

Fusion UV[®] F600S

UV Curing System

Fusion UV[®]



Introduction

The F600S UV lamp system has been Fusion UV®'s workhorse product for more than 20 years. Reliable and solid-performing, continual updates make it an effective solution for a wide variety of industrial curing applications. A modular 10-inch lamp system, the F600S operates at 600 W/inch (240 W/cm). The microwave lamp operates without the metal electrodes required in conventional arc lamps.

The F600S UV lamp system's power stems from technical enhancements to the I600M irradiator and the P600M power supply. The P600M power supply has two power

levels and is microprocessor controlled. During operation, the organic light-emitting diode (OLED) display offers continuous status updates and instant system diagnostic information. The irradiators placed end-to-end can create a lamp system of almost any length, providing high uniformity for wide applications.

Fusion UV's modular, microwave-powered UV lamp and bulb technology is universally recognized for outstanding stability and long operational life. Our product development is driven by a customer-centric mandate of continual innovation and improvement.

FUSION UV ADVANTAGES

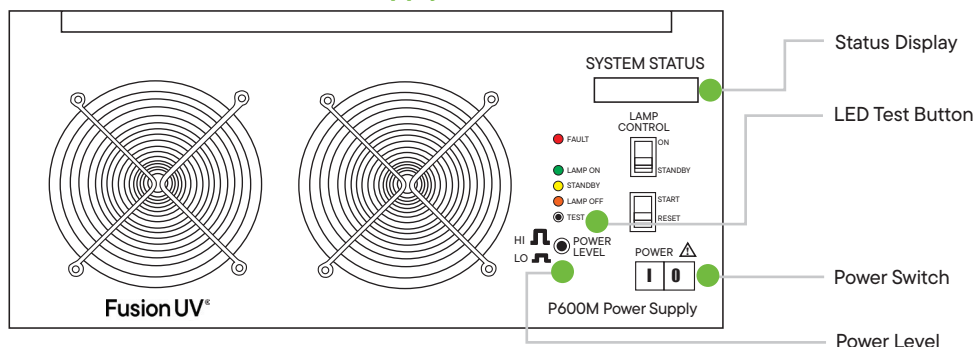
- High speed production resulting from high peak irradiance
- Easy & fast software updates via USB interface
- Reduced downtime with easy troubleshooting – front panel displays data, EEPROM stores the last 10 faults
- System is RoHS compliant
- Robust and reliable operation and control, even in harsh environments, due to effective electrical isolation
- Easier to process heat-sensitive substrates due to less IR heat from bulb
- Popular bulb spectra available with a simple bulb change

Specifications: F600S

The F600S [240 W/cm (600 W/in.)] system consists of the following items:

- An I600M-series irradiator
- A P600M power supply
- One cable assembly to connect the high voltage and control outputs from the power supply to the lamp
- A Fusion UV RF (microwave) leakage detector assembly, RF-5
- One cable assembly to connect the power supply to the RF detector assembly

Front Panel of P600M Power Supply



NOTE: If using a remote cooling or exhaust blower assembly, contact Fusion UV for dimensions and performance requirements.

IRRADIATOR MODEL I600M

Weight	I600M: 18 kg (39 lbs.)
Dimensions	440 mm (17.3 in.) high x 210 mm (8.2 in.) wide x 270 mm (10.6 in.) long
Cooling air	Minimum 7.7 m ³ /min. (270 scfm) of filtered air at 2.2 kPa water gauge (8.9 in.) at the inlet (2.0 kPa inside the irradiator housing)
Exhaust	Minimum 10.6 m ³ /min. (375 scfm) at -50 Pa water gauge (-0.2 in.) measured in the light shield
Reflector geometry	Elliptical. Focus 53 mm (2.1 in.) from irradiator face (209 end reflectors available for far-field curing)
Lamp power	Full power: 240 W/cm (600 W/in.); 6,000 watts total
Footprint	267 mm (10.5 in.) x 206 mm (8.1 in.)
Light shield	Available upon request to customer specifications
Mounting position	Any angle
Bulbs available	H, D, V, H+/++ family of Hg bulbs

POWER SUPPLY MODEL P600M

Weight	80 kg (177 lbs.)
Dimensions	221 mm (8.7 in.) high x 467 mm (18.4 in.) wide x 754 mm (29.7 in.) long
Voltage	P600M: 380, 400, 415 volts, 3 phase, at 50 Hz or 380, 400, 460, 480 volts, 3 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 at 100%	10.8 kVA, 3 phase (6.2 kVA/phase)
Rear clearance	300 mm (12 in.) required (for connections and air flow)
Bulb input power levels	Full power: 6,000 watts Low power: 4,000 watts
Interconnecting cables	Circular connectors with locking rings
Control voltage	Supplied internally
USB	Easy access on front panel for software upgrades

TÜV certified. Pending CE approval.

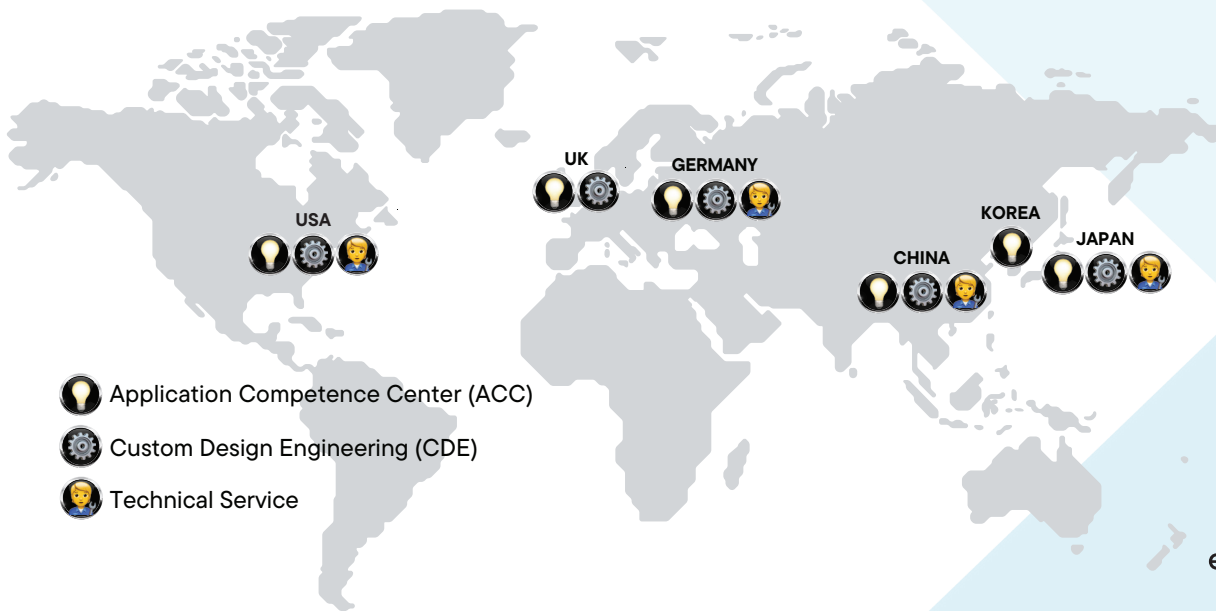
UTILITIES

Maximum line power	10.8 kVA @ 100% power
Maximum line current	50 Hz: 16 amps 60 Hz: 16 amps
Water	None required
Input voltage	380–415/380–480 V (50/60 Hz)
Compressed air	None required

Lamps contain mercury. Manage in accordance with local, state or federal disposal laws.

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

Success Factor: Regional teams close to our customers



- Application Competence Center (ACC)
- Custom Design Engineering (CDE)
- Technical Service



© 2026 Excelitas Technologies Corp. All rights reserved.



+1 301 527 2660

910 Clopper Road
Gaithersburg, Maryland
20878-1357

excelitas.com
info.hna@excelitas.com

©2026 Excelitas Technologies. We reserve the right to incorporate changes and improvements without notice. UVP31 EN/03.26.
Fusion UV is a registered trademark of Excelitas Technologies Corp.

ISO 9001 Certified QMS

