

FireLine™ FL400

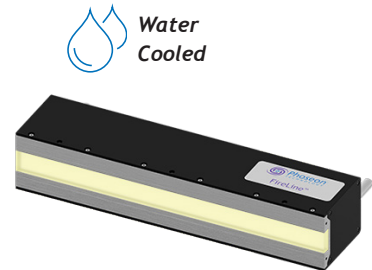
Product Specifications



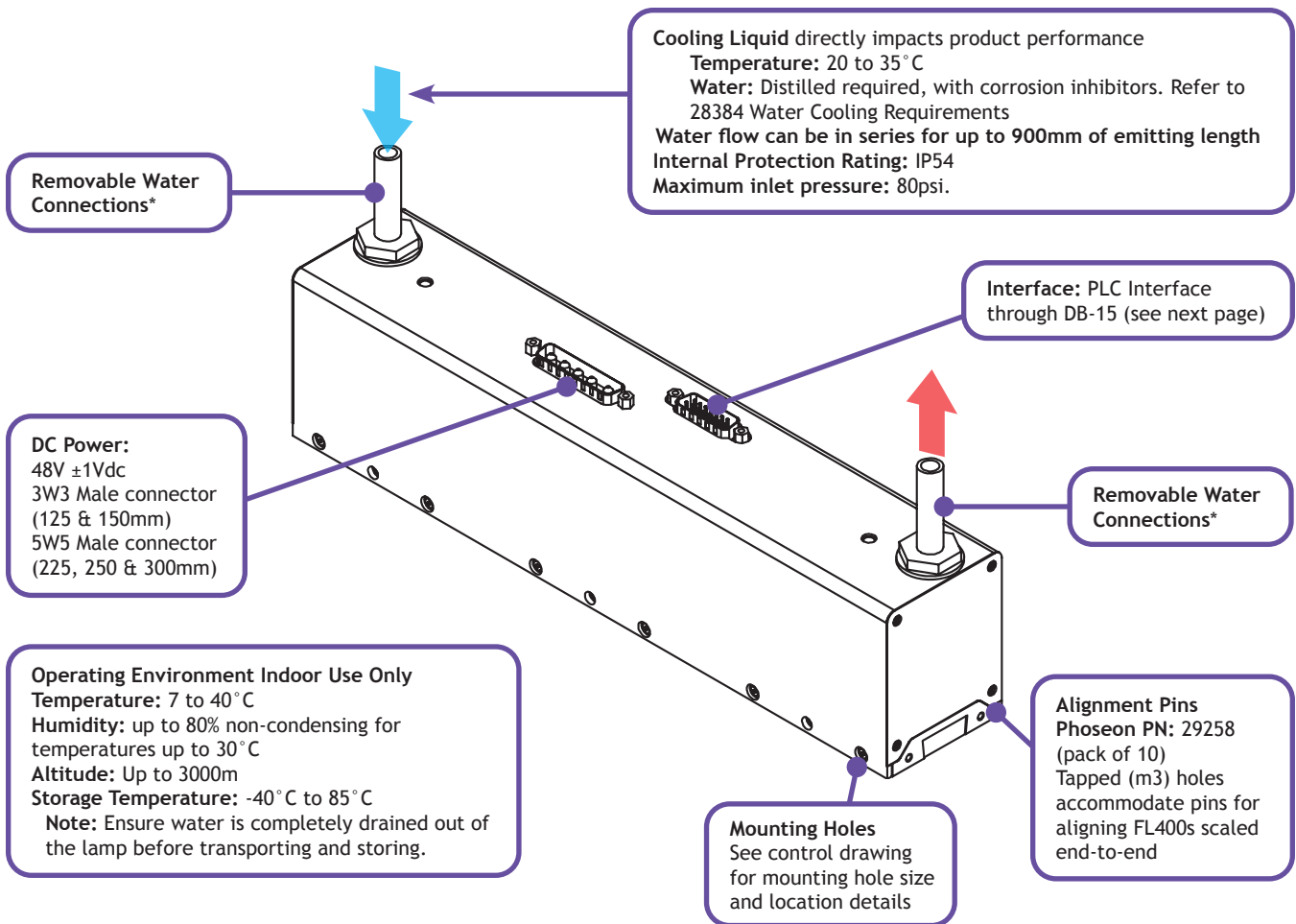
Phoseon UV LED SLM™ Technology

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™ FL400 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

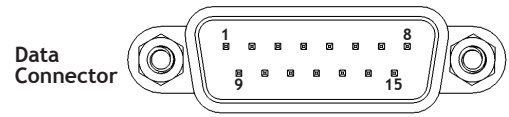
	385, 395, 405nm									
Peak Irradiance	24W/cm ²					20W/cm ²				
Emitting Window (mm)	125x20	150x20	225x20	250x20	300x20	125x20	150x20	225x20	250x20	300x20
48V Power In (Max)	1604W 33A	1925W 40A	2888W 60A	3209W 67A	3850W 80A	1514W 32A	1817W 38A	2726W 57A	3028W 63A	3634W 76A
Chiller/Cooler Capacity	1315W	1579W	2368W	2631W	3157W	1242W	1490W	2235W	2483W	2980W
Chiller/Cooler Flow Rate	6LPM	8LPM	8LPM	10LPM	10LPM	6LPM	6LPM	6LPM	8LPM	8LPM
Pressure Drop (Typical)	0.16 Bar 2.4 psi	0.31 Bar 4.6 psi	0.38 Bar 5.5 psi	0.61 Bar 8.8 psi	0.62 Bar 9.1 psi	0.16 Bar 2.4 psi	0.18 Bar 2.6 psi	0.21 Bar 3.1 psi	0.39 Bar 5.6 psi	0.40 Bar 5.8 psi
Connector	3W3	3W3	5W5	5W5	5W5	3W3	3W3	5W5	5W5	5W5

	385, 395, 405nm									
Peak Irradiance	16W/cm ²					12W/cm ²				
Emitting Window (mm)	125x20	150x20	225x20	250x20	300x20	125x20	150x20	225x20	250x20	300x20
48V Power In (Max)	1211W 25A	1454W 30A	2180W 45A	2423W 50A	2907W 61A	909W 19A	1090W 23A	1635W 34A	1817W 38A	2180W 45A
Chiller/Cooler Capacity	993W	1192W	1788W	1987W	2384W	745W	894W	1341W	1490W	1788W
Chiller/Cooler Flow Rate	6LPM	6LPM	6LPM	8LPM	8LPM	6LPM	6LPM	6LPM	8LPM	8LPM
Pressure Drop (Typical)	0.16 Bar 2.4 psi	0.18 Bar 2.6 psi	0.21 Bar 3.1 psi	0.39 Bar 5.6 psi	0.40 Bar 5.8 psi	0.16 Bar 2.4 psi	0.18 Bar 2.6 psi	0.21 Bar 3.1 psi	0.39 Bar 5.6 psi	0.40 Bar 5.8 psi
Connector	3W3	3W3	5W5	5W5	5W5	3W3	3W3	5W5	5W5	5W5

	365nm				
Peak Irradiance	12W/cm ²				
Emitting Window (mm)	125x20	150x20	225x20	250x20	300x20
48V Power In (Max)	909W 19A	1090W 23A	1635W 34A	1817W 38A	2180W 45A
Chiller/Cooler Capacity	745W	894W	1341W	1490W	1788W
Chiller/Cooler Flow Rate	6LPM	6LPM	6LPM	8LPM	8LPM
Pressure Drop (Typical)	0.16 Bar 2.4 psi	0.18 Bar 2.6 psi	0.21 Bar 3.1 psi	0.39 Bar 5.6 psi	0.40 Bar 5.8 psi
Connector	3W3	3W3	5W5	5W5	5W5

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)

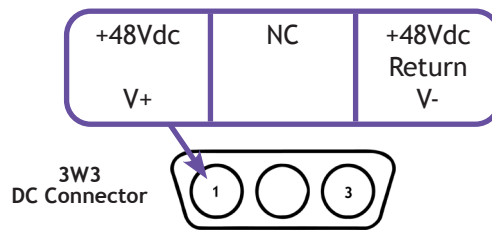
Phoseon Custom Backshell Kit PN: 33027

Female 40A 3W3 with Solder Contacts:

Norcomp PN 680S3W3203L401

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)

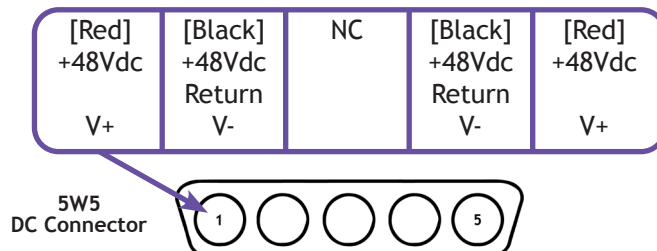
Phoseon Custom Backshell Kit PN: 32968

Female 40A 5W5 with Solder Contacts:

Norcomp PN 680S5W5203L401

Custom Backshell Components plus hardware

Phoseon 2m Cable PN: 33167



Dimensions

Units of measurement: mm

FireLine FL400					
UV Emitting Window (mm)	125X20	150X20	225x20	250x20	300X20
L	127	152	227	252	302
W	58	58	58	58	58
H	72	72	72	72	72
H*	113.3	113.3	113.3	113.3	113.3
Weight (kg)	1.1	1.2	1.8	2.0	2.3

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

