spectratek avled

A NEW & COMPLETE LINE OF HIGH PERFORMANCE UV-A LED CURING LAMPS



A new approach to cure UV paint products with a complete line of UV-A LED curing lamps specially designed for the automotive industry with high performance UV LED technologies

spectratek UVTEK 100 spectratek InstaCure UVLED spectratek UVTEK 2000 spectratek UVTEK 3000 spectratek UVTEK 4000

SPECTRATEK

SPECTRATEK InstaCure UVLED • Handheld model

HIGH, UNIFORM & CONSTANT IRRADIANCE MANAGED BY DUAL LED TECHNOLOGY & OPTIMAL LED CONFIGURATION



MOST POWERFUL & RELIABLE UV LED curing lamps on the global market....

never surpassed by the competitors.

MOST ADVANCED LED TECHNOLOGY

Developped by engineers and LED experts, the complete SPECTRATEK UV LED product line is equipped with our exclusive & advanced DUAL LED TECHNOLOGY providing 365 & 395nm wavelength ALL-IN-ONE.

No need to get multiple equipment with single wavelength.

OPTIMAL LED CONFIGURATION

Determined by scientific analysis and simulations, SPECTRATEK's UVLED modules are manufactured with a specific LED configuration, ensuring highest, constant, and uniform irradiance on all the curing surface, instead of a small central point of high irradiance with low values at the edges provided by our competitors.

SPECTRATEK UVLED • Mobile models

READY TO SAND, BUFF AND DELIVER IN LESS THAN 3 MINUTES



CONTROLLED WATTAGE

WHY REQUESTING TOO HIGH WATTAGE when resulting in lot of heat to dissipate, risk of overheating, damaged LED units, and shorter lifetime?

SPECTRATEK focused on the perfect balance of providing a high irradiance and reduced wattage, resulting in high performance results, longer LED lifetime, and better working reliability.

ENVIRONMENTALLY FRIENDLY & SAFE

SPECTRATEK UVLED curing lamps are environmentally-friendly by promoting use of UV polymerizable paint products with low VOC.

Low energy consumption.

Users also benefit a high safety use with UV-A emission only. No harmful UVB & UVC in comparison with HID equipment.

BETTER INTEGRITY PROTECTION

SPECTRATEK developped and designed a state-of-the-art thermal management system for high power UV LED allowing efficient heat dissipation and protection of the system integrity. No risk of overheating. No damaged LED units. No warm-up time before using. No cooling time required during curing jobs.

AMH Canada Ltd presents a new approach of UV curing processes with our complete line of SPECTRATEK UVLED curing lamps. Designed with our unique & advanced DUAL LED technology combining 365 & 395nm wavelength ALL-IN-ONE to optimizing curing results.

Designed and built in Canada for worldwide use on all current ultraviolet light curable fillers, base coats (primers), top coats,

Working from its state-of-the-art research and testing facilities, a top team of engineers, technicians and LED experts created - in cooperation with the coating industries - the SPECTRATEK UVLED lamps destined to revolutionize UV-A paint curing in the car body repair industry.

Faster, safer, and more efficient than any other HID or conventional UV curing system for automotive repair and industrial finishes.

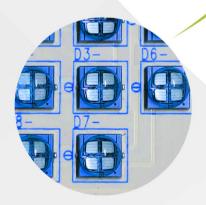
Faster delivery delay for the final product, resulting in high profits.

In addition to speeding up production, UV curing processes increase finish quality by reducing flaws and errors. The amount of time that dust, insects, or any airborne object has to settle on the painted surface is greatly reduced. This will improve the finish quality.

What is the DUAL LED technology?

putties, resines, and more) and optimizing the curing results.

The SPECTRATEK UVLED curing lamps are environmentally-friendly with a low energy consumption.



spectratek™

InstaCure UVLED

Fastest & most powerful UV curing process combining 2 wavelenghts all-in-one

Advanced technology

 Equipped with DUAL LED technology combining 365 & 395nm double wavelength ALL-IN -ONE for better curing results than only single 395nm.

Cordless & Autonomy ----->

- No electric plug needed.
- Easy and complete access to all parts and sections of the vehicle.

Flexible

- Excellent for quick & fast repair.
- Perfect for scanning process on larger curing surfaces.

Optimal Curing Parameters

@ 50-75mm (2-3") curing distance

- Curing surface: 100 x 100mm (4"x4")
- Curing time: 8 60 seconds
- Average irradiance: 118 mW/cm²
- Peak irradiance: 250 mW/cm²

- Curing time: 60 120 seconds

@ 200mm (8") curing distance

• Curing surface: 250 x 250mm (10"x10")

during the complete

battery autonomy.

- Average irradiance: 24 mW/cm²
- Peak irradiance: 50 mW/cm²

constant and uniform irradiance

SPECTRATEK InstaCure UVLED

Cordless & Handheld UV curing lamp

Ref.: 28.SPTUVTEK565

Digital Control system

- Two control modes: Automatic & Manual (with trigger).
- Digital counter, battery level symbol and control mode displayed on screen.



Li-Ion Battery powered

• Complete recharge in less than 1-1/2 hours.

State-of-the-art electronics

- Electronics kept in a well sealed section.
- Constant and uniform irradiance during the complete battery autonomy.

Safety

 No risk of burns. • No cooling time required.

Long Curing Lifetime

• More than 35.000 hours of hard works and high return on investment.

Ergonomic handle & trigger

· Light weight & safe handling.



Storage case:

The SPECTRATEK InstaCure UVLED is provided with a storage case made of durable material. Battery charger, AC cable, and UV safety goggles also included.

The LED units setup and the specially designed supply system allow a

Adding with a unique and specific LED configuration, SPECTRATEK UVLED guarantees the must uniform, constant,

powerful, and efficient UV curing process on the global market.

Ultraviolet spectrum UV-C (100-280nm) • **UV-B** (280-315nm) • **UV-A** (315-400nm) Visible Light Spectrum -

The DUAL LED technology is a unique & exclusive LED design specially developped by

our engineers and LED experts to provide a 365 & 395nm double wavelenght, all-in-one.

As conventional LED unit emit only at a single wavelength, SPECTRATEK UVLED is the first actor

in the car repair market to offer a solution for curing a larger UV paint product range (primers, clearcoats,

500nm

SPECTRATEK Flashlight UVTEK100

A powerful 20W UV LED flashlight for touch-up and very small repair. Powered by a Lithium battery and rechargeable through USB port. UV-A high-performance 395nm UV LED unit.

Ref.: 28.SPTUVTEK100





///// spectratek uvled

Excellent solution for all repair jobs

A complete line of mobile UV LED curing lamps for larger curing surfaces. Using our advanced **DUAL LED technology** in addition with a powerful and optimal 24 LED units configuration by cassette, for optimizing curing results.



Digital control system

 LCD Display & membrane switch allowing parameter adjustment, as curing time, selection of languages (+27), and more.

High quality

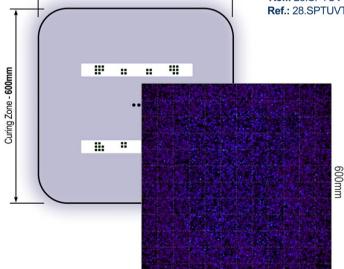
- Evenly cured surface up to 190µm for customer satisfaction.
- No degradation of LED units over lifetime.
- Higher accuracy due to incorporation of lenses and distance control.
- Large & uniform curing area up to 600mm x 600mm.

Curing Zone - 600mm

• High & uniform average irradiance up to **24mW/cm**² at 300mm from the surface. Efficient peak irradiance up to 50mW/cm².

SPECTRATEK UVTEK2000 Single UVLED head

Ref.: 28.SPTUVTEK2110.24 (110V) Ref.: 28.SPTUVTEK2000.24 (230V)



600mm

mW/cm² 40-

Lower cost

- Substantial cost saving over lifetime = better margins up to 70% lower energy use.
- Very long lifetime = no replacement cost.
- · Improve management profits.

Reliability & efficiency

- No warm-up & cooldown time, in comparison with HID UV equipment.
- · Passive cooling without parts and vents subject to wear.

Safety

Long Curing Lifetime

and high return on investment.

More than 35,000 hours of hard works

- · Pure UV-A, no filter required.
- · Reduced heat production, no risk of burns.
- No hazardous chemicals in work environment.
- No disposal of used lamps containing Mercury.



- Improved working conditions = employee satisfaction.
- Compact design, easy to store and set-up.
- Safe in use Unit does not get hot.

SPECTRATEK UVTEK3000

Single UVLED head on a strong & robust column Ref.: 28.SPTUVTEK3110.24 (110V) Ref.: 28.SPTUVTEK3000.24 (230V)

UV curing process



UV curing is the process by which ultraviolet light is used to initiate a photochemical reaction that generates a crosslinked network of polymers. UV curing is adaptable to printing, coating, decorating, stereolithography, and in the assembly of a variety of products and materials.

In comparison to other technologies, curing with UV energy may be considered a low temperature process, a high speed process, and is a solventless process, as cure occurs via direct polymerization rather than by evaporation.



Application of the UV paint product







Exposure to UV light causes chemical reactions UV paint hardens when completely cured Specifications 28.SPTUVTEK100

Rechargable battery type: Lithium 3.7 VOLT - 2,600mAh LED wattage: 20 watts Emiting wavelength: 395nm Waterproof grade: IPX4

Handheld model **SPECTRATEK InstaCure UVLED Specifications** 28.SPTUVTEK565 Rechargable battery type: Li-ion 18.5 VOLT - 3,000mAh Battery charge cycles life: 1,000 cycles Battery autonomy: 2 hours 110-240VAC, 50-60Hz, Short circuit/Overload protection Battery charger: LED type: High power LED LED lamp wattage: 55 watts Wavelength: DUAL LED technology 365 & 395nm (UV-A only) Weight: 1,85 kg (4 lbs) @ 50mm (2") curing distance @ 200mm (8") curing distance **Curing zone dimensions:** 100mm x 100mm (4" x 4") 250mm x 250mm (10" x 10") Emitting zone dimensions: 80mm x 80mm (3-1/5" x 3-1/5") 80mm x 80mm (3-1/5" x 3-1/5") Curing time: 8 ~ 60 seconds 60 ~ 120 seconds Average Irradiance: 118.0 mW/cm² 24.0 mW/cm² Efficient Peak Irradiance: 250.0 mW/cm² 50.0 mW/cm² Body lamp material: Aluminium Cooling system: Passive thermal management system enhanced with fan LED lifetime: +35,000 hours

Storage temperature (°C):

Mobile models Specifications	UVTEK 2000 Configuration 24 LEDs by cassette		UVTEK 3000 Configuration 24 LEDs by cassette		UVTEK 4000 Configuration 24 LEDs cassette	
	28.SPTUVTEK2110.24	28.SPTUVTEK2000.24	28.SPTUVTEK3110.24	28.SPTUVTEK3000.24	28.SPTUVTEK4110.24	28.SPTUVTEK4000.24
Supply voltage Single Phase:	110VAC	230VAC	110VAC	230VAC	110VAC	230VAC
Frequency:	50-60Hz					
Fuse:	4.8A	2.0A	4.8A	2.0A	8.5A	3.7A
Input apparent power:	525VA	475VA	525VA	475VA	950VA	850VA
Total Electrical power:	375W (190W by cassette)				750W (190W by cassette)	
Heat power:	120W (60W by cassette)				240W (60W by cassette)	
Optical LED power:	255W (128W by cassette)				510W (128W by cassette)	
Wavelength:	DUAL LED technology 365 & 395nm (UV-A only)					
Curing zone dimensions:	24" x 24" (600mm x 600mm)			24" x 52" (600mm x 1315mm)		
Maximum curing distance:	12" (300mm)					
Curing time:	< 300 seconds					
Average irradiance:	24.0mW/cm ²					
Efficient peak irradiance:	~50.0mW/cm²					
Cooling system:	Passive thermal management system					
LED lifetime:	+35,000 hours					
Storage temperature:	-40°C ~ +80°C					
Control system:	Digital control (LCD screen + tactile membrane keypad)					

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-40°C ~ +80°C



^{*}The curing time may vary according to the paint product type, the curing process and/or other factors