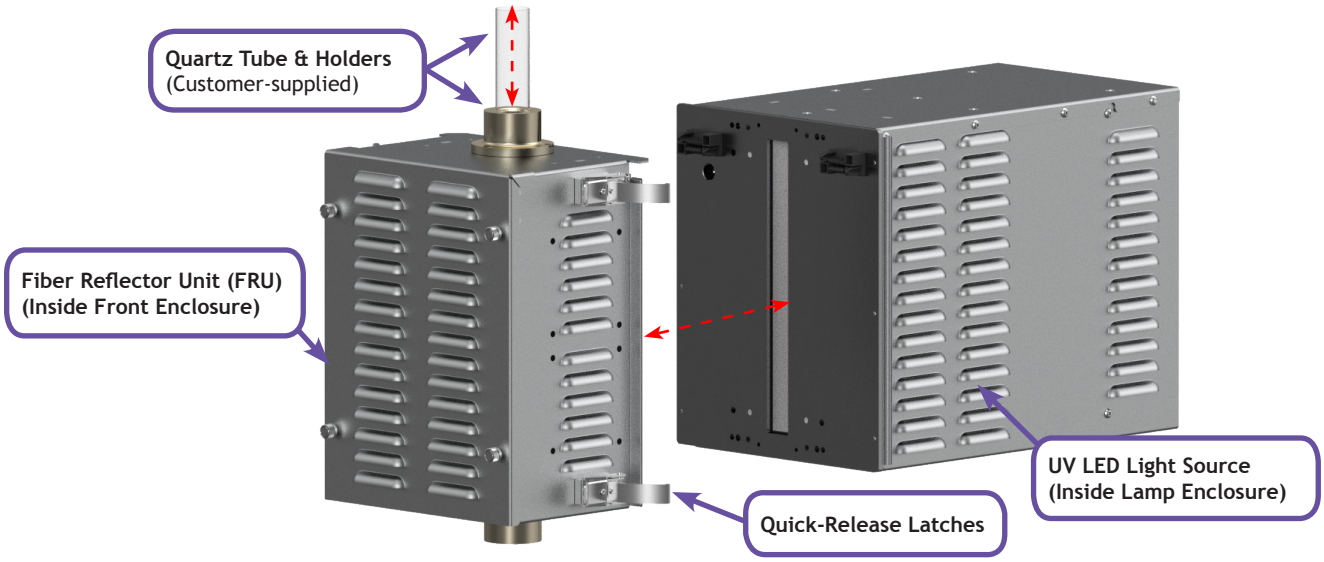
Enclosed Fiber Curing System

Generation 6, Product Specifications

Phoseon UV LED SLM™ Technology

Phoseon Technology is the world leader in providing UV LED solutions for commercial and industrial applications. With over 90,000 units in the field worldwide, Phoseon is the recognized leader for reliability and performance.

The Fiber Curing System utilizes a fiber-optimized UV LED light source combined with a patented reflector. The reflector is housed within the replaceable Fiber Reflector Unit (FRU) to direct the UV light around the entire fiber circumference. The UV light energy is concentrated within a tight cylinder, creating ultra-high intensity for maximum curing at the highest speed. The light source and FRU reside within an enclosure, providing protection from water, coating and other liquid spills.



Performance

The Fiber Curing System includes an optimized version of the air-cooled FireJet FJ228™ or water-cooled FirePower™ FP300 UV LED light source.

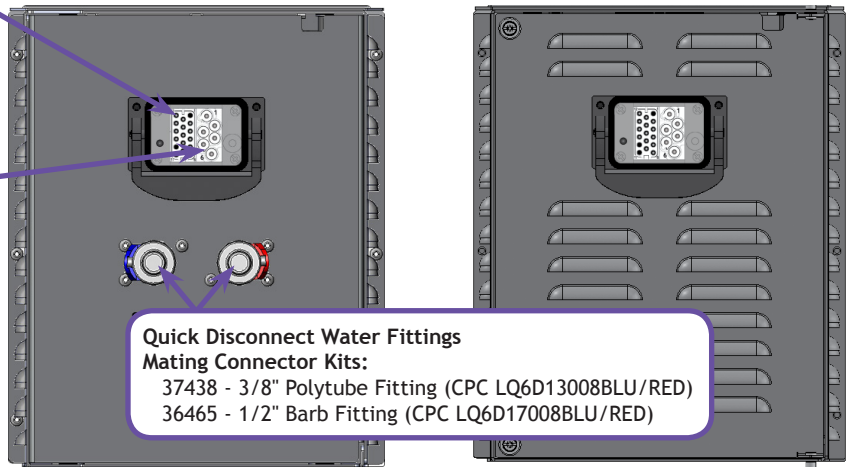
	FJ228 395nm	FP300 395nm
Peak Irradiance	25W/cm^2	30W/cm^2
Emitting Window (mm)	225x20	225x20
48V Power In (Max)	2064W / 43A	1920W / 40A
Cooling Capacity (Typical)		1233W
Cooling Capacity (Max)		1425W
Water Flow Rate (Min)		6LPM
Pressure Drop (Typical)		0.19 Bar

Systems Components & Setup

PLC Interface: (See below)
Data Cable
Mating Connector: Phoenix Contact 1414357
Crimp Terminals: Phoenix Contact 1663394

DC Input Power: 48±1Vdc
DC Power Cable
Mating Connector: Phoenix Contact 1414369
Crimp Terminals: Phoenix Contact 1663705

Operating Environment:
Indoor Use Only
Temperature: 10°C to 50°C
Humidity: <80% non-condensing for temperatures up to 30°C
Altitude: Up to 3000m
Storage Temperature: -20 to 85°C



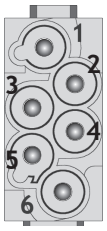
Quick Disconnect Water Fittings
Mating Connector Kits:
37438 - 3/8" Polytube Fitting (CPC LQ6D13008BLU/RED)
36465 - 1/2" Barb Fitting (CPC LQ6D17008BLU/RED)

Water-Cooled Rear Panel **Air-Cooled Rear Panel**

DC Power Pinout

The male 6-pin connector feeds +48Vdc power to the UV LED Light Source and cooling fans.

1	+48Vdc	2	+48Vdc
3	48V Return	4	48V Return
5	+48Vdc	6	48V Return



PLC Interface

The male 17-pin connector is used to control the UV LED Light Source via PLC.

1 **No Connection**

2 **Intensity Control:** (Voltage Input)
1V = 10% of full power
10V = 100% of full power
Internal load is 100kΩ

3 **Enable High:** (24V Logic Input)
0 to 6V (ground/open input) = OFF
or 16 to 24V = ON
Internal load is 125kΩ

4* **Do Not Use (Factory Use Only)**

5 **Lamp Ready (FJ228) or**
Thermal Fault (FP300):
(24V Logic Output)
0 to 6V (ground) = Not Ready/Fault *or*
16 to 24V (open) = Ready/No Fault
Resistive load must be >3kΩ

6* **Do Not Use (Factory Use Only)**

7+ **Interlock:** (24V Logic Input)
0 to 6V = UV Emission Allowed or
16 to 24V = UV Emission Stopped
Internal load is 10kΩ

8 **Ground**

9 **Ground**

10 **Ground**

11 **Fault:** (24V Logic Output)
0 to 6 (ground) = Fault or
16 to 24V (open) = No Fault
Resistive load must be >3kΩ

12 **RS485 Communication:** Serial -

13 **RS485 Communication:** Serial +

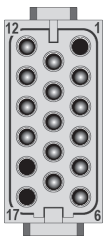
14 **Ground**

15 **Temperature Monitor:** (Voltage Output)
Voltage proportional to internal lamp temperature 0.1V = 1°C

16 **No Connection**

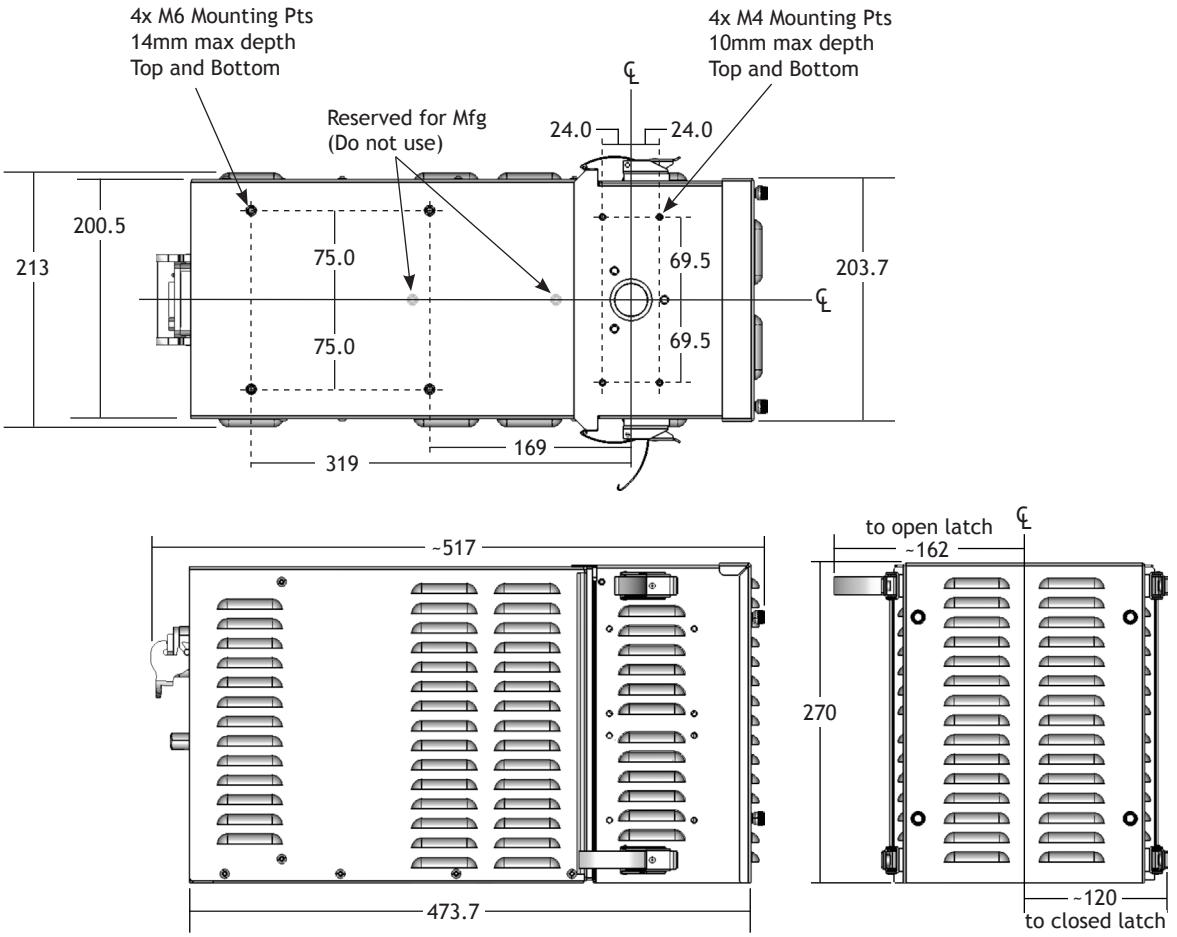
17 **No Connection**

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).
\+ The interlock Pins must not be tied together across multiple light sources. Each interlock must be connected to independent circuits.



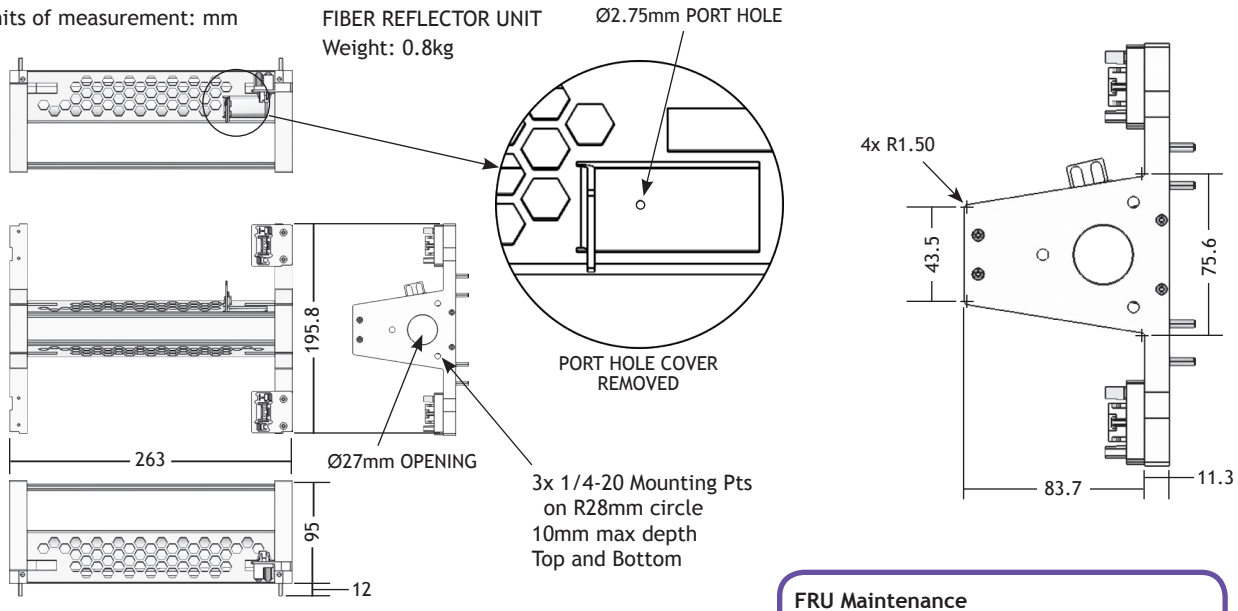
Dimensions (Enclosure)

Units of measurement: mm



Dimensions (Internal Fiber Reflector Unit)

Units of measurement: mm



FRU Maintenance
Refer to 34497 Fiber Reflector Maintenance

Ordering Information

FJ228 GEN6 FIBER SYSTEM		FP300 GEN6 FIBER SYSTEM	
Item	Description	Item	Description
37015	Config, FJ228 225x20AC395-25W Fiber Enc	35740	Config, FP300 225x20WC395-30W Fiber Enc
37014	FG, FJ228 225x20AC395-25W Fiber Enc G6	37437	FG, FP300 225x20WC395-30W Fib Enc G6

AVAILABLE ACCESSORIES	
Item	Description
35036	Cable, DC/Data, Fiber Enc, 5m - Connects Fiber System to 48Vdc Power and Control System
34614	Cable, DC/Data, Fiber Enc, 10m - Connects Fiber System to 48Vdc Power and Control System
35584	Cable, DC/Data, Fiber Enc, 15m - Connects Fiber System to 48Vdc Power and Control System
30107	Control Box - Provides UV Enable and Intensity Control (refer to 30477 Spec Sheet, Control Box, Gen3)
29973	Alignment Puck - Aids in centering the Fiber Reflector Unit to the fiber draw line
32120	Irradiance monitor mounting kit - Use to mount EIT Compact Sensor to Fiber Reflector Unit
31885	Assy, Fiber Reflector Unit - Replacement Fiber Reflector Unit, Complete Assembly
33463	Kit, Fiber Reflector 4 pk - Internal Reflector for FRU repair (refer to 37571 User Manual, Fiber Refl Maintenance G6)
34432	Kit, FRU Protective Glass, 4 pk - Protective Glass for FRU repair (refer to 37571 User Manual, Fiber Refl Maintenance G6)
37643	Kit, Fiber Reflector Fixture, G6 - Assembly fixture for FRU repair (refer to 37571 User Manual, Fiber Refl Maintenance G6)
29879	Power Supply, 48V, 2400W, 50A
	36465 Kit, Water Fitting, LQ6, ½" barb, Fiber (CPC LQ6D17008BLU/RED, 2 hose clamps)
	37438 Kit, Water Fitting, LQ6, 3/8" PTF, Fiber (CPC LQ6D13008BLU/RED)

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