

*Phoseon*®

## **Phoseon® UV LED Fiber Curing Systems**

LED Light Sources for Process  
Improvement of Primary and  
Secondary Coatings

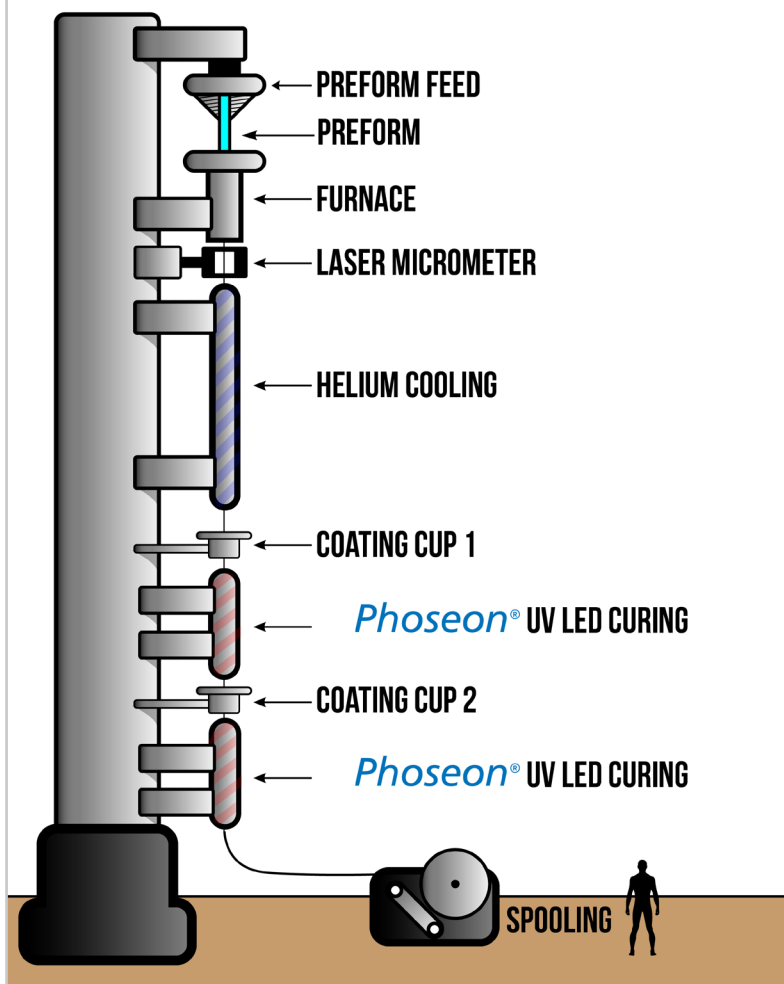


# Introduction

Phoseon Technology's Fiber Curing System consists of a high intensity UV LED light source, which cures the coatings protecting the glass fibers, along with a patented Fiber Reflector Unit (FRU) to direct the UV energy uniformly around the circumference of the fiber. The UV LED light source and FRU are enclosed in an IP52 enclosure, protecting the system from liquid spills. LED technology drastically reduces energy consumption and significantly reduces operational costs and maintenance downtime. For applications where process monitoring is required, the FRU includes a mounting feature for an irradiance monitoring system.

The latest generation Fiber Curing Systems feature a three-part reflector assembly to improve the irradiance at the fiber by twenty percent. Mounting hardware integrated into the enclosure makes retrofitting onto existing towers easier than ever. The field proven, fiber optimized UV LED light source paired with the patented focusing reflector 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..

## FIBER DRAW TOWER WITH UV LED CURING



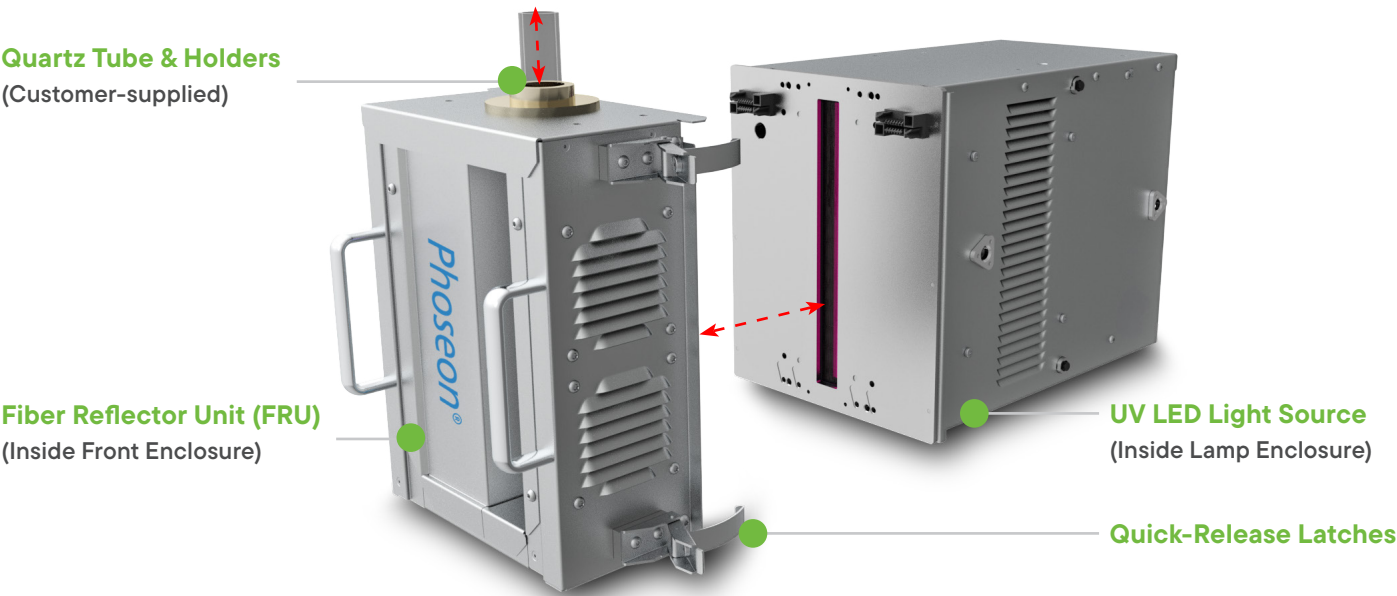
## ADVANTAGES OF UV LED CURING SYSTEMS

- Reduced energy – up to 50% or more
- Reduced infrastructure – exhaust, air-exchange, power delivery, no roof penetration
- Elimination of lamp related consumables: bulbs, shutters, reflectors
- Improved safety and environmental – no Hg, no UV-B, no UV-C, no ozone
- Requires less preventative maintenance time
- Reduced equipment failures
- Increased yield due to tighter process control
- Faster process speed

# Enclosed Fiber Curing System: Generation 8, Product Specifications

## Phoseon UV LED SLM™

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 and patented focusing reflector remain 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.



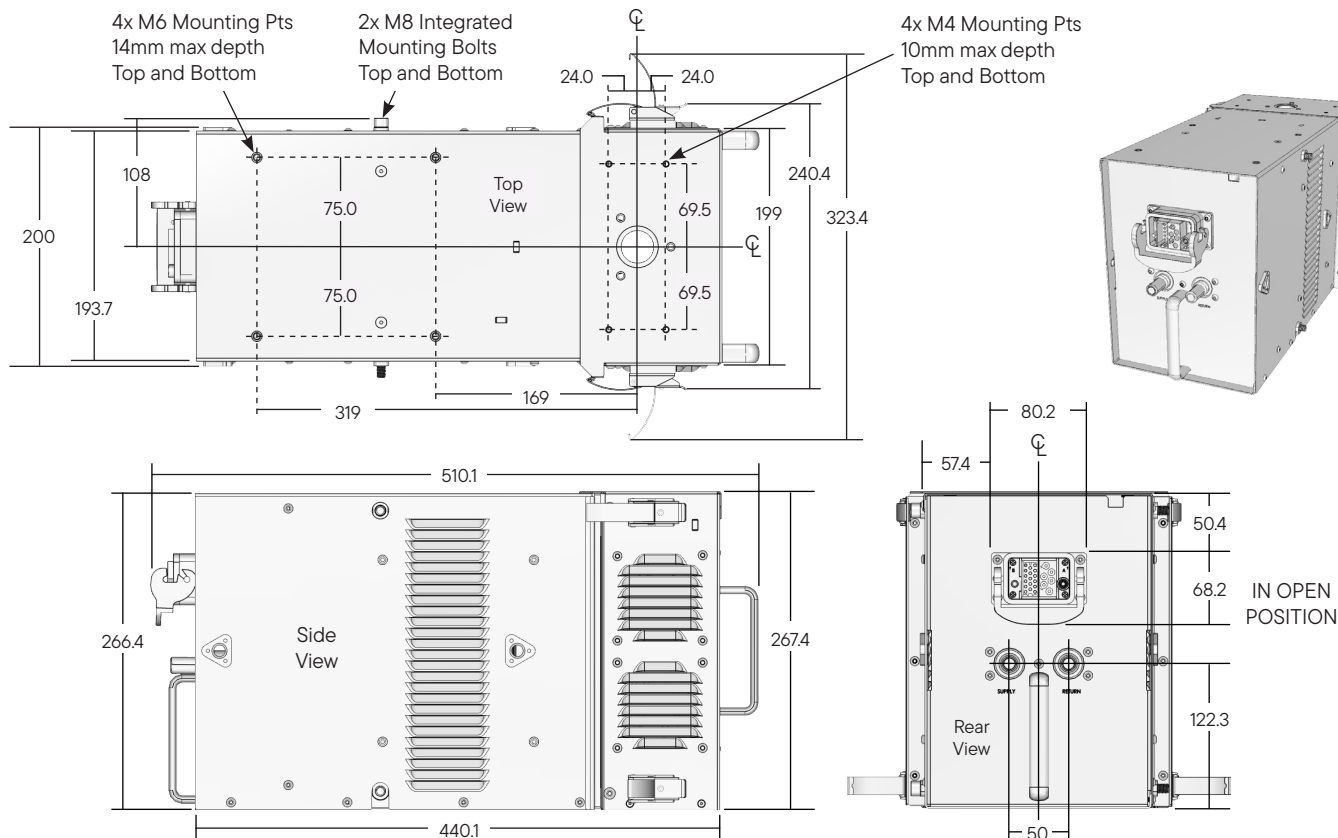
## Performance

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

PERFORMANCE			
	FJ228 365 nm	FJ228 365, 395 nm	FJ300 395 nm
Peak Irradiance	10 W/cm²	25 W/cm²	30 W/cm²
Emitting Window (mm)	225x20	225x20	225x20
48V Power In (Max)	1200W / 25A	2064W / 43A	1920W / 40A
Cooling Capacity (Typical)	n/a	n/a	1233W
Cooling Capacity (Max)	n/a	n/a	1425W
Water Flow Rate (Min)	n/a	n/a	6 LPM
Pressure Drop (Typical)	n/a	n/a	0.19 Bar

# Dimensions (Enclosure)

Units of measurement: mm



## ORDERING INFORMATION

FJ228 GEN8 FIBER SYSTEM		FP300 GEN8 FIBER SYSTEM	
Item	Description	Item	Description
<b>54407</b> <b>54374</b>	Config, FJ228 225x20AC395-25W Fib Enc G8 FG, FJ228 225x20AC395-25W Fib Enc G8	<b>54408</b> <b>54375</b>	Config, FP300 225x20WC395-30W Fib Enc G8 FG, FP300 225x20WC395-30W Fib Enc G8
<b>54404</b> <b>54371</b>	Config, FJ228 225x20AC365-10W Fib Enc G8 FG, FJ228 225x20AC365-10W Fib Enc G8	<b>54405</b> <b>54372</b>	Config, FP300 225x20WC365-12W Fib Enc G8 FG, FP300 225x20WC365-12W Fib Enc G8
<b>54406</b> <b>54373</b>	Config, FJ228 225x20AC385-25W Fib Enc G8 FG, FJ228 225x20AC385-25W Fib Enc G8	n/a	n/a
Item	AVAILABLE ACCESSORIES Description		
<b>35036</b>	Cable, DC/Data, Fiber Enc, 5m - Connects Fiber System to 48Vdc Power and Control System		
<b>34614</b>	Cable, DC/Data, Fiber Enc, 10m - Connects Fiber System to 48Vdc Power and Control System		
<b>35584</b>	Cable, DC/Data, Fiber Enc, 15m - Connects Fiber System to 48Vdc Power and Control System		
<b>30107</b>	Control Box - Provides UV Enable and Intensity Control (refer to 30477 Spec Sheet, Control Box, Gen3)		
<b>29973</b>	Alignment Puck - Aids in centering the Fiber Reflector Unit to the fiber draw line		
<b>53314</b>	Assy, G8 Fiber Reflector Unit - Replacement Fiber Reflector Unit, Complete Assembly		
<b>54600</b>	Kit, G8 Fiber Reflector, 4 pk - Internal Reflector for FRU repair (refer to 54617 User Manual, Fiber Refl Maintenance)		
<b>34432</b>	Kit, FRU Protective Glass, 4 pk - Protective Glass for FRU repair (refer to 54617 User Manual, Fiber Refl Maintenance)		
<b>37643</b>	Kit, G8 Fiber Reflector Fixture - Assembly fixture for FRU repair (refer to 54617 User Manual, Fiber Refl Maintenance)		
<b>29879</b>	Power Supply, 48V, 2400W, 50A		
n/a	n/a	<b>36465</b>	Kit, Water Fitting, LQ6, 1/2" barb, Fiber (CPC LQ6D17008BLU/RED, 2 hose clamps)
n/a	n/a	<b>37438</b>	Kit, Water Fitting, LQ6, 3/8" PTF, Fiber (CPC LQ6D13008BLU/RED)

# UV LED Fiber Curing System

Phoseon brand's Fiber Curing System consists of a high intensity UV LED light source and a patented Fiber Reflector Unit (FRU). The LED array in the light source and the focusing reflector in the FRU are designed to uniformly irradiate the fiber around its entire circumference for optimum cure. Available light sources include the air-cooled FireJet™ FJ228 or the water-cooled FirePower™ FP300. The light source and FRU are housed in an IP52 protective enclosure.

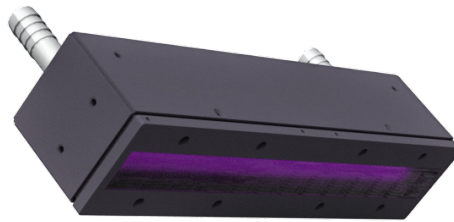
## AIR-COOLED: FIREJET™ FJ228 LIGHT SOURCE

- Air-cooled
- Irradiance: 55-60 W/cm<sup>2</sup> at the fiber
- TargetCure™ & WhisperCure™ technologies
- Linear intensity control
- 40,000+ curing hours



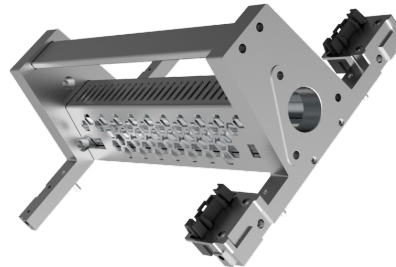
## WATER-COOLED: FIREPOWER™ FP300 LIGHT SOURCE

- Water-cooled
- Irradiance: 67-72 W/cm<sup>2</sup> at the fiber
- Linear intensity control
- Requires external chiller
- 40,000+ curing hours



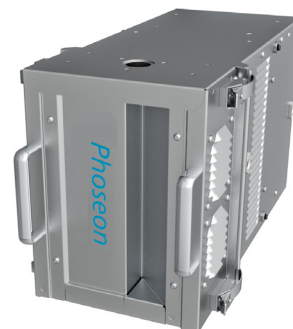
## FIBER REFLECTOR UNIT

- Patented compound reflector design
- Provides uniform irradiance around the circumference of the fiber
- Reduced reflector maintenance



## 8TH GENERATION FIBER ENCLOSURE

- IP52 enclosure protects light source and FRU
- Internal fans with improved air flow and reduced noise
- Three-part reflector assembly to improve the irradiance at the fiber by twenty percent
- Integrated mounting hardware compatible with existing draw towers





---

+1 503 439 6446

+1 800 668 8752  
USA and CAN

---

2545 Railroad Street, Suite 300  
Pittsburgh, PA 15222  
United States

[excelitas.com](http://excelitas.com)  
[phoseon.info@excelitas.com](mailto:phoseon.info@excelitas.com)

For a complete listing of our global offices, visit [www.excelitas.com/locations](http://www.excelitas.com/locations)

©2025 Excelitas Technologies Corp. Phoseon® is a registered trademark of Excelitas Technologies Corp. The Excelitas logo and design are registered trademarks of Excelitas Technologies Corp. All other trademarks are the property of their respective owners, and neither Excelitas Technologies Corp., its affiliates or subsidiaries, or any of their respective products, are endorsed or sponsored by or affiliated in any way whatsoever with those organizations whose trademarks and/or logos may be mentioned herein for reference purposes. Excelitas Canada Inc. reserves the right to change this document at any time without notice and disclaims liability for editorial, pictorial or typographical errors.

Phoseon Fiber Cure Brochure\_2025.08