### OmniCure® UV Curing • In Control

# OmniCure V3 UV LED Heads

### Class Leading Optical Performance & Flexibility for UV Spot Curing

**Power**: Offers class leading irradiance (W/cm<sup>2</sup>) and optical power (W) at 365nm, 385nm, 395nm and 405nm.

**Efficiency**: More energy efficient, lower maintainance, longer service life for use in industrial manufacturing.

**Consistency**: Improved radiation distribution across beam cross section. Delivers consistent, controlled, and repeatable cure when paired with LX500 Controller.

**Versatility**: Wide range of cross compatible accessories including focusing lenses, adapters, and extension cables with customization support. Enables use in a variety of applications.





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# Leap into the Future of UV Curing with Omr

OmniCure<sup>®</sup> V3 UV LED Heads for LX500 Controller use next generation UV LEDs to deliver best-in-class optical performance. With higher power delivery, improved efficiency, enhanced beam profile and an available range of cross compatible accessories, V3 Heads have been optimized for use in a variety of industrial manufacturing applications. They are able to deliver higher dosage, distributed uniformaly across the spot area for faster, more consistent cures with greater control and higher efficiency. V3 Heads offer superior thermal management to extract and dissipate internal heat generated by the LED, allowing enhanced air cooling efficiency in even the most challenging manufacturing environments.



Optical Power (mW)



FEATURESBENEFITSV3 UV LEDs provide high output<br/>• 16.5W/cm², 750mW (typical) at 365nm<br/>• 27.3W/cm², 1,100mW (typical) at 385nm<br/>• 27.0W/cm², 1,100mW (typical) at 395nm<br/>• 23.8W/cm², 1,000mW (typical) at 395nm<br/>• 23.8W/cm², 1,000mW (typical) at 405nmReduces manufacturing costs with faster curing times and higher power efficiency.Ultra-cool UV LED headsLong UV LED head lifetime, improved power efficiency and low cost of ownership.Patented Intelli-Lamp® technology for real-time monitoring<br/>of LED temperature and number of hours of operation.Maximizes UV LED head power efficiency, long-term reliability and lifetime.Locking HDMI ConnectorDesigned for easy installation

Identical form factor, Wavelength, Accessories compatibility compared to MAX UV LED Heads.

Mechanical and Optical Compatibility with your existing setup alows for seamless update to V3 Heads from MAX LED Heads.



## **Beam Profiles**

















### 395nm

















## Compatibility V3 UV LED Heads v/s MAX UV LED Heads

#### **Optical Compatibilty**

V3 Heads offer 25% higher peak irradiance and 75% higher optical power at same working distance (365 nm with 8 mm Lens).

#### Wavelength Compatibility

Comparable wavelength binning.

#### **Mechanical Compatibility**

Same form factor as MAX Heads.

#### **Controller Compatibilty**

Limited compatibility with older generation controller. Refer to LX500 instruction manual for more details.



### Optical Output Comparison 365nm (8mm Lens)





#### **GENERAL SPECIFICATIONS**

Typical Peak Irradiance16.8(365nn)[27.0(395nn)](23.8(405nn)/24.9(nn))Optimal Working Distance (many Distance (man		
Optimal Working Distance (mm) (Lens Dia. (mm)7.5 (3) [11.5 (6) [14 (8) [16.5 (10) [16.5 (12)]Typical LED Lifetime20,000 hours**LED Temperature MonitoringLED temperature monitoring & over temperature protection by patented Intelli-Lamp® technologyLED Lifetime MonitoringLED number of hours of operation monitored by patented Intelli-Lamp® technologyCable Included with the HeadLength: 1 meter (extension cables also available: 1m, 3m and 10m)Head DimensionsHead outside diameter: 12mm ong head length: 125mm end short head length: 55mmLight SourceLED Class, Risk Group 3WarrantyGuarantee of 10,000 hours or 3 years, whichever comes first.	Typical Peak Irradiance	16.8 (365nm)   27.3 (385nm)   27.0 (395nm)   23.8 (405nm) W/cm² respectively with 3mm lens*
Typical LED Lifetime20,000 hours**LED Temperature MonitoringED temperature monitoring & over temperature protection by patented linetamp® technologyLED Lifetime MonitoringED number of hours of operation monitored by patented linetamp technologyCable Included with the HeadEngth: 1 meter (extension cables also available: 1m, 3m and 10m)Head DimensionsHead outside diameter: 12mm ong head length: 125mm + Short head length: 55mmLight SourceED Class, Risk Group 3Kertifications & Safety StandardsRidls compliant and meets CE requirementsWarrantyGuarantee of 10,000 hours or 3 years, whichever comes first.	Optimal Working Distance (mm) (Lens Dia.(mm)	7.5 (3)   11.5 (6)   14 (8)   16.5 (10)   16.5 (12)
LED Temperature MonitoringLED temperature monitoring & over temperature protection by patented Intelli-Lamp® technologyLED Lifetime MonitoringLED number of hours of operation monitored by patented Intelli-Lamp technologyCable Included with the HeadLength: 1 meter (extension cables also available: 1m, 3m and 10m)Head DimensionsHead outside diameter: 12mm cong head length: 125mm • Short head length: 55mmLight SourceLED Class, Risk Group 3Certifications & Safety StandardsRoHS compliant and meets CE requirementsWarrantyGuarantee of 10,000 hours or 3 years, whichever comes first.	Typical LED Lifetime	20,000 hours**
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Head DimensionsHead outside diameter: 12mm Long head length: 125mm • Short head length: 55mmLight SourceLED Class, Risk Group 3Certifications & Safety StandardsRoHS compliant and meets CE requirementsWarrantyGuarantee of 10,000 hours or 3 years, whichever comes first.	Cable Included with the Head	Length: 1 meter (extension cables also available: 1m, 3m and 10m)
Light Source LED Class, Risk Group 3   Certifications & Safety Standards RoHS compliant and meets CE requirements   Warranty Guarantee of 10,000 hours or 3 years, whichever comes first.	Head Dimensions	Head outside diameter: 12mm Long head length: 125mm • Short head length: 55mm
Certifications & Safety Standards   RoHS compliant and meets CE requirements     Warranty   Guarantee of 10,000 hours or 3 years, whichever comes first.	Light Source	LED Class, Risk Group 3
WarrantyGuarantee of 10,000 hours or 3 years, whichever comes first.	Certifications & Safety Standards	RoHS compliant and meets CE requirements
	Warranty	Guarantee of 10,000 hours or 3 years, whichever comes first.

\* Typical Maximum Irradiance Variation: +/- 20% (as specified by the LED device manufacturer)

\*\* With 100% initial output at 25°C temperature and secured to standard installation clamp. This data is for reference only.



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