

FireLine™ FL440

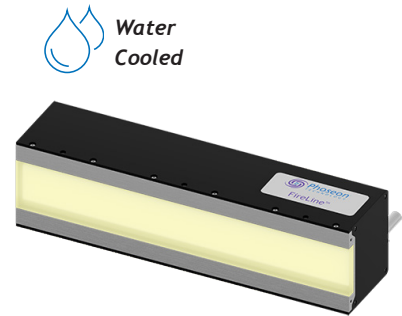
Product Specifications



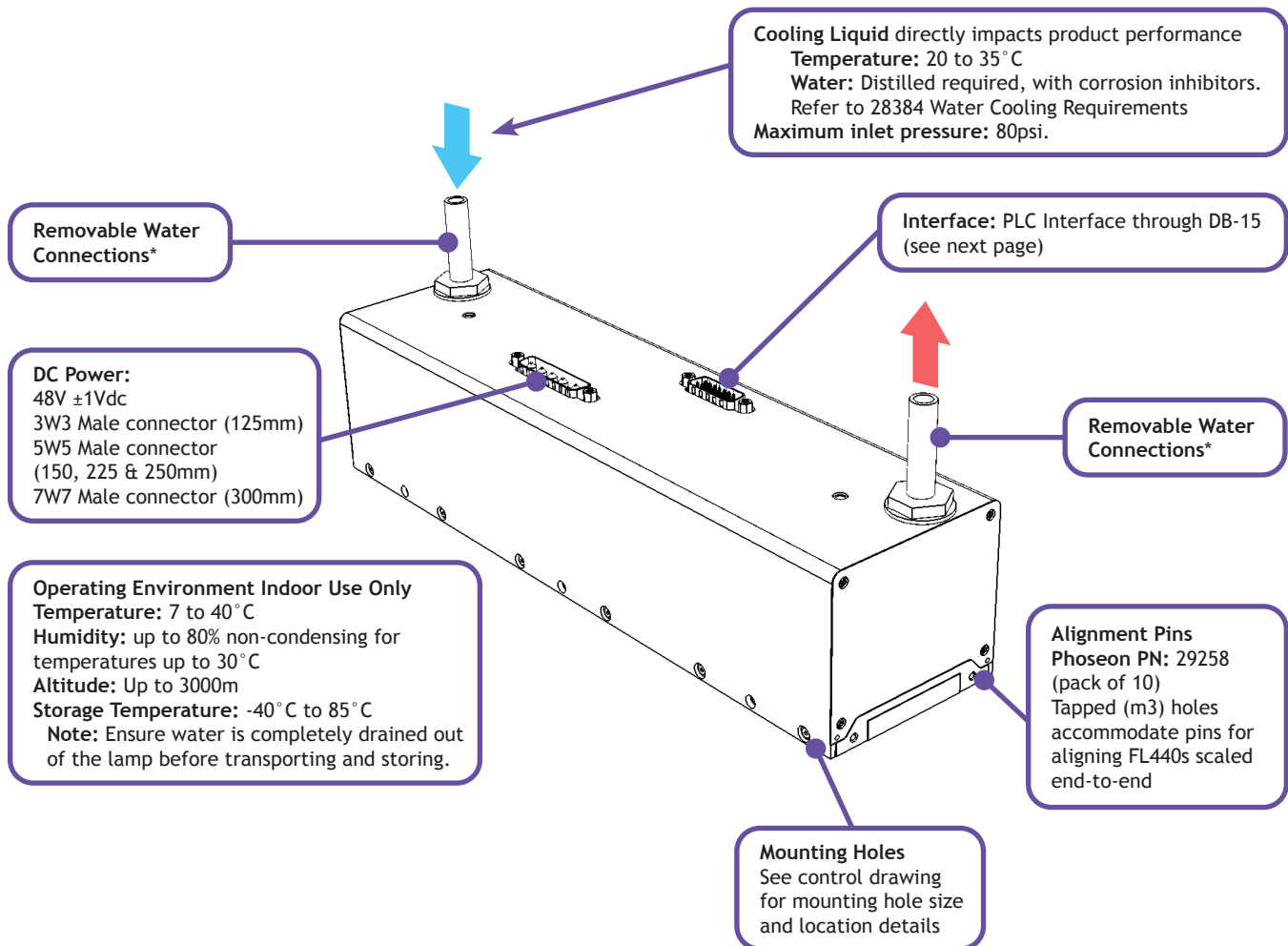
Phoseon UV LED SLM™ Technology

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 FireLine™ FL440 light source is for use in high-performance curing.



Light Source Setup



- *Stainless Steel Water Connection Options:**
- 3/8" OD straight tube (PN 32941)
 - 3/8" OD barbed (PN 32942)
 - 3/8" NPT (PN 32943)
 - Adapter for 3/8" female NPT scaled water kit (PN 32945)



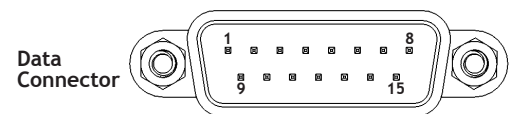
Performance

	385, 395, 405nm				
Peak Irradiance	16W/cm ²				
Emitting Window (mm)	125x40	150x40	225x40	250x40	300x40
48V Power In (Max)	1600W 33A	1920W 40A	2880W 60A	3200W 67A	3840W 80A
Chiller/Cooler Capacity	1312W	1575W	2362W	2625W	3150W
Chiller/Cooler Flow Rate	4LPM	6LPM	6LPM	8LPM	8LPM
Pressure Drop (Typical)	0.04 Bar 0.5 psi	0.09 Bar 1.2 psi	0.11 Bar 1.5 psi	0.18 Bar 2.5 psi	0.19 Bar 2.75 psi
Connector	3W3	5W5	5W5	5W5	7W7

	365nm				
Peak Irradiance	12/cm ²				
Emitting Window (mm)	125x40	150x40	225x40	250x40	300x40
48V Power In (Max)	1392W 35A	1670W 42A	2504W 63A	2743W 69A	3340W 84A
Chiller/Cooler Capacity	1312W	1575W	2362W	2625W	3150W
Chiller/Cooler Flow Rate	4LPM	6LPM	6LPM	8LPM	8LPM
Pressure Drop (Typical)	0.04 Bar 0.5 psi	0.09 Bar 1.2 psi	0.11 Bar 1.5 psi	0.18 Bar 2.5 psi	0.19 Bar 2.75 psi
Connector	3W3	5W5	5W5	5W5	7W7

PLC Interface

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



1* Do Not Use	6* Do Not Use	11 Fault: (24V PLC Output) 0 to 6 (ground) = Fault or 16 to 24V (open) = No Fault Internal resistive load on this Pin is >3kΩ Sink Current Maximum = 6mA Should be connected to high impedance input
2 Intensity Control: (Voltage Input: 0.1V-10V) 0.1V = 1% of full power 10V = 100% of full power Internal resistive load on this Pin is 200kΩ	7 UV Override Pulled low to ground (0V) = UV Emission Stopped Floating = UV Emission Allowed (Internally pulled high to +24V) DO NOT APPLY VOLTAGE TO THIS PIN Sink Current Maximum = 2.4mA	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 125kΩ	8 Ground	13 RS485 Communication: Serial +
4* Do Not Use	9 Ground	14 Ground
5 Thermal Fault Feedback: (24V PLC Output) 0 to 6V (ground) = Fault or 16 to 24V (open) = No Fault Connected to high impedance input External resistive load on this Pin must be >3kΩ	10 Ground	15 Temperature Monitor: (Voltage Output) Voltage proportional to SLM heat sink temperature 0.1V = 1°C This value should not exceed approximately 6V

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).

DC Power Connectors

The male Dsub connector is used to provide power to the light source.

3W3 Connector

Mating DC Connector Options

3W3 Female Dsub connector

Connector Housing: FCI PN DA3W3SA00LF

Female Contacts:

FCI PN 8638PSS4005LF (40A Max Solder Contacts) or FCI PN 8638PSC4005LF (40A Max Crimp Contacts)

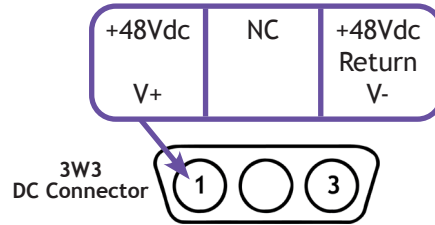
Phoseon Custom Backshell Kit PN: 33027

Female 40A 3W3 with Solder Contacts:

Norcomp PN 68053W3203L401

Custom Backshell Components plus hardware

Phoseon 2m Cable PN: 32932



5W5 Connector

Mating DC Connector Options

5W5 Female Dsub connector

Connector Housing: FCI PN DB5W5SA00LF

Female Contacts:

FCI PN 8638PSS4005LF (40A Max Solder Contacts) or FCI PN 8638PSC4005LF (40A Max Crimp Contacts)

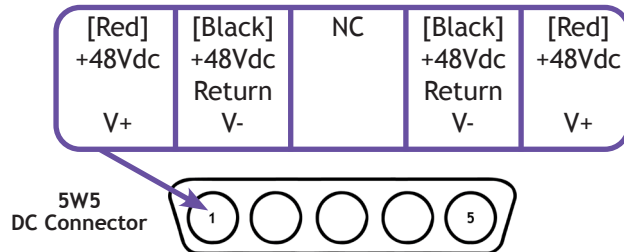
Phoseon Custom Backshell Kit PN: 32968

Female 40A 5W5 with Solder Contacts:

Norcomp PN 68055W5203L401

Custom Backshell Components plus hardware

Phoseon 2m Cable PN: 33167



7W7 Connector

Mating DC Connector Options

7W7 Female Dsub connector

Connector Housing: Harting PN09694000077

Female Contacts:

FCI PN 8638PSS4005LF (40A Max Solder Contacts) or FCI PN 8638PSC4005LF (40A Max Crimp Contacts)

Phoseon Custom Backshell Kit PN: 37175

7W7 Connector Housing:

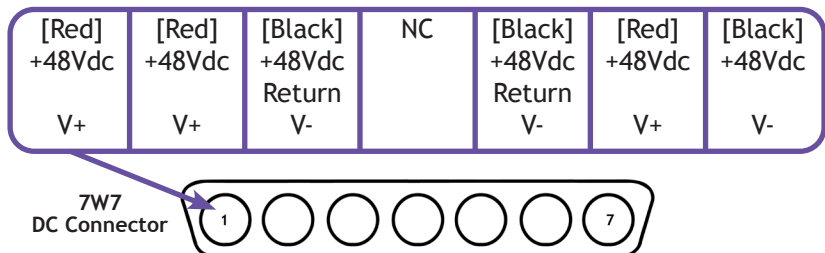
Harting PN 09694000077

Female 40A Solder Contacts:

Harting PN 09691815423

Custom Backshell Components plus hardware

Phoseon 2m Cable PN: 37168



Dimensions

Units of measurement: mm

FireLine FL440					
UV Emitting Window (mm)	125X40	150X40	225x40	250x40	300X40
L	127	152	227	252	302
W	80.6	80.6	80.6	80.6	80.6
H	72	72	72	72	72
H*	113.3	113.3	113.3	113.3	113.3
a	50	75	150	175	200
Weight (kg)	1.4	1.6	2.4	2.6	3.0

*Height with 3/8" straight water fittings, which may vary with other options.

