

FirePower™ FP501

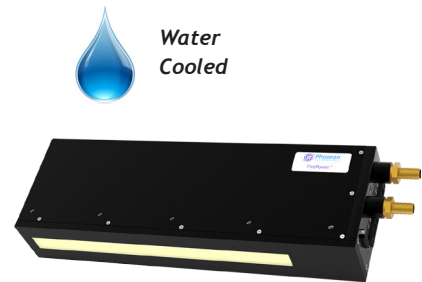
Product Specifications



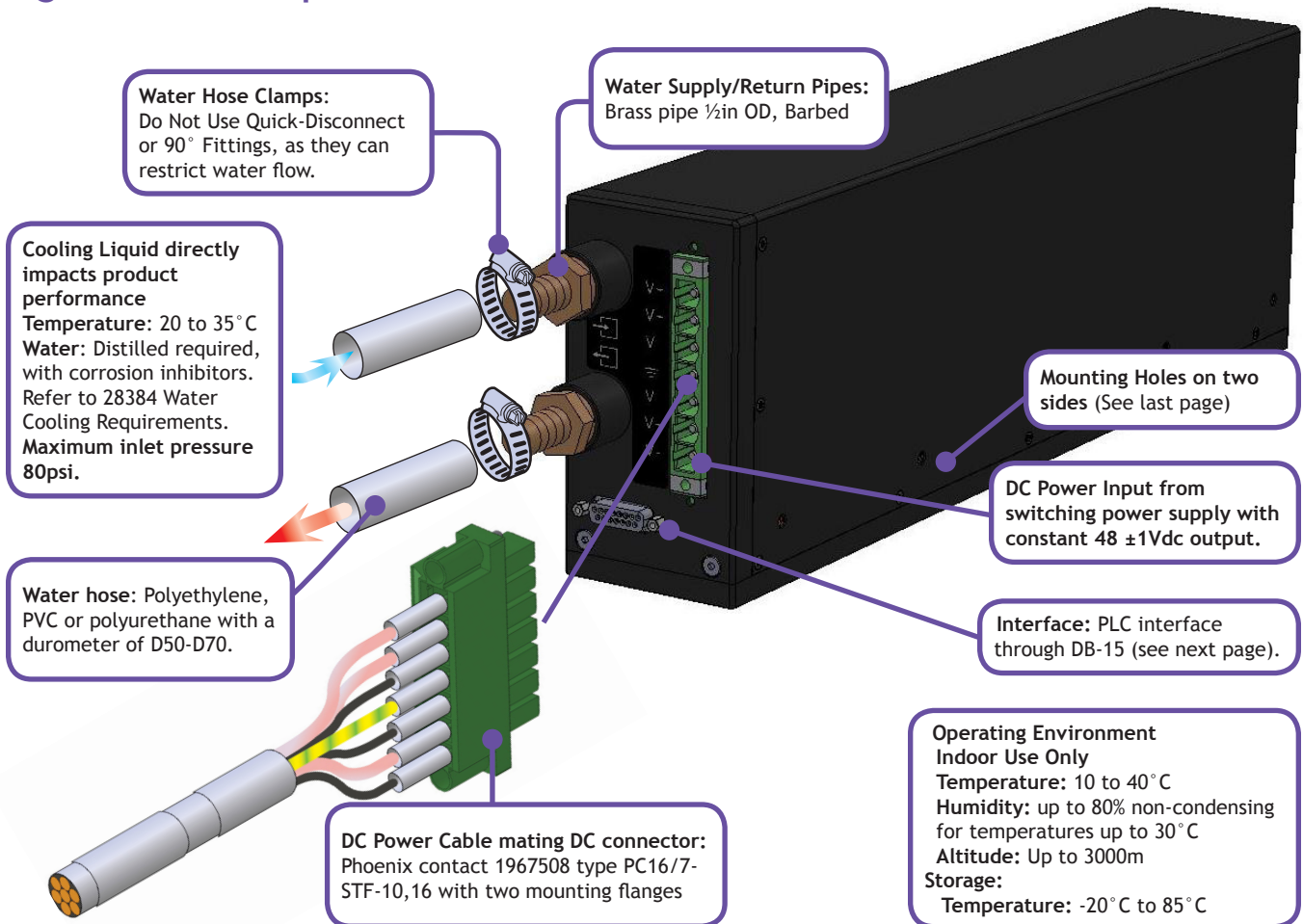
Phoseon UV LED SLM™ Technology

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 and wide-web segments.



Light Source Setup



Performance

	365nm					
Peak Irradiance	12W/cm ²					
Emitting Window (mm)	300x20	350x20	450x20	525x20	600x20	700x20
48V Power In (Typical)	2535W 53A	2955W 62A	3800W 79A	4435W 92A	5070W 106A	5915W 123A
48V Power In (Max)	2880W 60A	3360W 70A	4320W 90A	5040W 105A	5760W 120A	6720W 140A
Chiller/Cooler Capacity	2485W	2900W	3725W	4355W	4970W	5795W
Chiller/Cooler Flow Rate	8LPM	8LPM	12LPM	14LPM	16LPM	16LPM
Pressure Drop (Typical)	0.70 Bar 10.1 psi	0.99 Bar 14.3 psi	0.79 Bar 11.4 psi	1.09 Bar 15.8 psi	1.39 Bar 20.2 psi	1.97 Bar 28.6 psi

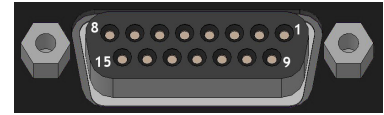
	385, 395nm											
Peak Irradiance	20W/cm ²						16W/cm ²					
Emitting Window (mm)	300x20	350x20	450x20	525x20	600x20	700x20	300x20	350x20	450x20	525x20	600x20	700x20
48V Power In (Typical)	3170W 66A	3695W 77A	4750W 99A	5545W 116A	6335W 132A	7390W 154A	2535W 53A	2955W 62A	3800W 79A	4435W 92A	5070W 106A	5915W 123A
48V Power In (Max)	3455W 72A	4030W 84A	5185W 108A	6050W 126A	6910W 144A	8065W 168A	3170W 66A	3695W 77A	4750W 99A	5545W 116A	6335W 132A	7390W 154A
Chiller/Cooler Capacity	2795W	3260W	4195W	4905W	5590W	6525W	2640W	3080W	3960W	4630W	5280W	6160W
Chiller/Cooler Flow Rate	8LPM	8LPM	12LPM	14LPM	16LPM	16LPM	8LPM	8LPM	12LPM	14LPM	16LPM	16LPM
Pressure Drop (Typical)	0.70 Bar 10.1 psi	0.99 Bar 14.3 psi	0.79 Bar 11.4 psi	1.09 Bar 15.8 psi	1.39 Bar 20.2 psi	1.97 Bar 28.6 psi	0.70 Bar 10.1 psi	0.99 Bar 14.3 psi	0.79 Bar 11.4 psi	1.09 Bar 15.8 psi	1.39 Bar 20.2 psi	1.97 Bar 28.6 psi

	405nm											
Peak Irradiance	20W/cm ²						16W/cm ²					
Emitting Window (mm)	300x20	350x20	450x20	525x20	600x20	700x20	300x20	350x20	450x20	525x20	600x20	700x20
48V Power In (Typical)	2930W 61A	3655W 76A	4700W 98A	5280W 110A	5860W 122A	7310W 152A	2930W 61A	3650W 76A	4700W 98A	5280W 110A	5860W 122A	7300W 152A
48V Power In (Max)	3650W 76A	4610W 96A	5880W 123A	6590W 137A	7300W 152A	9200W 192A	3650W 76A	4610W 96A	5880W 123A	6590W 137A	7300W 152A	9220W 192A
Chiller/Cooler Capacity	3100W	3920W	5000W	5600W	6200W	7840W	2960W	3745W	4780W	5350W	5920W	7490W
Chiller/Cooler Flow Rate	8LPM	8LPM	12LPM	14LPM	16LPM	16LPM	8LPM	8LPM	12LPM	14LPM	16LPM	16LPM
Pressure Drop (Typical)	0.70 Bar 10.1 psi	0.99 Bar 14.3 psi	0.79 Bar 11.4 psi	1.09 Bar 15.8 psi	1.39 Bar 20.2 psi	1.97 Bar 28.6 psi	0.70 Bar 10.1 psi	0.99 Bar 14.3 psi	0.79 Bar 11.4 psi	1.09 Bar 15.8 psi	1.39 Bar 20.2 psi	1.97 Bar 28.6 psi

PLC Interface

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

Data Connector



1	Do Not Use	6	Do Not Use	11	SLM Fault Feedback (Output) 0V to +6V (ground) = Fault +16V to +24V (open) = No Fault Note: Sink Current Maximum = 6mA. Connect only to high impedance input. Pins 5 and 11 can be tied together for a single fault output.
2	Intensity Control: (Voltage Input) 1V = 10% of full power 10V = 100% of full power Internal resistive load on this Pin is 100kΩ	7	Interlock: (Input) Use with external customer defined interlock circuit, Or connect Pin 7 to ground if no interlock is used. 0 to 6V = UV Emission Allowed or 16 to 24V = UV Emission Stopped	12	RS485 Communication: Serial -
3	Enable High: (PLC Compatible Logic) 0 to 6V (ground/open input) = OFF or 16 to 24V = ON	8	Ground	13	RS485 Communication: Serial +
4	Do Not Use	9	Ground	14	Ground
5	Thermal Fault Feedback: (Output) 0 to 6V (ground) = Fault or 16 to 24V (open) = No Fault Note: Sink Current Maximum = 6mA. Connect only to high impedance input. Pins 5 and 11 can be tied together for a single fault output.	10	Ground	15	Temperature Monitor: 0V to 7.5V Output = voltage proportional to SLM heat sink temperature (not water) 0.1V = 1°C

Dimensions

Units of measurement: mm

FirePower FP501						
UV Emitting Window	300x20	350x20	450x20	525x20	600x20	700x20
Length	453.5	503.5	603.5	678.5	753.5	853.5
Weight	2.7kg	2.8kg	3.0kg	3.2kg	3.4kg	3.6kg
# Mounting Points (each side)	4	5	6	6	7	8
Overall Dimensions LxWxH	453.5x75x145	503.5x75x145	603.5x75x145	678.5x75x145	753.5x75x145	853.5x75x145

