speed applications.

### 3 High Power Fiber Light Line

Utilizes technology developed in the High Power Fiber Light Guides to provide a high output linear beam of curing energy. Ideal for narrow, single-pass, pinning applications. Available in 1 or 2 leg configurations.

| FEATURES | BENEFITS |
|---|---|
| **Small Form Factor** | Fits between ink jet heads for a smaller printing engine |
| **Multiple light guide options** | Flexibility in process development |
| **Hg Spectrum** | Compatible with all UV based applications |
| **200W lamp technology with up to 30W/cm² of output and a 2000 hour lamp life guarantee** | Lower operating costs |
| **Intelli-Lamp® Technology to cool lamp and monitor lamp hours** | Maintain optimum operating condition, stable lamp output, longer lamp life, accumulated lamp hours |
| **2 Lamp Options** | Special lamp technology for enhanced surface cures |
| **Closed-Loop Feedback Technology** | Automatically maintains a constant output for a repeatable curing process |
| **External PC Controlled** | Beneficial for automated assembly processes |
| **Adjustable light output in 1% increments** | Allowing very precise control of output |
| **Easily combined with the OmniCure® R2000 Radiometer** | Calibrate and set absolute irradiance levels wirelessly from a single reference point |
| **Integrated High Speed Shutter** | Allows for fast and controlled applications of UV |

## DESCRIPTION

| | |
|---|---|
| **Lamps** | High Pressure 200 Watt Mercury Vapor Short Arc (standard or surface cure) |
| **Lamp Life** | 2000 hours (guaranteed) |
| **Available Filters** | Standard: 320-500nm<br>Optional: 250-450nm*, 365nm, 320-390nm, 400-500nm, 250-600nm* |
| **Panel Controls** | Power On/Off, Display Mode, Adjust Up/Down, Start/Stop, Lock/Unlock |
| **Panel Displays** | Accumulated lamp usage, Exposure time (0.2 - 999.9sec), iris setting (0-100%) / irradiance level (0.2W/cm² - 40W/cm²), lamp on/warm-up, shutter open, calibrated, Light Guide detection, shutter/lamp error |
| **Warm-up Period** | 4 minutes (typical) |
| **Power In** | 100-120VAC / 200-240VAC, 50/60Hz |
| **Power Supply** | High efficiency, switch mode, line isolated |

## GENERAL SPECIFICATIONS

| | |
|---|---|
| **Dimensions (LxWxH)** | 13.3" x 7.1" x 7.9" (33.8cm x 18.0cm x 20.1cm) |
| **Weight** | 9.9lbs (4.5kg) |
| **Includes** | Lamp Module, Selected Filter (installed), Protective Eyewear, Grounded and Shielded Power Cord, Foot Pedal, Manual |
| **Warranty** | 1 year (excluding Lamp and Light Guide) |

* Blank filter; must be used with Fiber or Extended Range Light Guide

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**PLEASE NOTE:** Hg-LAMP CONTAINS MERCURY, Manage in Accord with Disposal Laws, See: www.lamprecycle.org or 1-800-668-8752