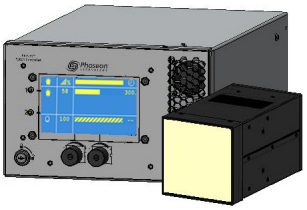
FireJet™ FJ801 Area Curing Solution

Product Specifications

Phoseon UV LED SLM™ Technology

Air Cooled



Phoseon Technology is the world leader in providing UV LED solutions for commercial and industrial applications. Phoseon's products deliver superior performance and real-world reliability for UV curing of adhesives, coatings and inks.

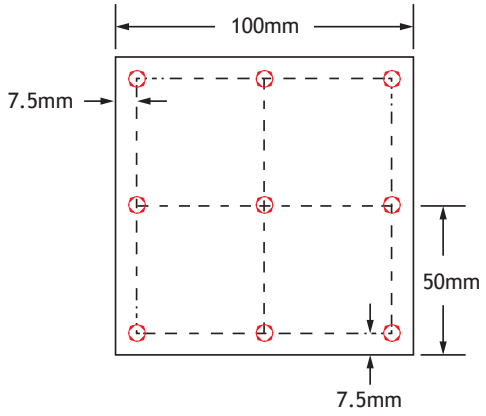
Phoseon's patented Semiconductor Light Matrix (SLM™) technology encapsulates LEDs, arrays, optics and cooling to maximize UV LED curing performance. The FJ801 Area Curing Solution consists of UV light source, controller, and cables. It is optimized for electronic manufacturing production lines with large area curing applications, such as micro speakers, camera modules, and flat panel displays.

Performance

	365nm	385nm	395nm	405nm
Peak Irradiance*	1.2 W/cm²	1.7 W/cm²	1.7 W/cm²	1.7 W/cm²
Total Output Power*	120W	170W	170W	170W
UV Footprint	100mm x 100mm			
Uniformity*	>85%			
Noise Level⁺	<77dBA			

*At the working distance of 10mm from substrate to light source glass. Uniformity is measured at nine different spots, shown below.

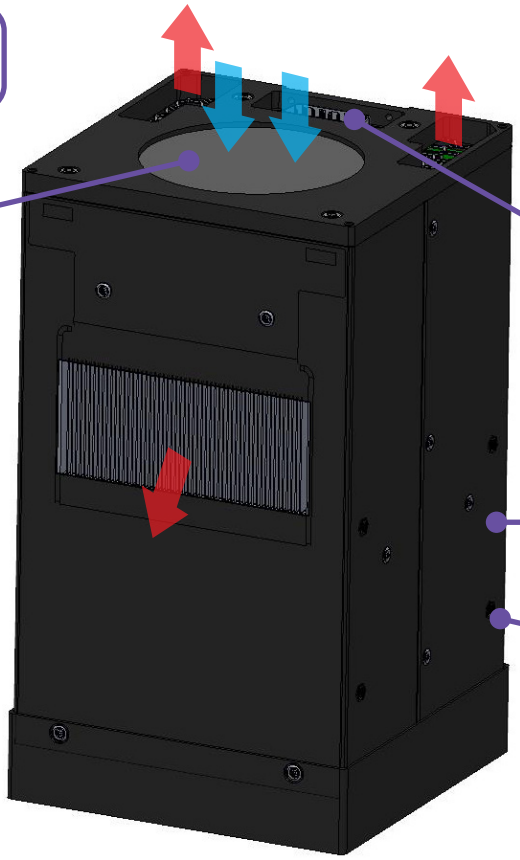
⁺Noise level is measured 1m from the lamp.



Light Source Setup

Air Flow: Intake (blue arrows)/Exhaust (red arrows)
Minimum clearance: 50mm

Replaceable Air Filter Kit:
PN 38910 Kit of 5 filters



Controller Mating Connector:
DB-15, Male
DB-15 cables must be fully populated Male-to-Female (minimum 20AWG wire for up to 10m)

Scalable on three sides (all sides except side with Exhaust)

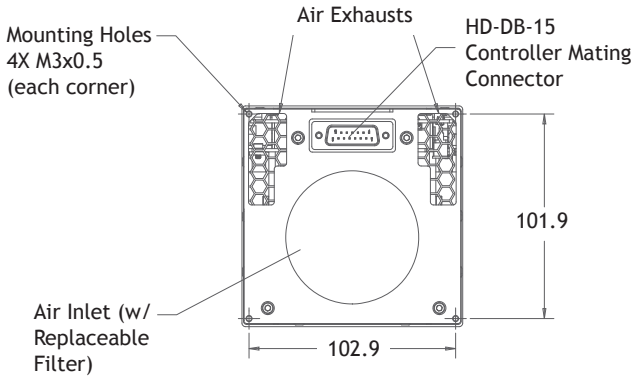
Mounting: 4X M3x0.5 Mounting Positions (See the Dimensions section for location details).

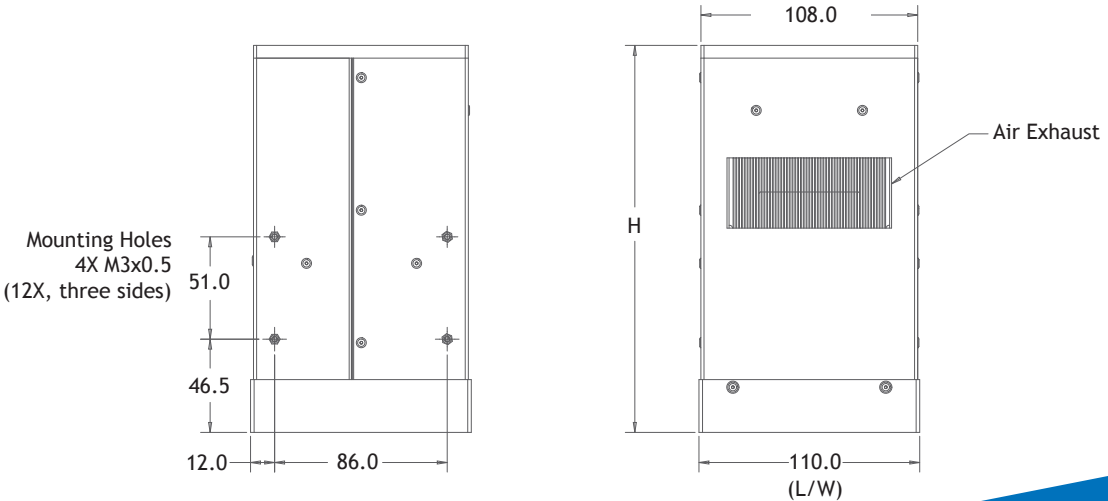
Equipment Type:
Electrical industrial process-control equipment
Operating Environment:
Indoor, Dry Location Use Only (Pollution Degree 2 as defined in EN61010-1)
Temperature: 10 to 40°C
Humidity: up to 80% non-condensing for temperatures up to 30°C
Altitude: Up to 3000m
Storage Temperature: -20°C to 85°C

Light Source Dimensions

Units of measurement: mm

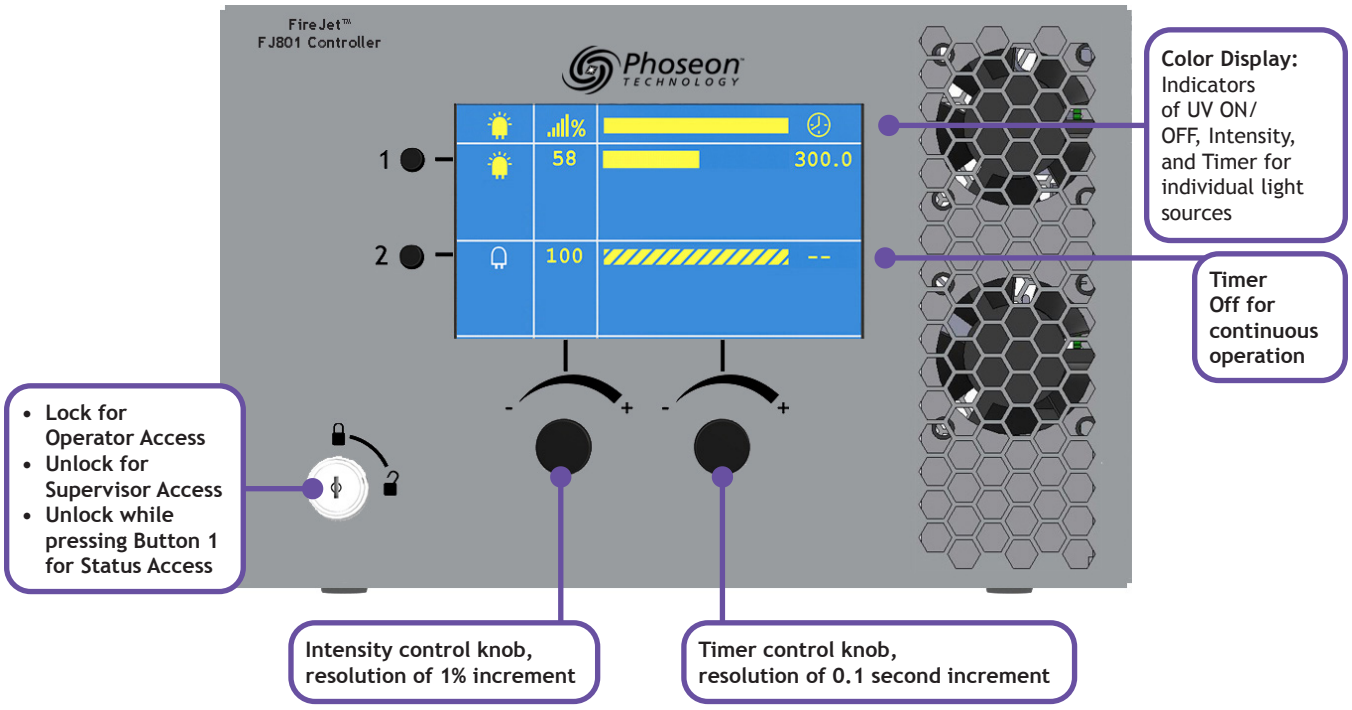
FJ801 Light Source	
UV Emitting Window	100x100
L	110
W	110
H	193
Weight (kg)	1.4

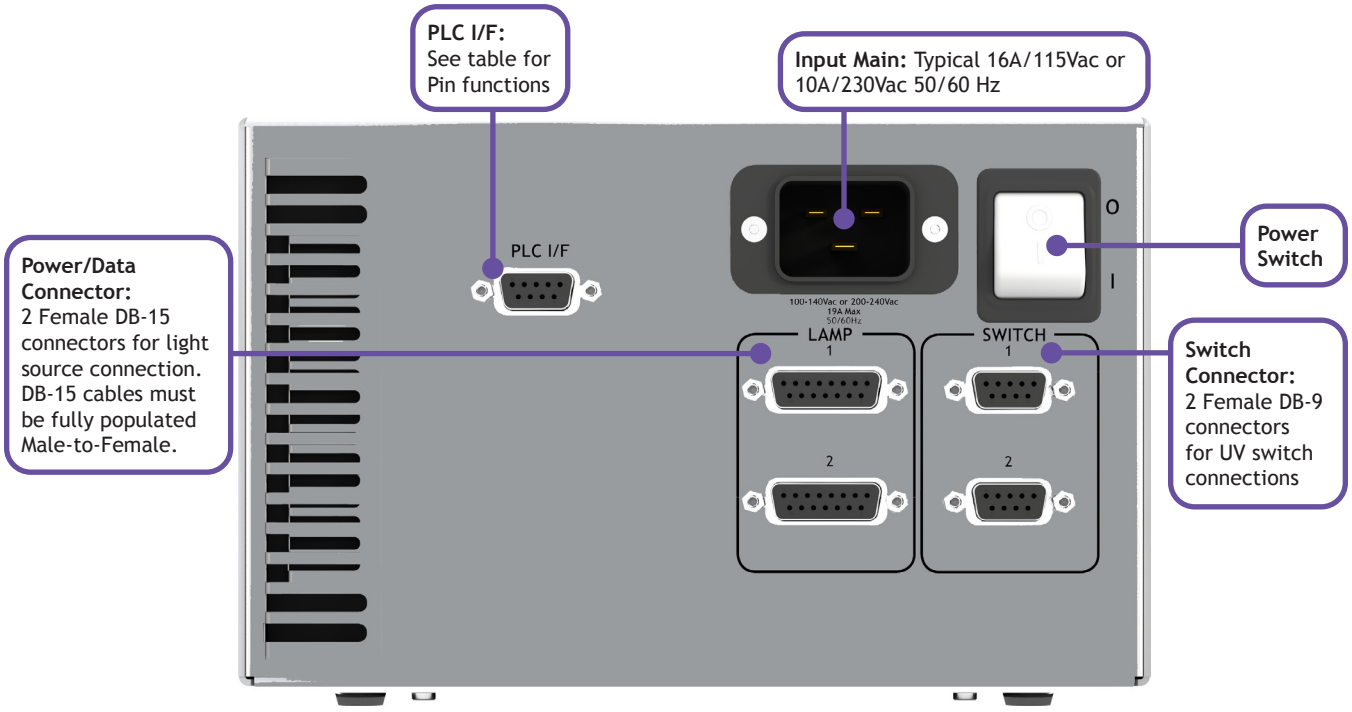




Controller Setup

- Intuitive graphical interface
  - On/off/fault
  - UV Timer: 0.1 to 600.0 sec, continuous
  - Intensity Control: 5% to 100%
- Individual control for up to 2 light sources
- 3 Access Levels: Operator, Supervisor and Status
- Fault signal output for line notification
- Manual/automatic external control available



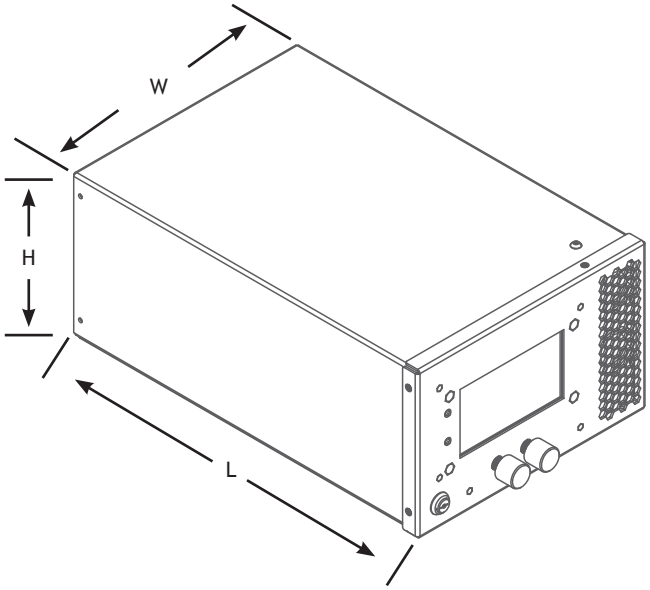


Controller Dimensions

Units of measurement: mm

FJ801 Controller	
L	336
L*	362
W	217
H	139
Weight (kg)	3.6

*Length, including Intensity & Timer Control knobs on front and Power Switch on back.

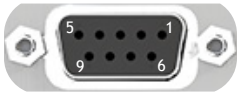


Cables & Connectors

Power/Data Cable	Connect Light Source to Controller
• **Connectors**	DB-15 connectors, Male-to-Female
• **Length**	1.5-meter, 3-meter, 7.5-meter, 10-meter
• **Gauge**	20 AWG
Power Cord	**Connects Controller to AC Outlet**
• **Connector**	Various wall options with C19 power cord to Controller
• **Length**	2.5-meter
• **Gauge**	14 AWG
Switch Input	**Connects External Input to Controller**
• **Connector**	DB-9 connector, Female

DB-9 Switch Pinout (Female)

Pin Number	Pin Name	Input/Output	Range (Min/Max)	Detailed Function Description
1 to 6, 8	N/C	-	-	-
7	Single Light Source Enable	Output	0V / 5V, max 24V	Normally high, low to enable
8	N/C	-	-	-
9	Ground	-	0VDC	Circuit Ground



Switch Connector

PLC I/F

Pin Number	Pin Name	Input/Output	Range (Min/Max)	Detailed Function Description
1	LAMP ENABLE1	Input	0V / 5V, max 24V	Normally low, high to enable
2	LAMP ENABLE2	Input	0V / 5V, max 24V	Normally low, high to enable
3	LAMP FAULT 1	Output	0V / 24V	Normally high, low = Fault
4	LAMP FAULT 2	Output	0V / 24V	Normally high, low = Fault
5	NC	-	-	-
6*	INTERLOCK	Input	0V / 24V	Normally high, low to allow enable
7	LAMP TEMP 1	Output	0V / 12V	Temperature = 0.1V per ˚C
8	LAMP TEMP 2	Output	0V / 12V	Temperature = 0.1V per ˚C
9	Ground	-	0VDC	Circuit Ground

*Interlock - Pin 6 must be shorted to Ground to allow enable. Connect the Interlock Connector at the PLC I/F connector to immediately disable the interlock and allow lamp ready mode.

Interlock **Connector**