

Higher power UV LED for printing, coating and converting applications











*Versus an original AeroLED system

Designed and made in Britain

gewuv.com





Fully air-cooled, higher power UV LED

Single remote fan sited behind the press means no integrated fans or electronics in lamphead.



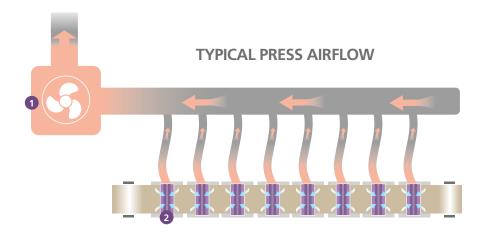
Efficient and sustainable

Simple cooling with no water chillers. Reduce energy costs by >55% versus comparable arc systems. No ozone, no mercury.

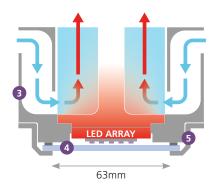


Step change process reliability

Consistent LED output over lamp lifetime ensures perfect process control compared to variable arc lamp UV.



AEROLED2 CHASSIS



1 Fully air-cooled

- Single centralised fan system for quiet and reliable operation.
- No chiller required; significantly reducing investment cost and power consumption.
- No heat exhausted onto press or into press room, air can be ducted out.

2 ArcLED

- AeroLED2 uses the same fan and airflow as GEW's proven E2C system. This means E2C and AeroLED2 can be interchanged freely on any print station.
- High redundancy in the cooling design means no filters are required making life simpler and cleaner for operators.

Improved reliability

- AeroLED2 and LeoLED2 share the same core components, enabling high volume, industrialised manufacture and improved reliability.
- Embedded temperature sensors constantly monitor the LEDs to ensure safe, long-term operation and reliability.

Most efficient curing

- Larger window improves light extraction, giving more UV dose for the same electrical input power.
- LEDs closer to the window increases irradiance at the substrate, improving curing efficiency.

Easy maintenance

- Tough watertight seal protects LEDs from dust/water ingress.
- GEW's standard cassette design for easy maintenance.
- No integrated fans or electronics in lamphead.
- Robust air-cooled heatsinks are easily accessible for cleaning when cassette is removed.





Cut your energy costs



Energy Consumption[†]

GEW E2C 206,200 kWh



AeroLED2 89,850 kWh

Free up mains capacity



Electrical Requirement[†]

GEW E2C

65 kVA

AeroLED2

32 kVA



† Figures for comparison are based on a 47cm width, 8 lamp curing system. Typical energy savings of >50%, and electrical requirement savings of >50%, dependent upon configuration. Assumptions: 400V | 50Hz | 1000m above sea level | 25°C ambient temperature | 60% duty cycle | 2 shifts of 8 hours, 312 days per year.

Kyle Davis

General Manager, MidSouth Tag & Label, Alabama, USA

Using AeroLED & E2C on three Mark Andy 2200 presses:

The LED technology gives us the opportunity to turn our product around quicker, whilst also giving us more product options in terms of what we can offer our customers.

The ability to switch between our LED and E2C cassettes just by switching the cartridges means we can pick the technology best suited to the product we're printing. It also gives us the option to go full LED on this press when varnishes are developed for use with LED.

We're undoubtedly getting a clearer print. We're not wasting ink, which means lower costs overall due to a significant reduction in ink consumption. There are soft cost savings too, like not having to put ink in and out of the pans, and not mixing catalyst every shift. We also have cleaner printing plates that last longer.





ArcLED cassettes can quickly and easily be interchanged; only a hex key tool is required.

ArcLED hybrid UV technology allows interchanging of a UV Arc lamp or LED array in the same housing.

Optimise your press with a mixture of Arc and LED curing on any station, for the ultimate flexibility.

GEW have held granted patents covering this technology internationally since 2016.

Specification

| Max electrical power | 67W / cm | | |
|-----------------------------|----------------------------|--|--|
| Wavelength | 395nm* | | |
| Irradiance at window | 26W / cm ² | | |
| Typical dose @ 100m / min | 170mJ / cm ² ** | | |
| Max length | 70cm | | |
| Standard cross section | 110mm W x 190mm H | | |
| Cooling | Air | | |
| Standard max operating temp | 35°C (95°F) | | |
| Standard max humidity | Non-condensing | | |
| Expected diode lifetime | >30,000 hours | | |

^{* 365}nm, 385nm & 405nm available upon request.





^{**} Measured with an EIT LEDMAP with L395 (370 - 422nm) responsivity.

RETROFIT YOUR PRESS with UV LED in less than one day

| IF YOU HAVE any of the list below | You will need these AeroLED2 system components: | | | |
|---|--|--------------------|------------------|-----------|
| list sclow | AeroLED2 Lamphead | RHINO/RLT & HMI | Fan & Ducting | Shielding |
| E2C & RHINO/RLT system | V | × | × | × |
| E2C & eBrick system | V | ~ | × | × |
| Any other system | V | V | ~ | V |

For GEW RHINO and RLT users, UV curing systems can be upgraded to AeroLED2 with minimal downtime by simply replacing the cassettes and running a software upgrade.

You can be working with LED in assistance from a GEW technician.



The fastest, most affordable route to LED printing.



Relax... you're in safe hands

GEW Remote Monitoring Service

Remote Monitoring is an IoT technology included as standard on every GEW RHINO/RLT UV system, and is Industry 4.0 approved.

> All such systems are continuously monitored to ensure they are operating at peak efficiency, 24/7/365.

This also enables GEW to provide the fastest and most precise service response in the industry.

System performance reports

The Event Log continually records system use and regular reports are generated for the customer, detailing energy usage, press productivity and system performance.

RHINO power

Compact, fail-safe power

RHINO and RLT power units can supply up to 12 UV lamps from one compact cabinet with a 1265mm x 800mm footprint.

The power supplies are designed to run in ambient temperatures up to 40°C and are protected from common mains power events (e.g. short-to-ground, mains dips) by a safe shutdown mode, for ultra-reliable operation.

5-year warranty available



Using GEW's embedded service package gives total confidence in the reliability of GEW power electronics, and minimises unplanned maintenance costs.



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