

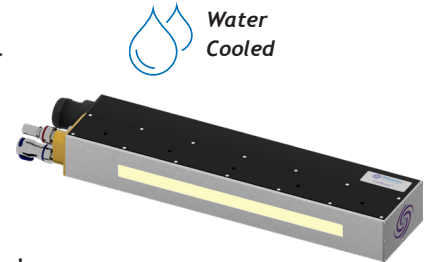
# FirePower™ FP601

## 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 FirePower™ family of high-power water cooled products allows new applications in the flexographic segment while also allowing increased speed in the narrow web segment.

### Performance

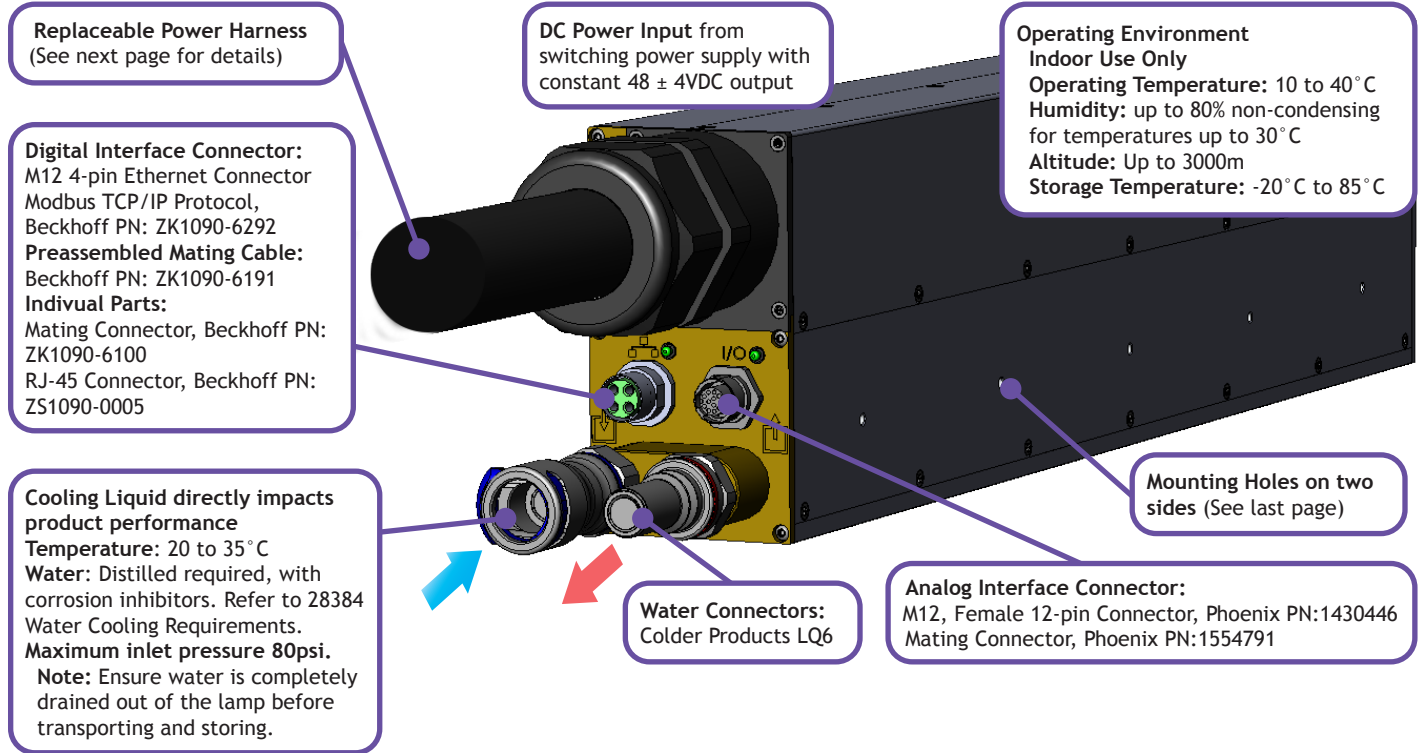
	395nm				
Peak Irradiance	24W/cm <sup>2</sup>				
Emitting Window (mm)	300x20	350x20	375x20	450x20	525x20
48V Power In (Max)	3326W/70A	3881W/81A	4158W/87A	4990W/104A	5821W/122A
Chiller/Cooler Capacity	2727W	3182W	3410W	4092W	4773W
Chiller/Cooler Flow Rate	6LPM	6LPM	6LPM	8LPM	12LPM
Pressure Drop	0.50 bar 7.3 psi	0.63 bar 9.2 psi	0.63 bar 9.2 psi	0.76 bar 11.0 psi	2.21 bar 32.0 psi

	395nm							
Peak Irradiance	20W/cm <sup>2</sup>							
Emitting Window (mm)	300x20	350x20	375x20	450x20	525x20	600x20	675x20	
48V Power In (Max)	2784W/58A	3216W/67A	3456W/72A	4176W/87A	4848W/101A	5568W/116A	6288W/131A	
Chiller/Cooler Capacity	2283W	2637W	2834W	3424W	3975W	4566W	5156W	
Chiller/Cooler Flow Rate	6LPM	6LPM	6LPM	6LPM	8LPM	8LPM	10LPM	
Pressure Drop	0.50 bar 7.3 psi	0.63 bar 9.2 psi	0.63 bar 9.2 psi	0.76 bar 11.0 psi	0.97 bar 14.0 psi	1.10 bar 16.0 psi	2.48 bar 36.0 psi	

	395nm							
Peak Irradiance	16W/cm <sup>2</sup>							
Emitting Window (mm)	300x20	350x20	375x20	450x20	525x20	600x20	675x20	
48V Power In (Max)	2218W/47A	2587W/54A	2772W/58A	3326W/70A	3880W/81A	4435W/93A	4990W/104A	
Chiller/Cooler Capacity	1819W	2121W	2273W	2727W	3182W	3637W	4092W	
Chiller/Cooler Flow Rate	6LPM	6LPM	6LPM	6LPM	8LPM	8LPM	10LPM	
Pressure Drop	0.50 bar 7.3 psi	0.63 bar 9.2 psi	0.63 bar 9.2 psi	0.76 bar 11.0 psi	0.97 bar 14.0 psi	1.10 bar 16.0 psi	2.48 bar 36.0 psi	

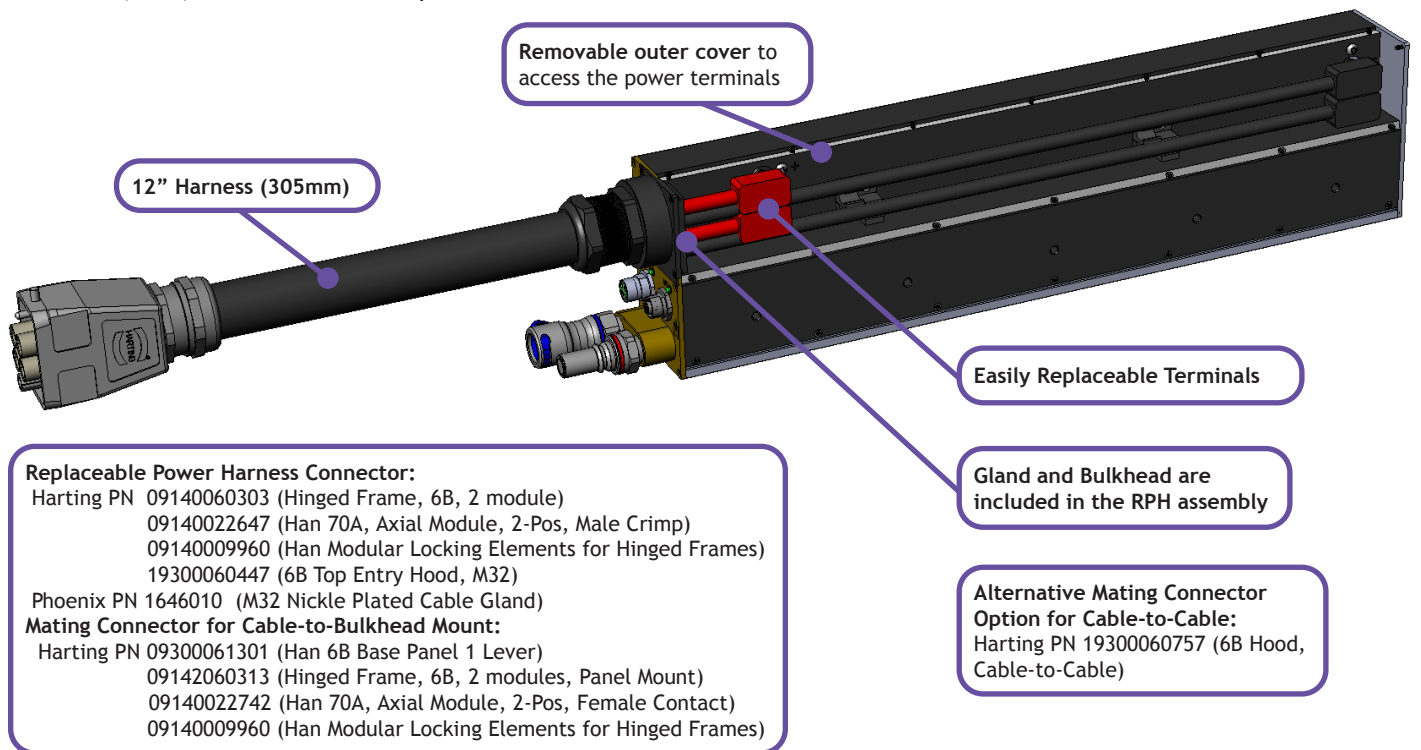


## Light Source Setup



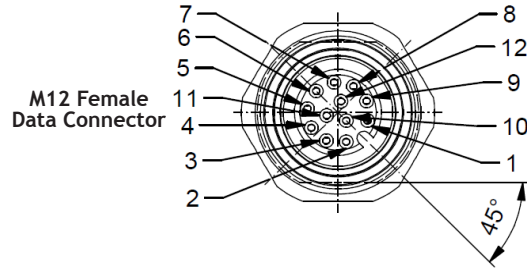
## Replaceable Power Harness

The FP601 DC Power Connector is part of a field-replaceable power harness. The Replaceable Power Harness (RPH) is available as a pre-assembled kit. Contact Phoseon for more information.



## PLC Interface

The female 12-pin connector is used to control the light source via PLC.



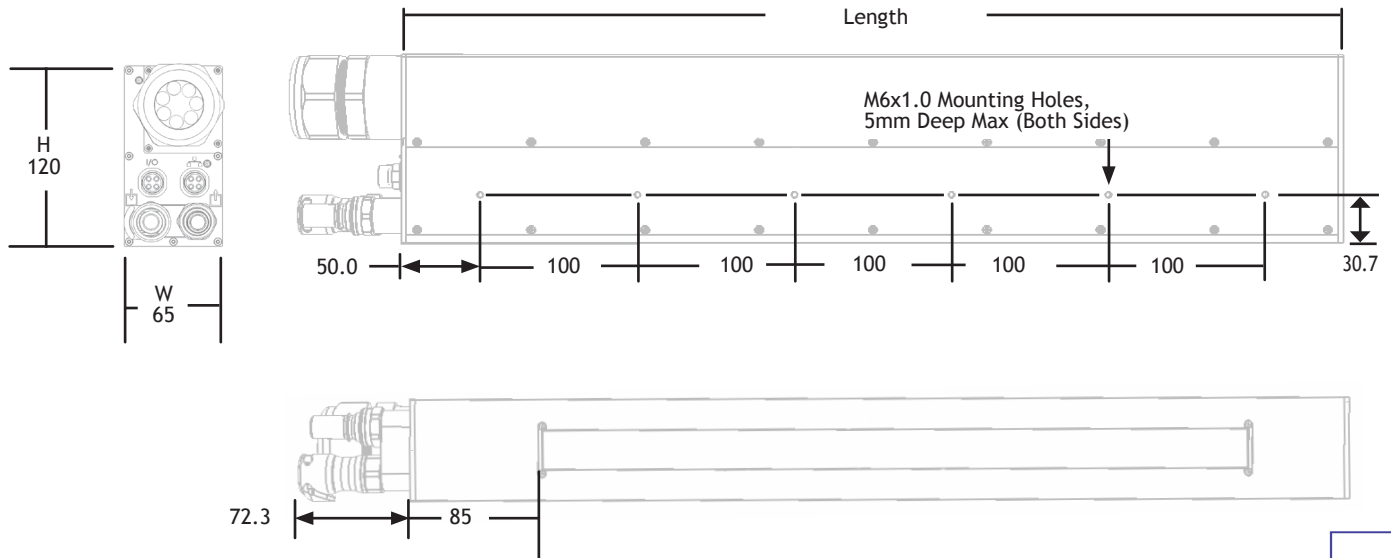
- |   |   |
|---|---|
| <p><b>1 Do Not Use</b></p> <p><b>2 Lamp Ready / UV Override:</b><br/>(Dual purpose pin - Output / Input)<br/>Open or +16V to +24V = UV Emission Allowed<br/>0V to +6V = UV Emission Stopped<br/>Can be pulled low to ground = UV Override<br/>Max sync current = 20mA</p> <p><b>3 Enable High:</b> (24V PLC Input)<br/>0 to 6V (ground/open input) = OFF or 16V to 24V = ON</p> <p><b>4 Do Not Use</b></p> <p><b>5 Temperature Monitor:</b> (Voltage Output: 0V to 7.5V)<br/>Output voltage proportional to heat sink temperature (not water) 0.1V = 1°C</p> <p><b>6 Intensity Control:</b> (Voltage Input: 0.1V-10V)<br/>1V = 10% of full power, 10V = 100% of full power<br/>Internal resistive load on this Pin is 100kΩ</p> | <p><b>7 IP Offset:</b> (Resistive Load)<br/>See Ethernet Protocols User Manual, PN 31098, for more details.</p> <p><b>8 Thermal Ready:</b> (24V PLC Output)<br/>0 to 6V (ground) = Thermal Fault or<br/>16V to 24V (open) = Thermal Ready (no fault)<br/>Internal resistive load on this Pin is &gt;3kΩ<br/>Sink Current Maximum = 6mA<br/>Should be connected to high impedance input</p> <p><b>9 Lamp Warning:</b> (24V PLC Output)<br/>0 to 6V (ground) = Lamp Warning (does not shut off UV, but lamp may have an issue) or<br/>16V to 24V (open) = Lamp Ready (no warning)<br/>Internal resistive load on this Pin is &gt;3kΩ<br/>Sink Current Maximum = 6mA<br/>Should be connected to high impedance input</p> <p><b>10, 11, 12 Ground</b></p> |
|---|---|

## Dimensions

Units of measurement: mm

### FirePower FP601

UV Emitting Window	300x20	350x20	375x20	450x20	525x20	600x20	675x20
Length	450	500	500	600	675	750	850
Weight (kg)	6.3	6.8	7.0	7.9	9.1	10.5	11.9
# Mounting Pts (each side)	4	5	5	6	7	7	8
Overall Dimensions (LxWxH)	450x65x120	500x65x120	500x65x120	600x65x120	675x65x120	750x65x120	850x65x120



Specifications are subject to change without notice. info@phoseon.com 31605 Rev 11  
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