

FireEdge™ FE300

Product Specifications



Phoseon UV LED SLM™ Technology

Phoseon's patented Semiconductor Light Matrix (SLM)™ technology encapsulates LEDs, arrays, optics and cooling to maximize UV LED curing performance. The FireEdge™ FE300 UV LED source provides high output power in an extremely compact mechanical package for high-speed pinning and full cure applications. The FE300 UV LED source is CE, RoHS, and REACH compliant.

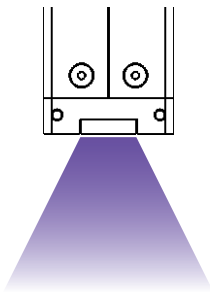


Performance

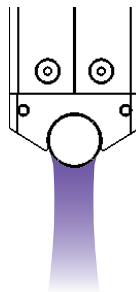
	365nm		385, 395nm		405nm	
Peak Irradiance	3.0 W/cm ²		5.0 W/cm ²		4.0 W/cm ²	
Emitting Window (mm)	75x10	110x10	75x10	110x10	75x10	110x10
48Vdc Power In (Typical)	65W / 1.4A	85W / 1.8A	85W / 1.8A	110W / 2.3A	145W / 3.0A	195W / 4.0A
48Vdc Power In (Maximum)	80W / 1.7A	105W / 2.2A	95W / 2.0A	125W / 2.6A	175W / 3.6A	230W / 4.8A

Available Optics: Angle Reduction Technology (ART)

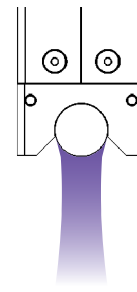
See 29071 FE300 Optic Options Technical Note for more details.



Flat Glass (Standard Optic)
Wide footprint for maximum dwell time



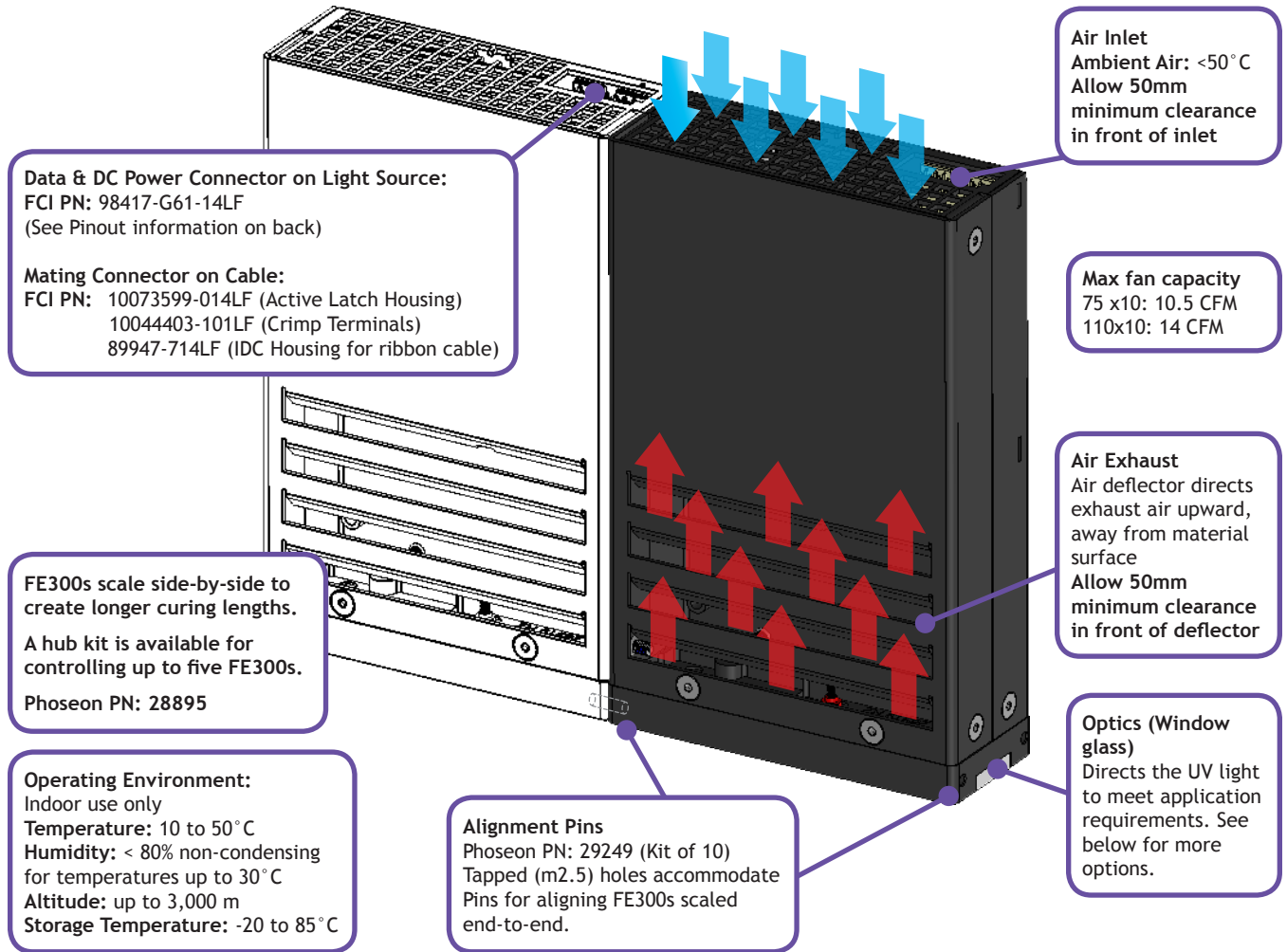
ART Rod (Available Option)
Minimum light spread reduces stray light effects



Enhanced Rod (Available Option)
Minimum light spread reduces stray light effects



Light Source Setup

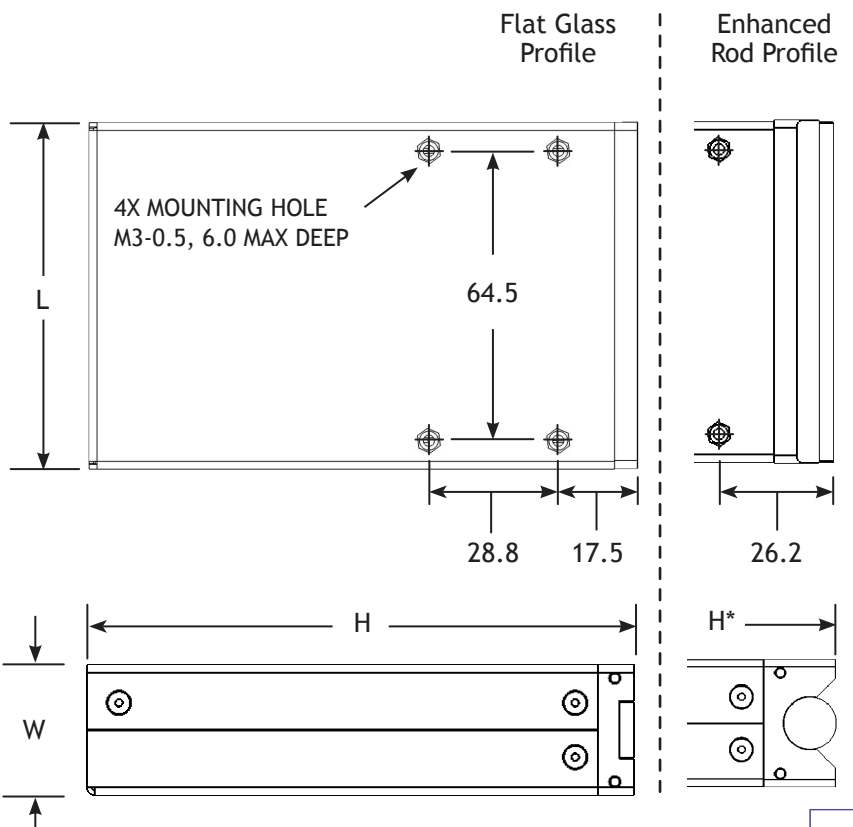


Dimensions

Units of measurement: mm

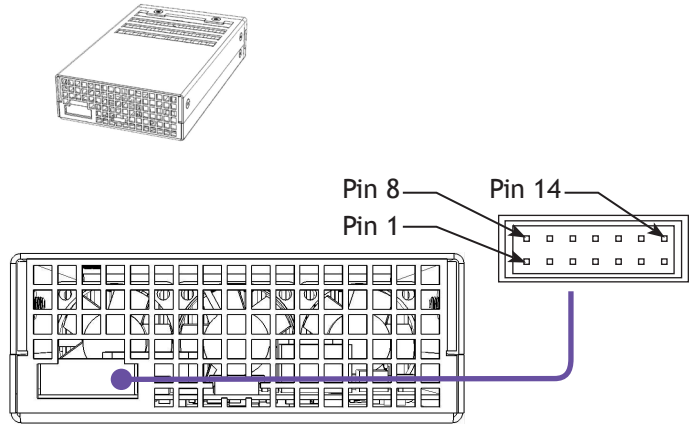
Dimensions	75x10	110x10
L	77.1	113.1
H	122.0	122.0
H*	130.6	130.6
W	29.0	29.0
UV Emitting Area	75 x 10	110 x 10
Weight (kg)	0.28	0.38

H* is the dimension with the ART Rod & Enhanced Rod Lens.



PLC Interface

- 1 **Intensity Control: (Voltage Input)**
 1V = 10% of full power, 10V = 100%
 of full power
 The internal resistive load on this Pin is 12kΩ
- 2 **Lamp Ready: (24V PLC Output)**
 0 to 4V = Not Ready *or*
 16 to 24V = Lamp Ready
 The external resistive load on this Pin
 must be ≥ 5kΩ
 The Not Ready state is triggered by:
 Insufficient DC Input voltage
 Excessive internal temperature
- 3, 4, 5, 6 **+48Vdc Input**
- 7 **Reserved**
- 8 **Ground**
- 9 **Enable High: (24V PLC Input)**
 0 to 4V (ground/open input) = OFF *or*
 16 to 24V = ON
 The internal resistive load on this Pin is 100kΩ
- 10, 11, 12, 13, 14 **Ground (+48Vdc Return)**



The equivalent circuits inside the FE300 UV light source are shown below:

