OmniCure[®] UV Curing • In Control



OmniCure High Power Fiber Light Guide

Delivers High Output UV Curing Energy Exactly Where You Need It and How You Need It

The OmniCure[®] High Power Fiber Light Guides (HPFLG) are ideal for use when multiple outputs with equal intensities to each output are required. Excelitas Technologies' proprietary fused fiber bundle and higher Numerical Aperture (NA) allow OmniCure HPFLGs to capture maximum light power from the UV curing light source and provide a high performance UV solution. Fiber light guides are virtually free of optical degradation compared to liquid light guides.



Improves UV high power transmission from the light source to multiple curing sites

Reduces UV manufacturing costs with faster curing time, higher yields and improved power efficiency

Delivers equal distribution (+/-5%) of light energy to curing sites from a single light source for repeatable, high quality results

Multi-legged guides provide 25%-50% higher throughput than comparable multi-legged liquid light guides to transmit greater energy from the lamp

Offers a wide range of standard light guides (3mm, 5mm, multi-leg) and output adaptors (cure ring, light line, collimator, 90° angle) to meet customers' specific needs

FEATURES

No optical degradation resulting in longer lifetimes than liquid light guides

Higher output than comparable multi-legged liquid light guides

Balanced output through multiple legs (+/-5%)

Transmitted light wavelengths from 160nm to 1200nm

BENEFITS

Eliminates liquid light guide replacement costs

Improves lamp usable lifetime and reduces operating costs

Provides higher yields for your curing processes and faster manufacturing equipment setup time

Enables tack-free UV light curing for most adhesives



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GENERAL SPECIFICATIONS

| Spectrum Range | 160 nm to 1200 nm |
|---|-------------------|
| Multi-legged Output Balancing Tolerance | +/-5% |
| Numerical Aperture (NA): | 0.37 |

Beam Profiles with the OmniCure® S2000 Additional beam profiles available, please contact our sales department.



Typical irradiance measurements with a tolerance of +/- 10% (System lamp lifetime: < 100 hours).

Typical Output

| HPFLG | Average Irradiance (W/cm²)** | | | Power (W)* | | |
|----------|------------------------------|-------|-------|------------|-------|-------|
| | S2000 | S1500 | S1000 | S2000 | S1500 | S1000 |
| 2 x 3 mm | 22.6 | 22.8 | 18.7 | 1.6 | 1.6 | 1.3 |
| 3 x 3 mm | 20.0 | 23.2 | 14.3 | 1.4 | 1.5 | 1.0 |
| 4 x 3 mm | 17.9 | 18.1 | 11.5 | 1.3 | 1.3 | 0.8 |

* Total power measured by an OmniCure R2000 Radiometer (Working distance: 0 mm). ** Average irradiance: Power at the individual leg output of the light guide divided by the output area.

Light Guide Output Dimensions



Light Guide Cross Section



The uniform distribution of the fibers within the High Power Fiber Light Guide allow an equal distribution of light energy among each leg in a multi-legged Light Guide.

Ordering Guideline

| Light Guide | Length | Part Number |
|-------------|---------|-------------|
| 2 x 3 mm | 1000 mm | 806-00005 |
| 3 x 3 mm | 1000 mm | 806-00007 |
| 4 x 3 mm | 1000 mm | 806-00006 |

Additional configurations available; please contact our sales department at OmniCure@excelitas.com.

To learn more about OmniCure UV curing solutions, please visit www.excelitas.com/omnicure.



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