

# F600S

The F600S UV lamp system is a product of Fusion UV Systems' continued commitment to the development of new and improved ultraviolet curing systems that meet today's growing demands for higher production speeds, increased profitability, enhanced reliability, and new UV curing applications.

A modular 10-inch lamp system, the F600S system increases UV output from previous system benchmarks of 300 to 400 watts/inch to 600 watts/inch, with no reduction of warranted bulb life. This higher power output increases UV curing effectiveness, depending upon the particular materials employed in the process. The system's increased power stems from a number of technical enhancements to the I600M irradiator and the P600M power supply.

The P600M power supply is powerful as well as intelligent, thanks to the addition of microprocessor control. In operation, a liquid crystal display offers continuous status updates as well as instant system diagnostic information.

Irradiators can be placed end-to-end to create a lamp system of almost any length, providing high uniformity for wide applications.

## Fast UV Curing from High Peak Irradiance and Low Infrared

The small diameter bulb combined with the elliptical reflector provides high peak of UV irradiance for high-speed cure. The small diameter bulb also reduces infrared emission resulting in lower surface temperatures of the substrate, thus eliminating the need for complicated heat removal methods.

## Popular Bulb Spectra Available

The standard bulb spectra are available: "H" spectral distribution is suited for clearcoats and varnishes; the "D" spectral distribution is popular and proven for inks and thick coatings or adhesives; and the "V" distribution is effective in the UV curing of white basecoats, through laminating materials and in other specialty applications.

## The Irradiator

- Electrodeless technology enables frequent on/off operations that have no adverse effect on UV output or bulb lifetime. Bulb also maintains spectral consistency throughout its life.
- A focused elliptical reflector concentrates maximum UV energy on substrate.
- Positive air cooling pushes air, supplied by a remote blower, through the reflector and over the bulbs. This means that bulb and reflector are always being cooled with clean air.
- Engineered modular design means modules can be placed end-to-end for uniform cure, and controlled individually or together.



# SPECIFICATIONS: F600S

## Irradiator Model I600M

### Lamp Power (input):

- **Full power:** 600 w/inch (240 w/cm); 6000 watts total.
- **Low power:** 400 w/inch (160 w/cm); 4000 watts total.

**Dimensions:** 16.9" (429 mm) high x 8.2" (208 mm) wide x 10.5" (267 mm) long.

**Weight:** 39 lbs. (17.8 kg).

**Cooling:** Minimum 315 scfm (8.9 m<sup>3</sup>/min) of filtered air at 11.0" water gauge (2.75 kPa) at the inlet (6.4" wg, 1.6 kPa inside the irradiator housing). Supplied by external blower.

**Reflector Geometry:** Elliptical. Focus 2.1" (53 mm) from irradiator face.

**Substrate Location:** 2.1" (53 mm) from irradiator face for maximum irradiance.

**Mounting Position:** Irradiator can be placed end-to-end to create a lamp of almost any length. Operates in any position.

**Footprint:** (mechanical) 10.5" (267 mm) x 8.2" (206 mm).

**Light Shield:** Available upon request to customer specifications.

## Power Supply Model P600M

**Dimensions:** 8.7" (221 mm) high x 18.4" (467 mm) wide x 29.7" (754 mm) long.

**Rear Clearance:** 12" (300 mm) required (for connections and air flow).

**Weight:** 190 lbs. (86 kg).

### Bulb Input Power Levels:

- **Full power:** 6000 watts.
- **Low power:** 4000 watts.

**Interconnecting Cables:** Circular connectors with locking rings (not interchangeable with other Fusion UV power supply cables).

**Voltage:** P600M: 380, 415, 440 volts, three phase at 50 Hz or 400, 460, 480 volts, three phase, at 60 Hz (specify at time of order). (Operation from 200, 208, 220, or 240 volt requires customer supplied step-up transformer(s)).

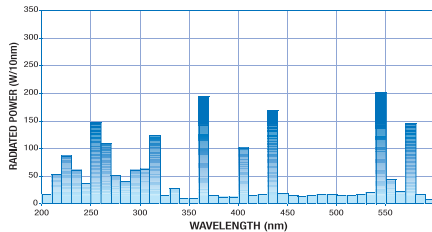
**Line Power:** 10.8 kva, 3 phase (6.2 kva/phase).

**Control Voltage:** Supplied internally.

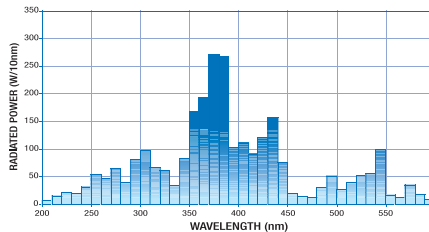
F600S lamp system is fully certified to applicable European and USA regulations and requirements.

## F600S Spectral Outputs

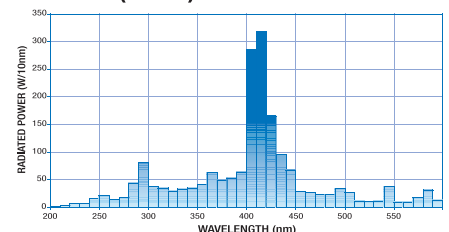
H Bulb (13 mm)



D Bulb (13 mm)



V Bulb (13 mm)



Contact your local Fusion UV office for an engineered solution for your specific requirements.



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ISO 9001 Certified QMS



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• Canada Patent No. 1024246  
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