

# VeriCure™ UV LED Curing System

## Product Specifications

### UV LED SLM™ Technology

Excelitas® is the world leader in UV LED solutions for commercial and industrial applications with products that deliver superior performance and real-world reliability for UV curing of adhesives, coatings and inks. Our patented Semiconductor Light Matrix (SLM)™ technology was developed with meticulous design engineering of LEDs, arrays, optics, and cooling architecture to deliver optimum UV LED curing performance.

The Phoseon VeriCure™ water-cooled UV light source, which features a unique UV LED SLM™ design, delivers an ultra-high UV dose that is ideal for demanding applications such as wood coatings. Patented SLM control technology allows uniformity to be optimized during operation, in real time, without the need to take the UV LED source offline. Additionally, this unique technology allows for the UV emitting area to be adjusted if process width requirements change, and for discrete LED module intensity levels to be set to optimize curing of irregular substrate contours.

### Light Source Overview

#### Coolant Supply/Return

(directly impacts product performance)

**Temperature:** 20 to 35 °C (dependent on environmental conditions)

**Water:** Distilled required, with corrosion inhibitors. Refer to 28384 Water Cooling Requirements

#### Clean Dry Air Inlet\*

#### PLC Interface

Supported Protocols: OmniCure  
AC Series communication  
protocol, Analog

#### Earth Ground

#### Ethernet Connection

Supported Protocols: Modbus  
TCP/IP, Phoseon CLIP protocol

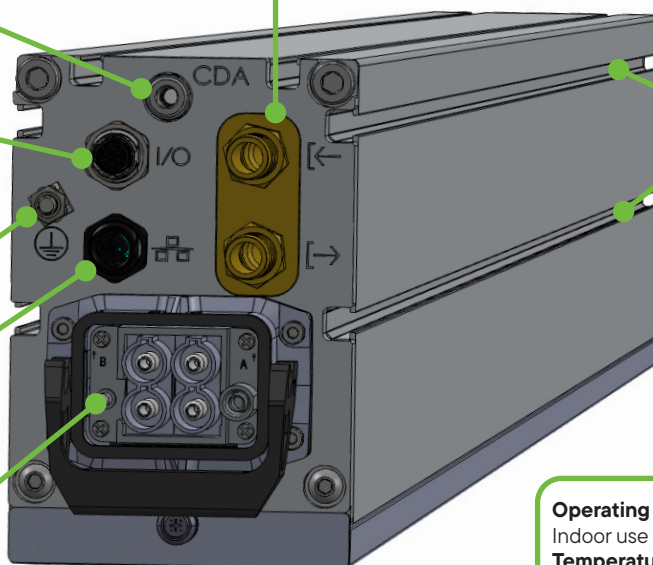
**DC Input Power:** 120±5 Vdc

**System Energy Efficiency:** 13 kW/110A

#### Removable Secondary Glass\*\*

\*not required, optional use only

\*\*extra cost option



#### Operating Environment:

Indoor use only

**Temperature:** 10 to 40 °C

**Humidity:** <80% non-condensing for  
temperatures up to 30 °C

**Altitude:** up to 3,000m

**Storage Temperature:** -20 to 85 °C



## Optical Performance\*

Wavelength (nm)	365	395/405
Typical Dose (@50 mm Working Distance & 50 m/min)	300 mJ/cm <sup>2</sup>	500 mJ/cm <sup>2</sup>
Peak Irradiance (@window)	15 W/cm <sup>2</sup>	20 W/cm <sup>2</sup>
Peak Irradiance (@30mm)	4 W/cm <sup>2</sup>	6 W/cm <sup>2</sup>

\*Without secondary glass. 385 nm wavelength available on request.

## Interface Mechanical Specifications

Coolant	3/8" NPT to 1/2" ID Hose Barb fitting (Can be removed and replaced with any 1/2" NPT fitting)
Clean Dry Air	1/8" NPT to 1/4" tube fitting
PLC Connection	Phoenix Contact 17-Pin M12 Socket Cable: Phoenix Contact 1430213 or equivalent
Earth Ground	M6 fitting
T-Slots	Accepts M6 square hardware
Ethernet Connection	Phoenix Contact 4-Pin M12 Socket Cable: Phoenix Contact 1403499 or equivalent
Power Connection	Phoenix Contact HEAVYCON B6
Electrical Supply	Meanwell RST-15K-115 or equivalent

## Chiller Requirements

Chiller/Cooler Capacity	10 kW
Chiller/Cooler Flow Rate	10 LPM
Coolant Temperature	30 °C (dependent on environmental conditions)
Pressure Drop (Typical)	7.7 psi/0.531 Bar @10 LPM

## Dimensions

Units of measurement (rounded): mm

<b>Model: VeriCure</b>	
<b>Emitting Window*</b>	1350 x 20
<b>Length (L)</b>	1624
<b>Width (W)</b>	104
<b>Height (H) Secondary Window Installed</b>	155
<b>Height (H*) No Secondary Window Installed</b>	147
<b>Weight (kg)</b>	29

\*Other lengths available.

