

FireJet™ FJ200

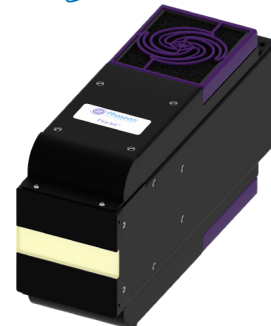
Product Specifications



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.



Performance

Notes:

- 16 & 20W/cm² lamps are available with TargetCure™ and WhisperCure™ Technologies.
- All lamps are available with either the Increased Air Flow or Classic chassis (see next page for chassis details).

Wavelength	385, 395, 405nm				
Peak Irradiance	20W/cm ²				
Emitting Window (mm)	75x20	150x20	225x20	300x20	375x20
UV Power (Watts)	205	412	620	825	1018
48V Power In (Max)	720W 15A	1440W 30A	2160W 45A	2880W 60A	3600W 75A

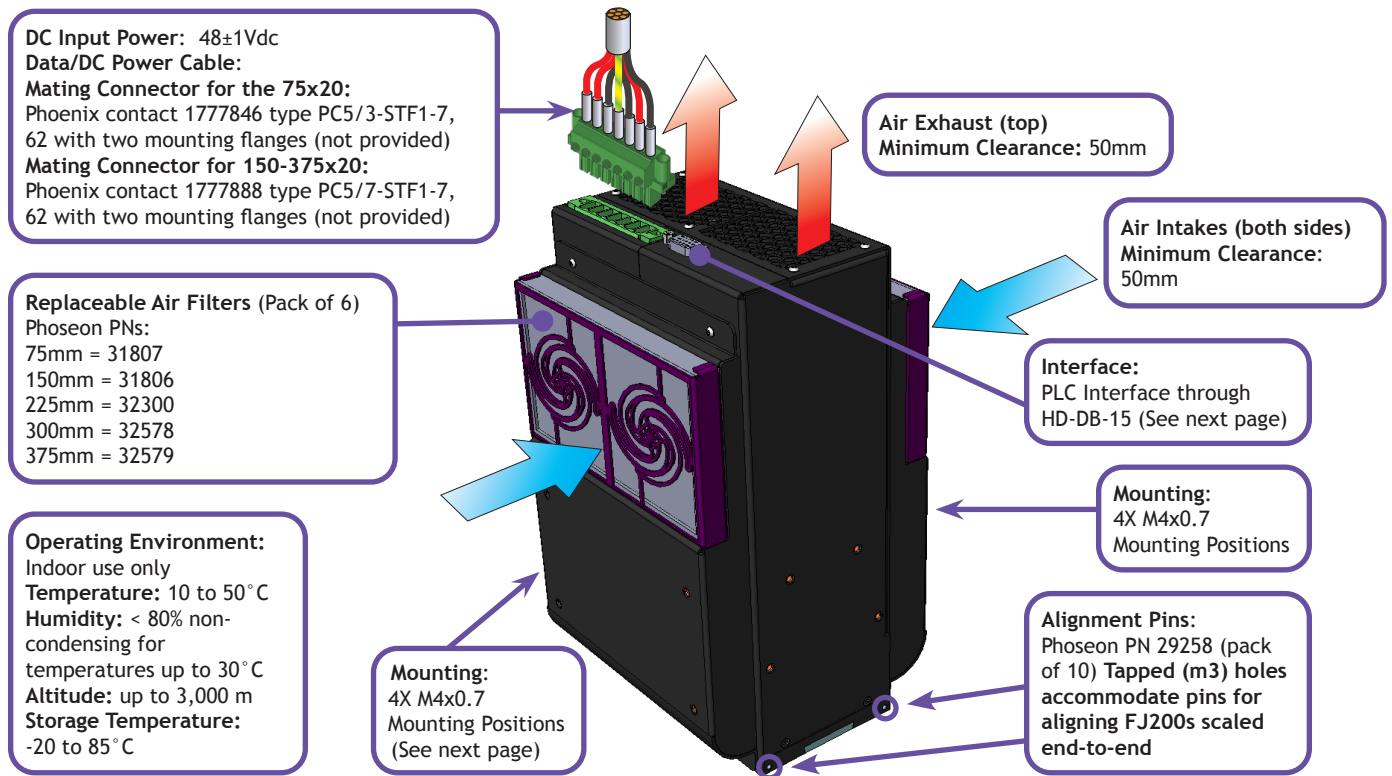


Wavelength	385, 395, 405nm									
Peak Irradiance	12W/cm ²					16W/cm ²				
Emitting Window (mm)	75x20	150x20	225x20	300x20	375x20	75x20	150x20	225x20	300x20	375x20
UV Power (Watts)	124	248	372	495	611	165	330	495	660	814
48V Power In (Max)	377W 7.9A	754W 15.7A	1131W 23.6A	1508W 31.4A	1885W 39.3A	503W 10.5A	1005W 20.9A	1508W 31.4A	2011W 41.9A	2514W 52.4A

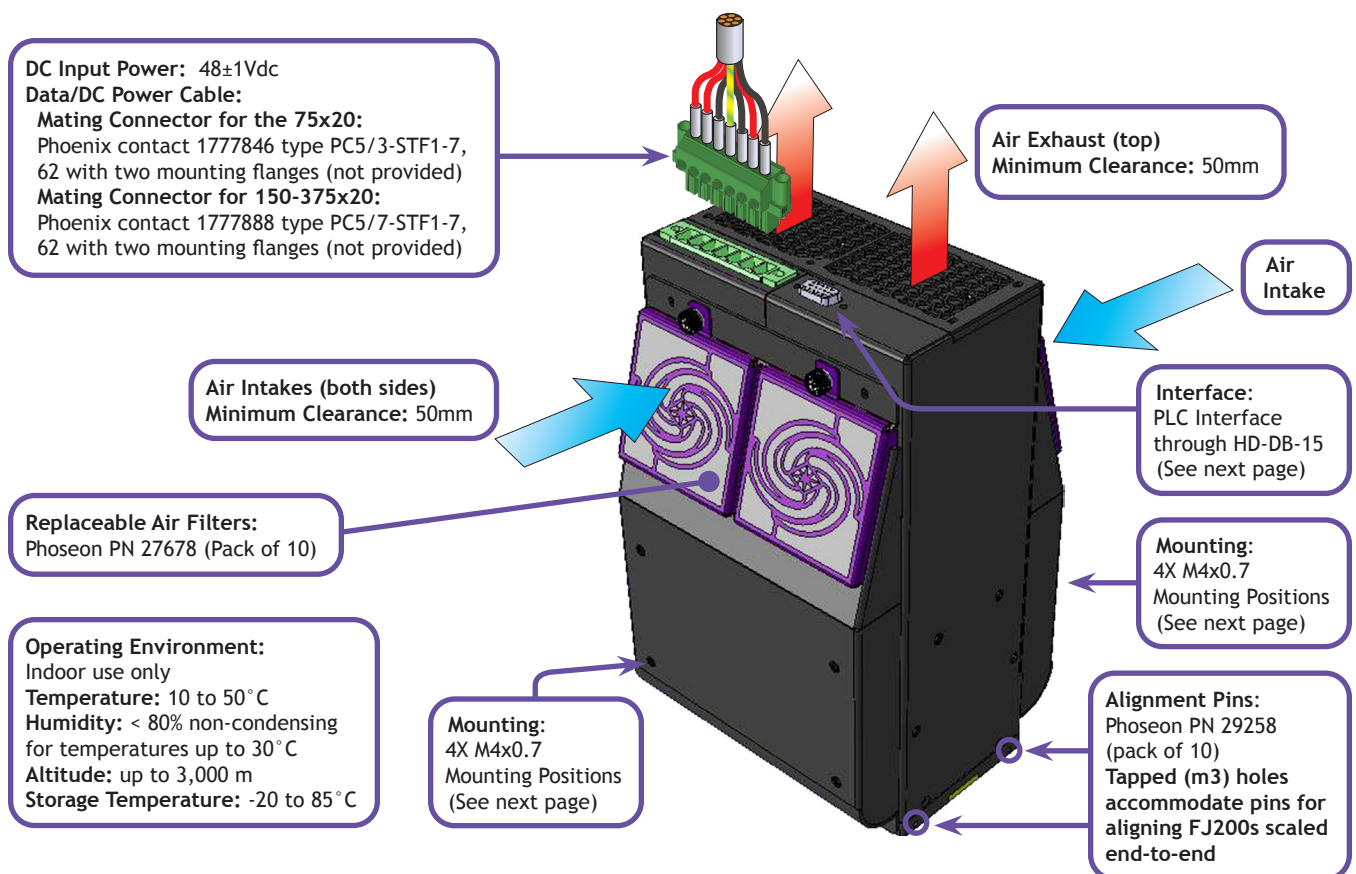
Wavelength	365nm				
Peak Irradiance	12W/cm ²				
Emitting Window (mm)	75x20	150x20	225x20	300x20	375x20
UV Power (Watts)	124	248	372	495	611
48V Power In (Max)	480W 10A	960W 20A	1440W 30A	1920W 40A	2400W 50A



Light Source Setup (Improved Air Flow Chassis)



Light Source Setup (Classic Chassis)

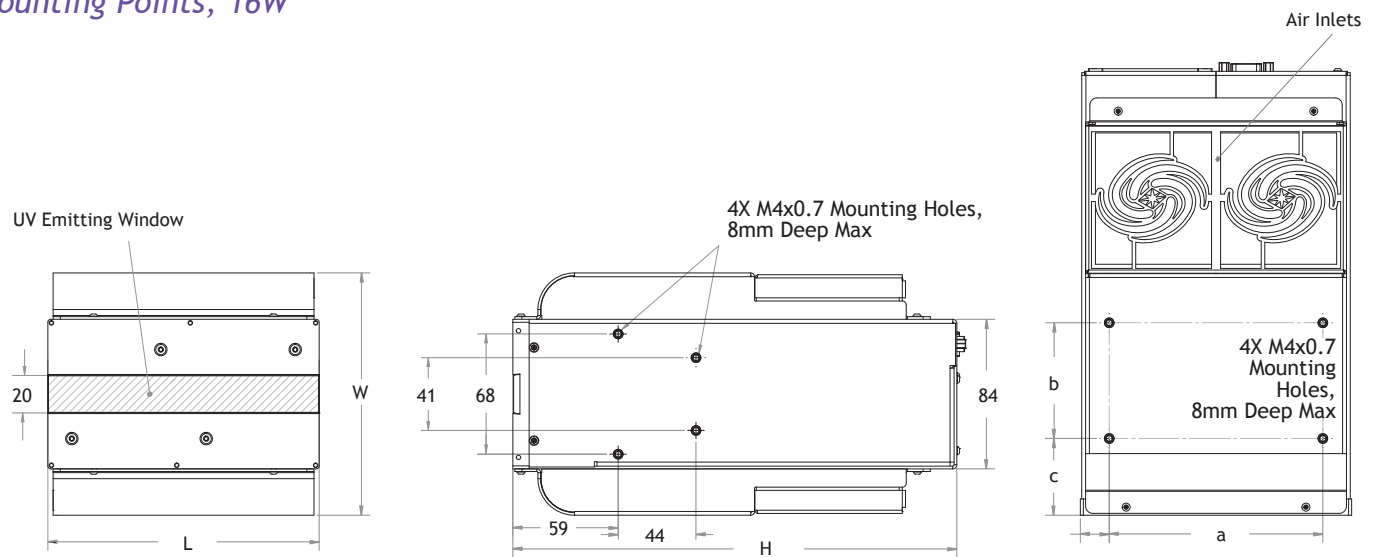


Dimensions

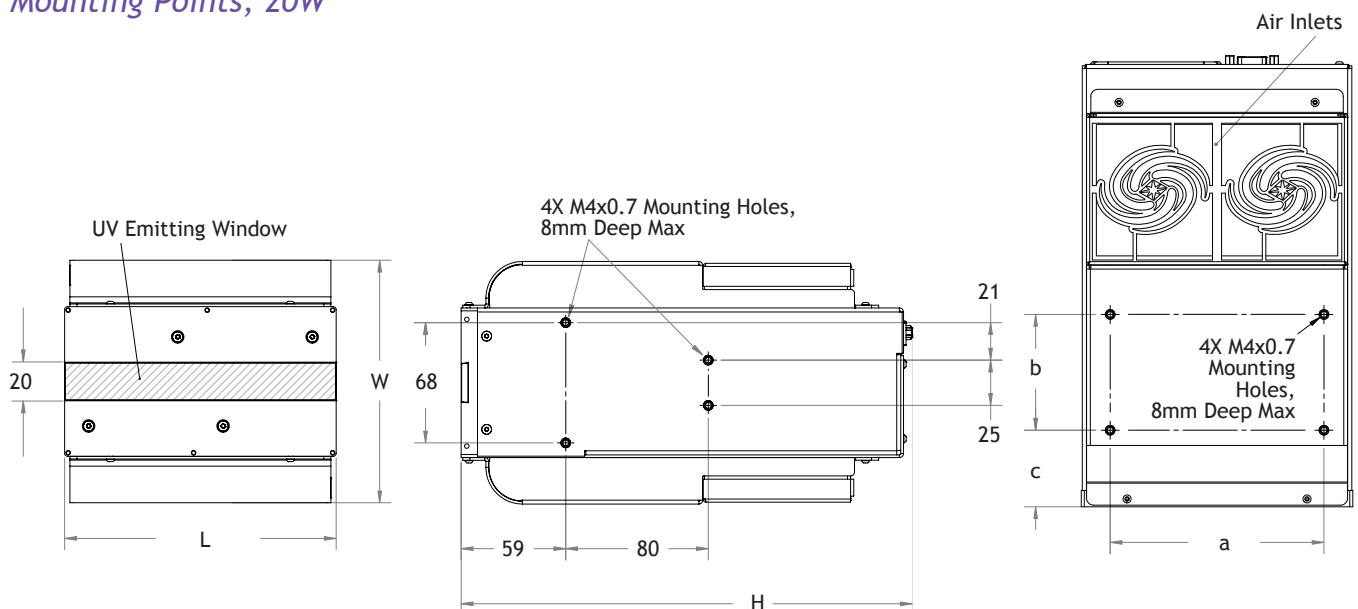
Units of measurement: mm

FJ200					
UV Emitting Window	75x20	150x20	225x20	300x20	375x20
a	56	120	120	240	240
b	65	65	65	65	65
c	43	43	43	43	43
Weight (kg)	1.1	2.1	3.3	4.4	5.5
Overall Dimensions (LxWxH)	77x136x249	152x136x249	228x136x249	303x136x249	379x136x249

Mounting Points, 16W



Mounting Points, 20W



PLC Interface

Data Connector



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

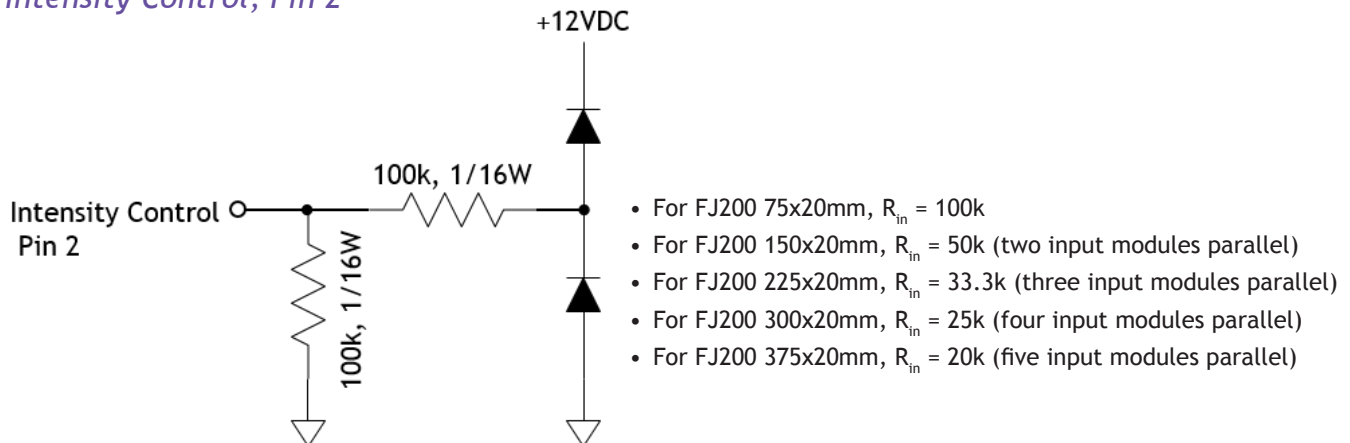
1* Do Not Use	5 Lamp Ready: (24V PLC Output) 0 to 6V (ground) = Not Ready or 16 to 24V (open) = Ready Internal resistive load on this Pin is 1.3k Ω Sink Current Maximum = 6mA Should be connected to high impedance input	11 Fault: (24V PLC Output) 0 to 6 (ground) = Fault or 16 to 24V (open) = No Fault Internal resistive load on this Pin is 1.3k Ω Sink Current Maximum = 6mA Should be connected to high impedance input
2 Intensity Control: (Voltage Input) 1V = 10% of full power 10V = 100% of full power Internal resistive load on this Pin is 100k Ω	6* Do Not Use	12 RS485 Communication: Serial -
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 125k Ω	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 10k Ω	13 RS485 Communication: Serial +
4* Do Not Use	8 Ground	14 Ground
	9 Ground	15 Temperature Monitor: (Voltage Output) Voltage proportional to SLM heat sink temperature 0.1V = 1 $^{\circ}$ C This value should not exceed approximately 8V
	10 Ground	

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

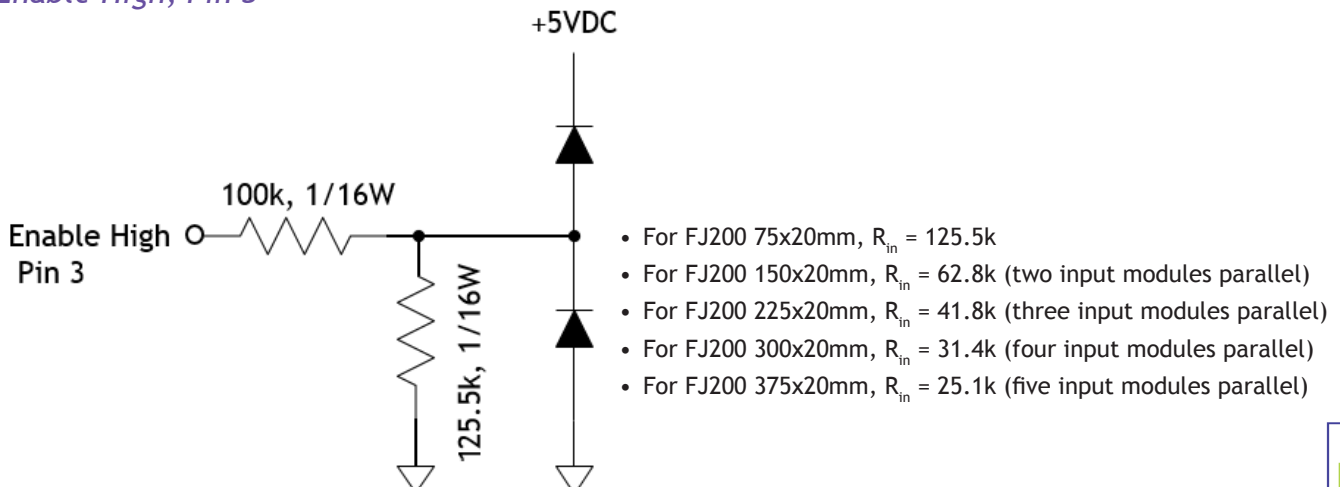
- * Leave these Pins open (unconnected).
- + The interlock Pins must not be tied together across multiple light sources. Each interlock must be connected to independent circuits.

The equivalent circuits inside the FJ200 UV light source are shown below:

Intensity Control, Pin 2

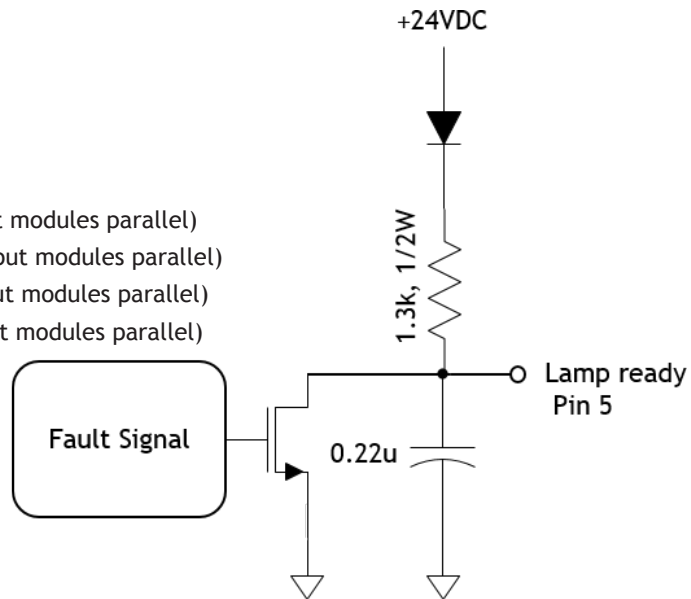


Enable High, Pin 3



Lamp Ready, Pin 5

- For FJ200 75x20mm, $R_{out} = 1.3k$
- For FJ200 150x20mm, $R_{out} = 0.65k$ (two output modules parallel)
- For FJ200 225x20mm, $R_{out} = 0.43k$ (three output modules parallel)
- For FJ200 300x20mm, $R_{out} = 0.33k$ (four output modules parallel)
- For FJ200 375x20mm, $R_{out} = 0.26k$ (five output modules parallel)



Temperature Monitor, Pin 15

- For FJ200 75x20mm, $R_{out} = 20k$
- For FJ200 150x20mm, $R_{out} = 10k$ (two output modules parallel)
- For FJ200 225x20mm, $R_{out} = 6.7k$ (three output modules parallel)
- For FJ200 300x20mm, $R_{out} = 5k$ (four output modules parallel)
- For FJ200 375x20mm, $R_{out} = 4k$ (five output modules parallel)

