

Enclosed Fiber Curing System



Generation 8, Product Specifications

Phoseon UV LED SLM™ Technology

The 8th Generation Fiber Curing System features a high-efficiency reflector for improved irradiance at the fiber. Mounting hardware integrated into the enclosure makes retrofitting onto existing towers easier than ever. The field proven, fiber optimized UV LED light source remains unchanged. Together they provide concentrated UV light energy within a tight cylinder at the fiber draw line, creating ultra-high intensity for maximum curing at the highest speed.



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 365nm	FJ228 385, 395nm	FP300 365nm	FP300 395nm
Peak Irradiance	10W/cm ²	25W/cm ²	12W/cm ²	30W/cm ²
Emitting Window (mm)	225x20	225x20	225x20	225x20
48V Power In (Max)	1000W / 25A	2064W / 43A	1500W / 32A	1920W / 40A
Cooling Capacity (Typical)			1233W	1233W
Cooling Capacity (Max)			1425W	1425W
Water Flow Rate (Min)			6LPM	6LPM
Pressure Drop (Typical)			0.19 Bar	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±4Vdc

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)

Hose fittings are necessary to operate water-cooled lamps and can be sourced from Excelitas or external vendors.

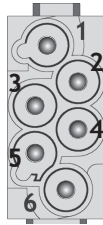
Water-Cooled Rear Panel

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

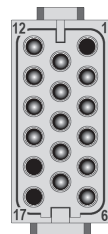
The male 17-pin connector is used to control the UV LED Light Source via PLC.

1	No Connection	6*	Do Not Use (Factory Use Only)	12	RS485 Communication: Serial -
2	Intensity Control: (Voltage Input) 0.1V = 1% of full power (FJ228) 1V = 10% of full power (FP300) 10V = 100% of full power Internal load is 100kΩ	7+	Interlock: (24V Logic Input) 0 to 6V = UV Emission Allowed or 16 to 24V = UV Emission Stopped Internal load is 10kΩ	13	RS485 Communication: Serial +
3	Enable High: (24V Logic Input) 0 to 6V (ground/open input) = OFF or 16 to 24V = ON Internal load is 125kΩ	8	Ground	14	Ground
4*	Do Not Use (Factory Use Only)	9	Ground	15	Temperature Monitor: (Voltage Output) Voltage proportional to internal lamp temperature 0.1V = 1°C
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	10	Ground	16	No Connection
		11	Fault: (24V Logic Output) 0 to 6 (ground) = Fault or 16 to 24V (open) = No Fault Resistive load must be >3kΩ	17	No Connection

Pins may be tied together to control multiple light sources from a single DB-15 interface with the following exceptions:

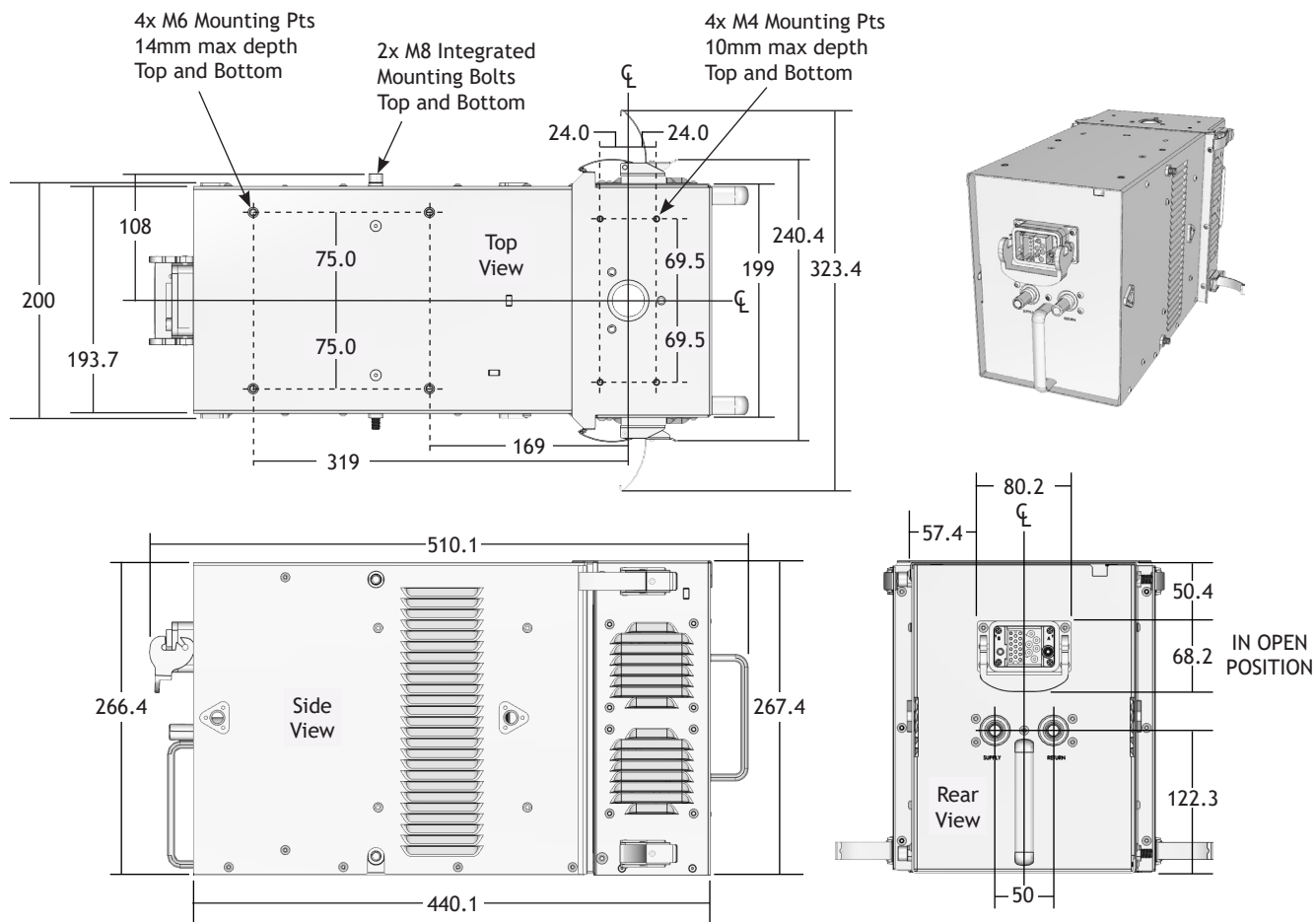
* Leave these Pins open (unconnected).

+ 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

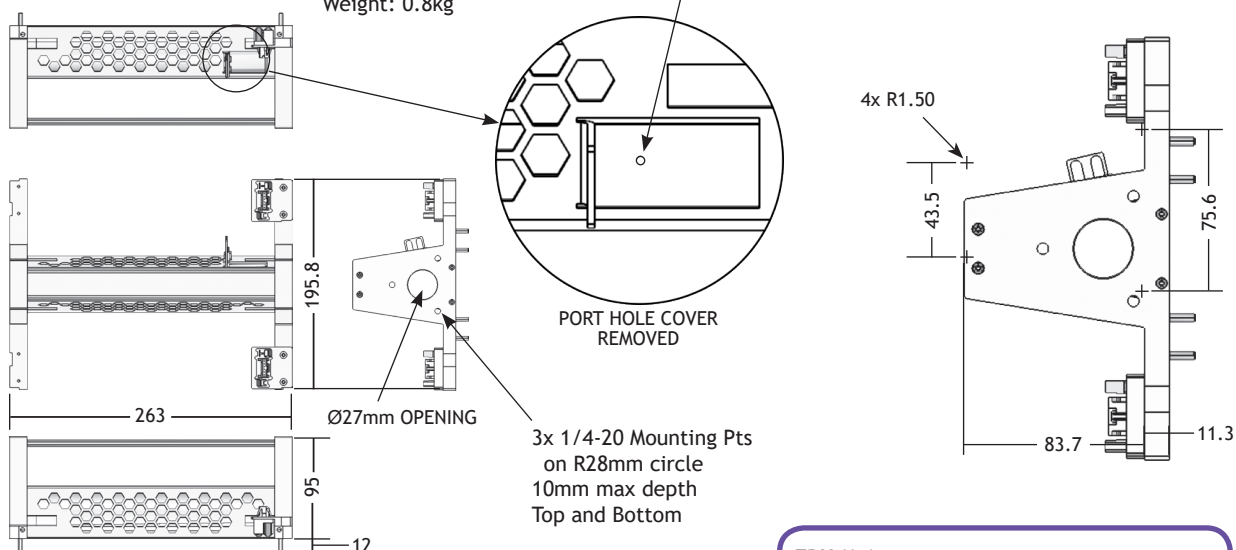


Dimensions (Internal Fiber Reflector Unit)

Units of measurement: mm

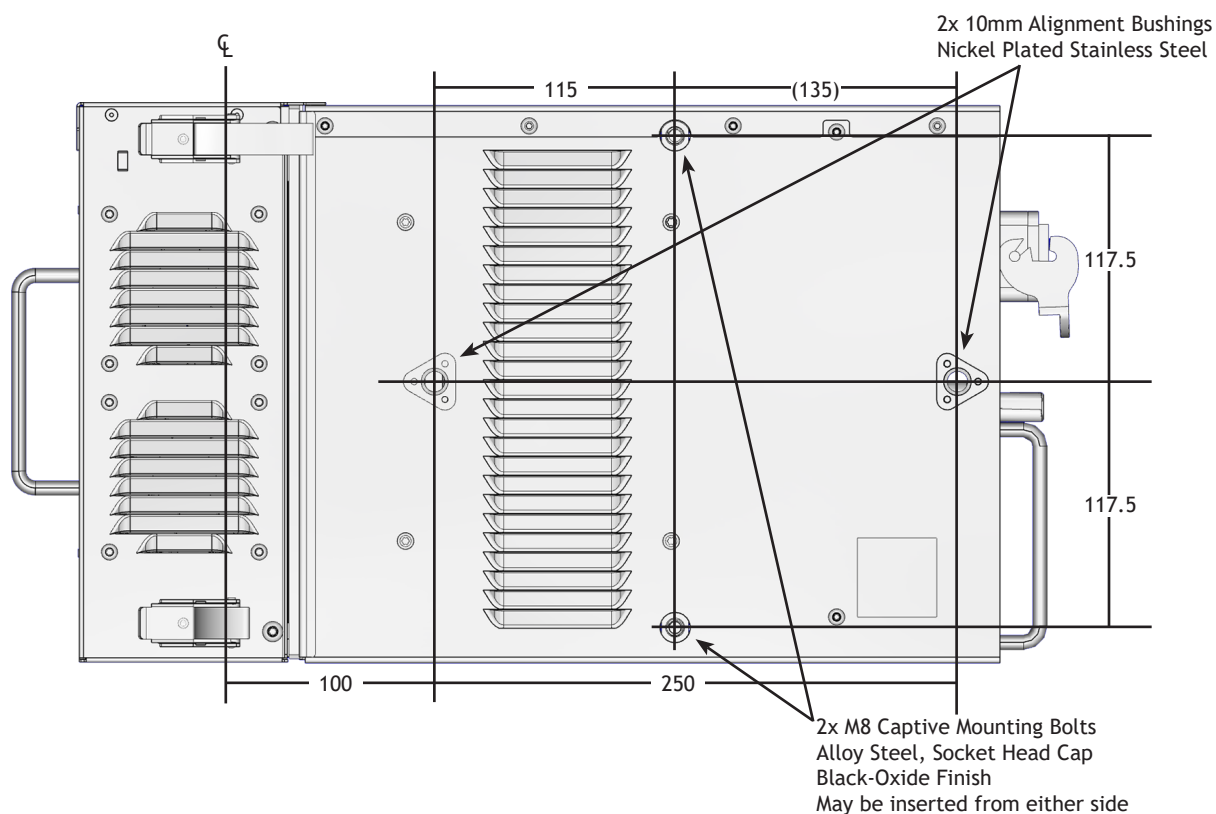
FIBER REFLECTOR UNIT
Weight: 0.8kg

Ø2.75mm PORT HOLE



FRU Maintenance
Refer to 39804 Fiber Reflector Maintenance

Integrated Mounting Hardware



Ordering Information

FJ228 GEN7 FIBER SYSTEM		FP300 GEN7 FIBER SYSTEM	
Item	Description	Item	Description
54407 54374	Config, FJ228 225x20AC395-25W Fib Enc G8 FG, FJ228 225x20AC395-25W Fib Enc G8	54408 54375	Config, FP300 225x20WC395-30W Fib Enc G8 FG, FP300 225x20WC395-30W Fib Enc G8
54404 54371	Config, FJ228 225x20AC365-10W Fib Enc G8 FG, FJ228 225x20AC365-10W Fib Enc G8	54405 54372	Config, FP300 225x20WC365-12W Fib Enc G8 FG, FP300 225x20WC365-12W Fib Enc G8
54406 54373	Config, FJ228 225x20AC385-25W Fib Enc G8 FG, FJ228 225x20AC385-25W Fib Enc G8		
Item	AVAILABLE ACCESSORIES 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		
53314	Assy, G8 Fiber Reflector Unit - Replacement Fiber Reflector Unit, Complete Assembly		
54600	Kit, G8 Fiber Reflector, 4 pk - Internal Reflector for FRU repair (refer to 54617 User Manual, Fiber Refl Maintenance)		
34432	Kit, FRU Protective Glass, 4 pk - Protective Glass for FRU repair (refer to 54617 User Manual, Fiber Refl Maintenance)		
37643	Kit, G8 Fiber Reflector Fixture - Assembly fixture for FRU repair (refer to 54617 User Manual, Fiber Refl Maintenance)		
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)