



Semray® UV4203 LED Curing Solution

A high-power air-cooled LED system offering the flexibility to optimize your process in a wide variety of applications

Simple

Compact modular housing designed for easy installation/replacement



Powerful

Up to 15% higher UV output than last generation



Robust

Thermal management redesigned to optimize durability



Flexible

Optimize your curing process with adjustable width, working distance & intensity



Product Advantages:

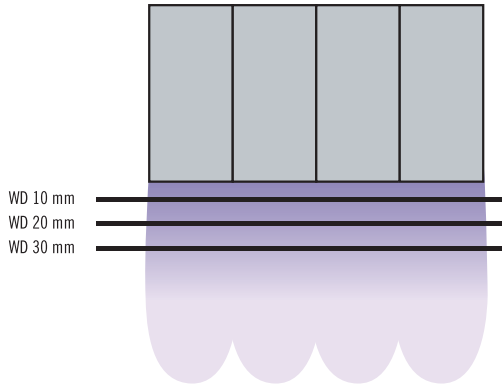
- High-intensity, robust air-cooled system
- Dimming from 20% to 100%
- Uniformity >90% from 20 mm working distance
- Compact modular design scalable for different widths
- Easy replacement and wavelength adjustment

Customer Benefits:

- High productivity: significantly faster line speeds achievable
- Reduced downtime: quick and easy LED module removal, replaceable LED engine
- Space saving: compact design without water chiller or hoses
- Sustainable process: Reduces VOCs, CO₂, and is ozone and mercury free

Specifications: Semray® UV4203

Irradiance Uniformity



Model	UV4203 Segment			
Peak wavelength ¹⁾ [nm]	365	385	395	405
Power consumption [W]	400	520	600	600
Typical intensity at emission window [W/cm ²]	12	13	16	16
Emission window [mm ²]	75 x 45			
Dimensions (W x D x H) [mm]	77 x 150 x 256			
Communication	Analog and RS485 MODBUS			
Fan speed [RPM]	16,500 (Max.)			
Noise level [dbA]	<68			
Enclosure rating	IP20			

1) Tolerance for 365 nm is +6 nm /-5 nm and for 385 nm, 395 nm, 405 nm +/- 5 nm.

Electrical Data

Mains Connection: 48 Vdc (±5 %).
Current (per segment): 13.5 A (max.).
Dimming: 2 – max. 10 Vdc (20–100%).
Controls: Analog / Digital (RS485 MODBUS / 9,600 or 115,200 baud).

Operating Conditions

Type of Cooling: Internal fan.
Ambient Temperature in Operation: 10–40°C.
Relative Humidity ²⁾: Max. 80%.
Degree of Protection: IP 20.
Expected Life Time: Typ. 15,000 hrs.

2) Condensation in or at the Semray® must be avoided at all times – this may further restrict the requirements regarding admissible humidity.

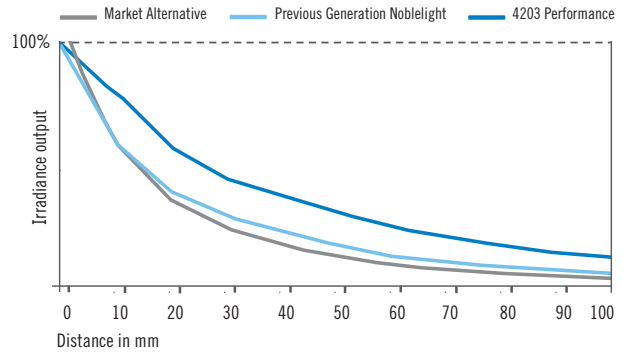
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Irradiance Output



Power Supply

Weight: 10 kg (22 lbs).
Dimensions: 483 mm x 186 mm x 882 mm with connector (19.01 in. x 7.32 in. x 34.72 in. with connector).
Cooling: Ventilation: internal fans; air flow path: front to rear.
Input Voltages: 200–240 V AC ±10%.
Mounting Position: Horizontal, standard 19 in. rack mount chassis unit can be free standing, stacked, or rack mounted.
Clearance: Allow 305 mm (12 in.) clearance front and rear of the power supply for cooling air flow and cable connections.
Safety Interlocks: 1 External interlock (customer I/O or E-stop).
Front Panel Indicators/Controls: Power/LED on/off switch; indicators. Display panel with Settings and Power Level control buttons.
Output Range: 40–48 V.
Enclosure Rating: IP20 (NEMA 1).
Maximum Line Power: 3.0 kVA @ 100% output.
Stacking: 5 units maximum.
Power Level Control Options: 4–20 mA; 0–10 Vdc; front panel.
Communication Methods: Master/Slave (standard, dry-contact); DeviceNet™ Mark II (additional module required)*; Profibus® DP-V1 (additional module required); EtherNet/IP™ (additional module required).
 *Requires additional 24 V DeviceNet™ power supply.

Power Supply Model Semray® CPS3



Contact your local Heraeus Noblelight office for an engineered solution for your specific requirements.

ISO 9001 Certified QMS

