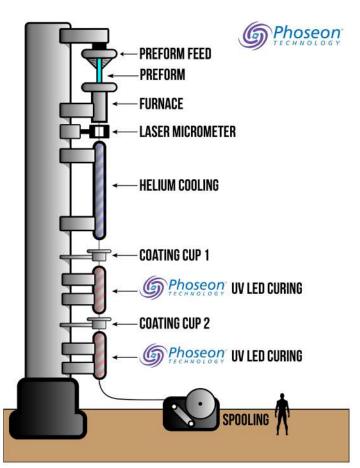


# UV LED Curing Solutions for Fiber Optics LED Light Sources for Process Improvement of Primary and Secondary Curing

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 of Fiber Curing Systems features an improved air-flow design to increase internal cooling and reduce fan noise. 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.



# Advantages of UV LED curing systems over mercury UV 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

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## **Enclosed Fiber Curing System**

#### **Generation 7, 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 7th Generation Fiber Curing System features an improved air-flow design to increase internal cooling and reduce fan noise. 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.



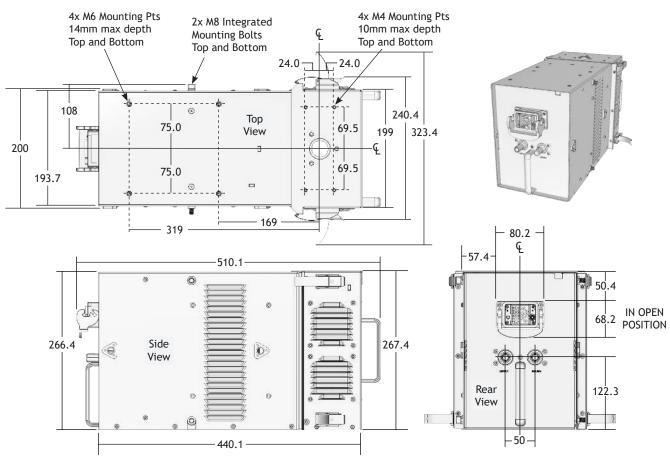


#### **Performance**

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

	F J 2 2 8 3 6 5 n m	FJ228 385, 395nm	F P 3 0 0 3 9 5 n m
Peak Irradiance	10W/cm <sup>2</sup>	25W/cm <sup>2</sup>	30W/cm <sup>2</sup>
Emitting Window (mm)	225x20	225x20	225x20
48V Power In (Max)	1200W / 25A	2064W / 43A	1920W / 40A
Cooling Capacity (Typical)			1233W
Cooling Capacity (Max)			1425W
Water Flow Rate (Min)			6LPM
Pressure Drop (Typical)			0.19 Bar

# Dimensions (Enclosure) Units of measurement: mm



#### **Ordering Information**

FJ228 GEN7 FIBER SYSTEM		FP300 GEN7 FIBER SYSTEM			
ltem	Description	ltem	Description		
39629 39628	Config, FJ228 225x20AC395-25W Fib Enc G7 FG, FJ228 225x20AC395-25W Fib Enc G7	39802 39801	Config, FP300 225x20WC395-30W Fib Enc G7 FG, FP300 225x20WC395-30W Fib Enc G7		
38160 38007	Config, FJ228 225x20AC365-10W Fib Enc G7 FG, FJ228 225x20AC365-10W Fib Enc G7				
38962 38963	Config, FJ228 225x20AC385-25W Fib Enc G7 FG, FJ228 225x20AC385-25W Fib Enc G7				
ltem	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				
39803	Irradiance monitor mounting kit - Use to mount EIT Compact Sensor to Fiber Reflector Unit				
37418	Assy, Fiber Reflector Unit, G6 - 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)		

### **UV LED Fiber Curing System**

Phoseon'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: 55-60W/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: 67-72W/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

#### 7th Generation Fiber Enclosure



- IP52 enclosure protects light source and FRU
- · Internal fans with improved air flow and reduced noise
- Integrated mounting hardware compatible with existing draw towers

# **Contact Phoseon Today!**

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