FireJet FJ240

Product Specifications

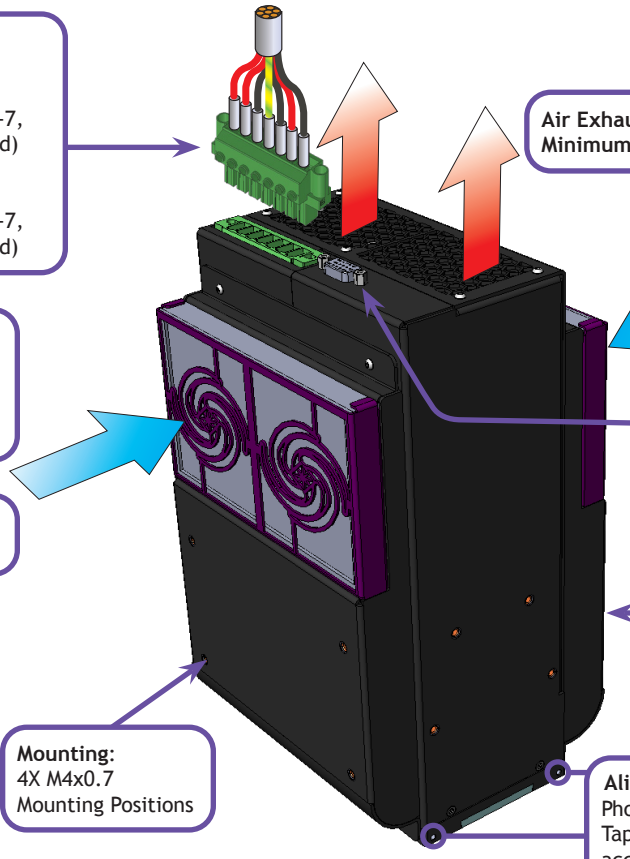
Phoseon UV LED SLM™ Technology

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 FireJet light source is for use in high-performance curing.

Air Cooled

Light Source Setup



TargetCure™
WhisperCure™

DC Input Power: 48±1Vdc
Data/DC Power Cable:
Mating Connector for the 75x40:
Phoenix contact 1777846 type PC5/3-STF1-7, 62 with two mounting flanges (not provided)

Mating Connector for 150-300x40:
Phoenix contact 1777888 type PC5/7-STF1-7, 62 with two mounting flanges (not provided)

Air Exhaust (top)
Minimum Clearance: 50mm

Air Intake

Replaceable Air Filters:
Phoseon PN 31807 (75x40mm: Pack of 6)
Phoseon PN 31806 (150x40mm: Pack of 6)
Phoseon PN 32300 (225x40mm: Pack of 6)
Phoseon PN 32578 (300x40mm: Pack of 6)

Interface:
PLC Interface through HD-DB-15

Air Intakes (both sides)
Minimum Clearance: 50mm

Mounting:
4X M4x0.7
Mounting Positions

Operating Environment:
Indoor use only
Temperature: 10 to 50°C
Humidity: <80% non-condensing for temperatures up to 30°C
Altitude: up to 3,000 m
Storage Temperature: -20 to 85°C

Mounting:
4X M4x0.7
Mounting Positions

Alignment Pins:
Phoseon PN 29258 (pack of 10)
Tapped (m3) holes accommodate pins for aligning FJ240s scaled end-to-end

Performance

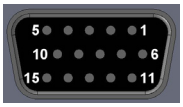
Wavelength	385, 395, 405nm									
Peak Irradiance	12W/cm²					16W/cm²				
Emitting Window (mm)	75x40	150x40	225x40	300x40	375x40	75x40	150x40	225x40	300x40	375x40
UV Power (Watts)	300	600	900	1200	1500	400	800	1200	1600	2000
48V Power In (Max)	768W 16A	1536W 32A	2304W 48A	3072W 64A	3840W 80A	1008W 21A	2016W 42A	3024W 63A	4032W 84A	5040W 105A

Wavelength	365nm				
Peak Irradiance	8W/cm²				
Emitting Window (mm)	75x40	150x40	225x40	300x40	375x40
UV Power (Watts)	200	400	600	800	1000
48V Power In (Max)	720W 15A	1440W 30A	2160W 45A	2880W 60A	3600W 75A

PLC Interface

The female HD-DB-15 connector is used to control the light source via PLC.

Data Connector



1* **Do Not Use**

2 **Intensity Control:** (Voltage Input)
1V = 10% of full power
10V = 100% of full power
Internal resistive load on this Pin is 100kΩ

3 **Enable High:** (24V PLC Input)
0 to 6V (ground/open input) = OFF *or*
16 to 24V = ON
Internal resistive load on this Pin is 125kΩ

4* **Do Not Use**

5 **Lamp Ready:** (24V PLC Output)
0 to 6V (ground) = Not Ready *or*
16 to 24V (open) = Ready
Internal resistive load on this Pin is 1.3kΩ
Sink Current Maximum = 6mA
Should be connected to high impedance input

6* **Do Not Use**

7+ **Interlock:** (24V PLC Input)
0 to 6V = UV Emission Allowed or
16 to 24V = UV Emission Stopped
Internal resistive load on this Pin is 10kΩ

8 **Ground**

9 **Ground**

10 **Ground**

11 **Fault:** (24V PLC Output)
0 to 6 (ground) = Fault or 16 to 24V (open) = No Fault
Internal resistive load on this Pin is 1.3kΩ
Sink Current Maximum = 6mA
Should be connected to high impedance input

12 **RS485 Communication:** Serial -

13 **RS485 Communication:** Serial +

14 **Ground**

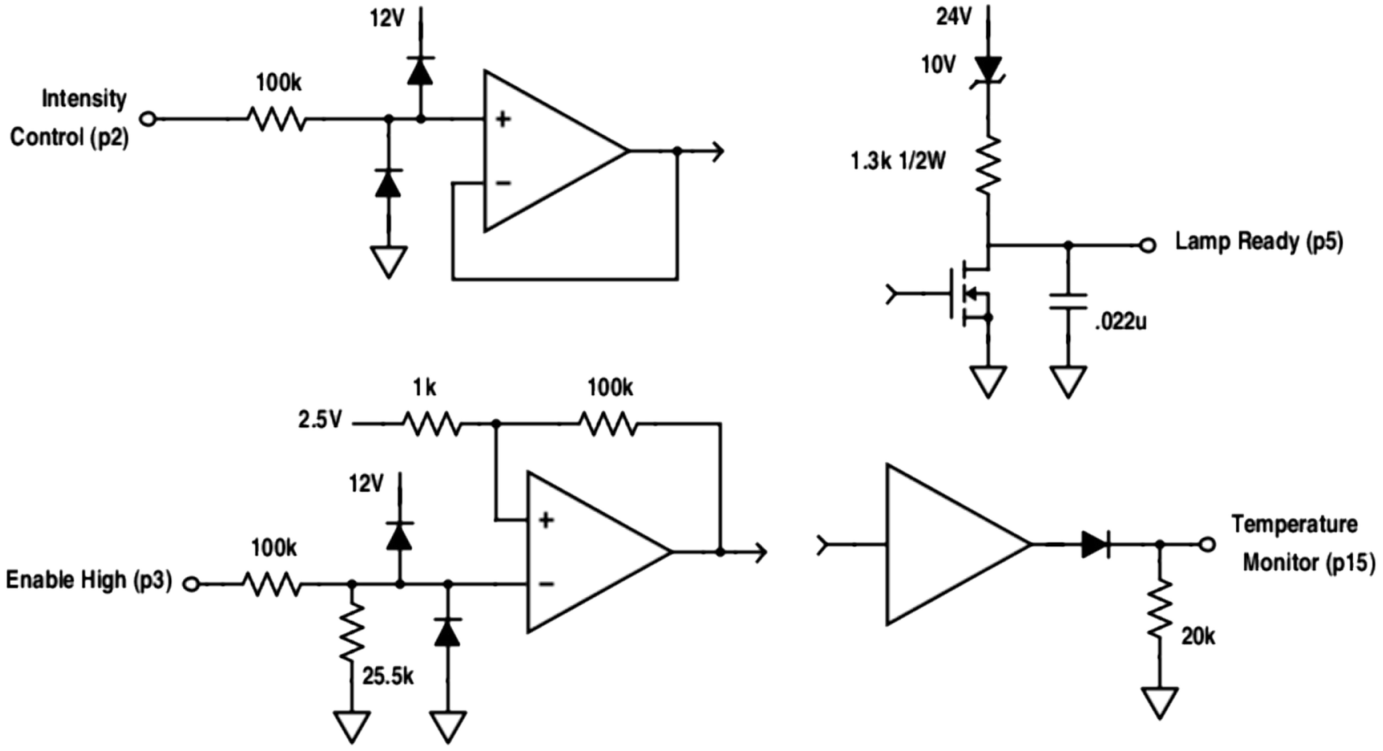
15 **Temperature Monitor:** (Voltage Output)
Voltage proportional to SLM heat sink temperature 0.1V = 1°C
This value should not exceed approximately 8V

Pins may be tied together to control multiple light sources from a single DB-15 interface with the following exceptions:

* Leave these Pins open (unconnected).

\+ The interlock Pins must not be tied together across multiple light sources. Each interlock must be connected to independent circuits.

The equivalent circuits inside the FJ240 UV light source are shown below:

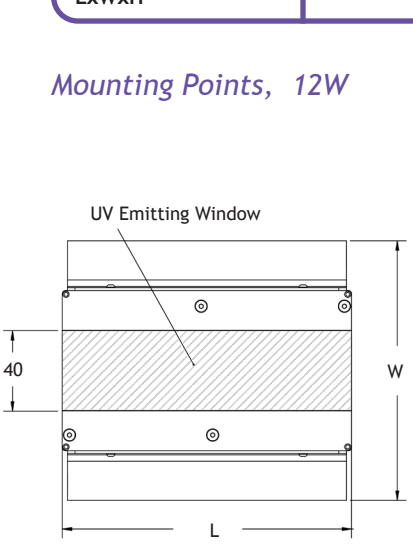


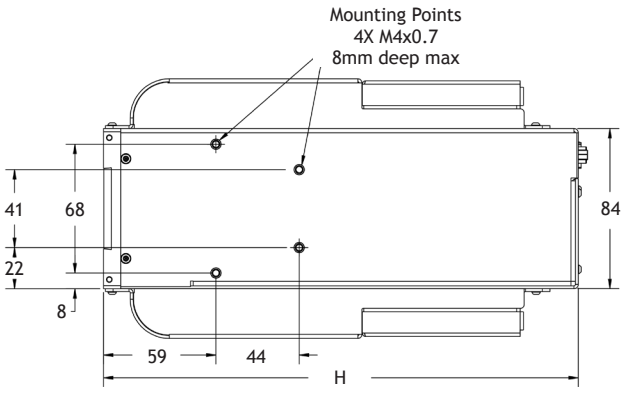
Dimensions

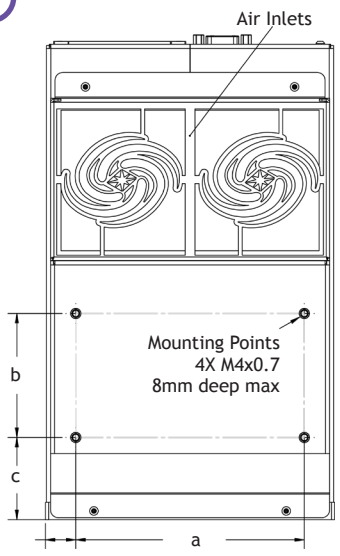
Units of measurement: mm

FJ240					
UV Emitting Window	75x40	150x40	225x40	300x40	375x40
a	56	120	120	240	379
b	65	65	65	65	65
c	43	43	43	43	43
Weight (kg)	1.3	2.2	3.2	4.2	5.2
Overall Dimensions LxWxH	77x136x249	152x136x249	228x136x249	303x136x249	379x136x249

Mounting Points, 12W







Mounting Points, 16W