

# FireJet FJ240

## Product Specifications



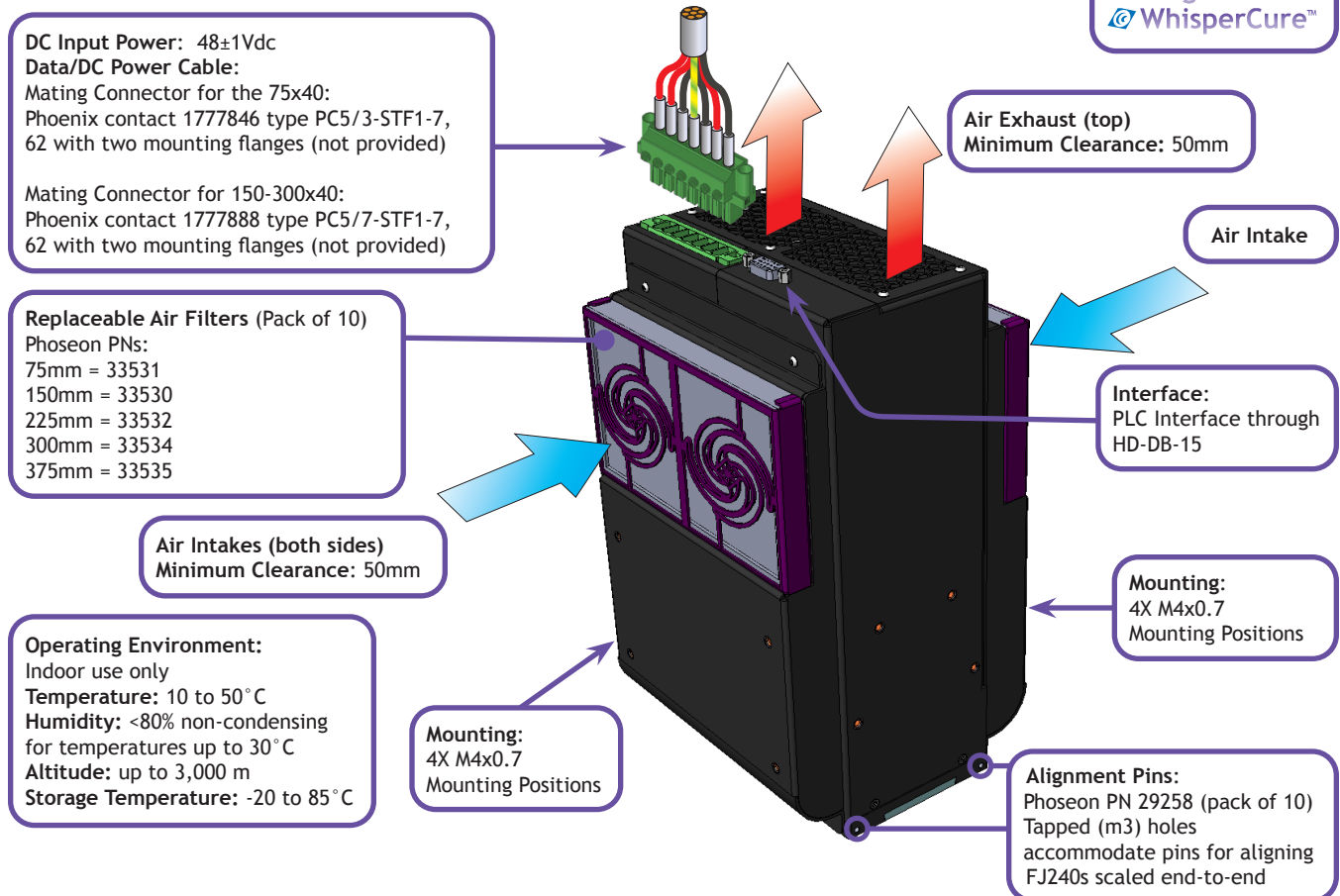
### Phoseon UV LED SLM™ Technology

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.



### Light Source Setup



## Performance

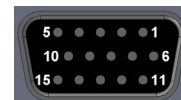
| Wavelength           | 385, 395, 405nm     |              |              |              |              |                     |              |              |              |               |
|----------------------|---------------------|--------------|--------------|--------------|--------------|---------------------|--------------|--------------|--------------|---------------|
| Peak Irradiance      | 12W/cm <sup>2</sup> |              |              |              |              | 16W/cm <sup>2</sup> |              |              |              |               |
| 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<br>16A         | 1536W<br>32A | 2304W<br>48A | 3072W<br>64A | 3840W<br>80A | 1008W<br>21A        | 2016W<br>42A | 3024W<br>63A | 4032W<br>84A | 5040W<br>105A |

| Wavelength           | 365nm              |              |              |              |              |
|----------------------|--------------------|--------------|--------------|--------------|--------------|
| Peak Irradiance      | 8W/cm <sup>2</sup> |              |              |              |              |
| Emitting Window (mm) | 75x40              | 150x40       | 225x40       | 300x40       | 375x40       |
| UV Power (Watts)     | 200                | 400          | 600          | 800          | 1000         |
| 48V Power In (Max)   | 720W<br>15A        | 1440W<br>30A | 2160W<br>45A | 2880W<br>60A | 3600W<br>75A |

## PLC Interface

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

Data  
Connector



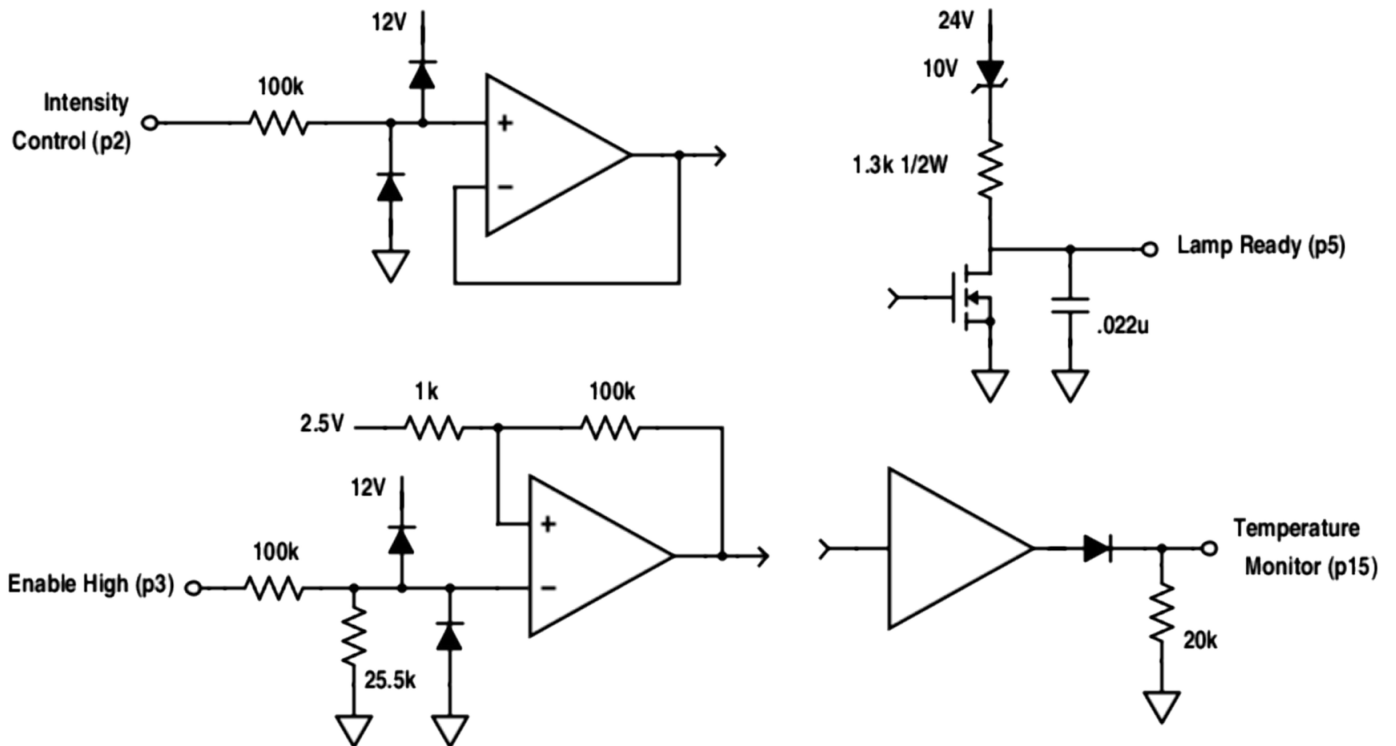
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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>1* Do Not Use</b></p> <p><b>2 Intensity Control:</b> (Voltage Input)<br/>1V = 10% of full power<br/>10V = 100% of full power<br/>Internal resistive load on this Pin is 100kΩ</p> <p><b>3 Enable High:</b> (24V PLC Input)<br/>0 to 6V (ground/open input) = OFF or<br/>16 to 24V = ON<br/>Internal resistive load on this Pin is 125kΩ</p> <p><b>4* Do Not Use</b></p> <p><b>5 Lamp Ready:</b> (24V PLC Output)<br/>0 to 6V (ground) = Not Ready or<br/>16 to 24V (open) = Ready<br/>Internal resistive load on this Pin is 1.3kΩ<br/>Sink Current Maximum = 6mA<br/>Should be connected to high impedance input</p> | <p><b>6* Do Not Use</b></p> <p><b>7+ Interlock:</b> (24V PLC Input)<br/>0 to 6V = UV Emission Allowed or<br/>16 to 24V = UV Emission Stopped<br/>Internal resistive load on this Pin is 10kΩ</p> <p><b>8 Ground</b></p> <p><b>9 Ground</b></p> <p><b>10 Ground</b></p> | <p><b>11 Fault:</b> (24V PLC Output)<br/>0 to 6 (ground) = Fault or 16 to 24V (open) = No Fault<br/>Internal resistive load on this Pin is 1.3kΩ<br/>Sink Current Maximum = 6mA<br/>Should be connected to high impedance input</p> <p><b>12 RS485 Communication:</b> Serial -</p> <p><b>13 RS485 Communication:</b> Serial +</p> <p><b>14 Ground</b></p> <p><b>15 Temperature Monitor:</b> (Voltage Output)<br/>Voltage proportional to SLM heat sink temperature 0.1V = 1°C<br/>This value should not exceed approximately 8V</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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:

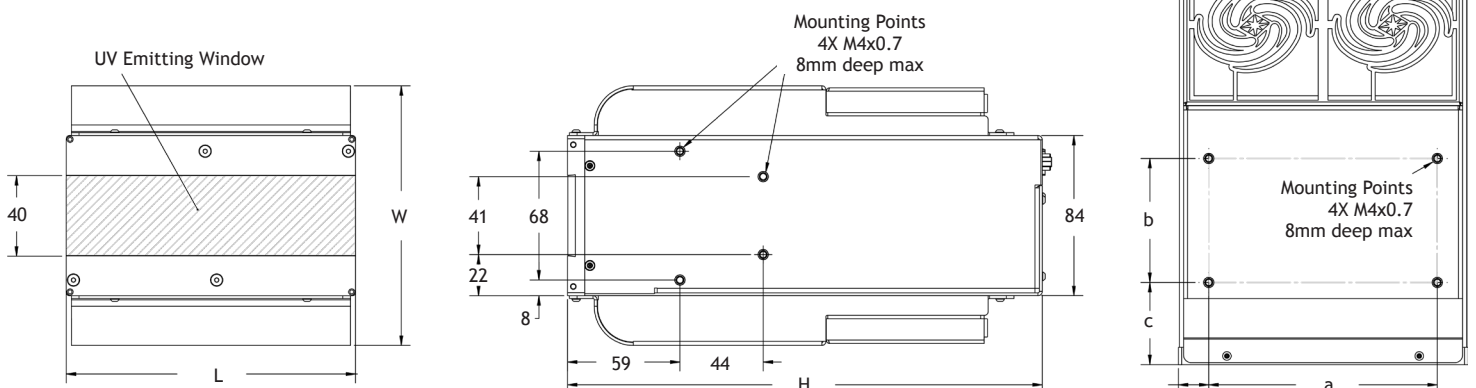


## Dimensions

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<br>LxWxH | 77x136x249 | 152x136x249 | 228x136x249 | 303x136x249 | 379x136x249 |

## Mounting Points, 12W



## Mounting Points, 16W

