

DoseGuard LABORATORY UNIT

The DoseGuard Laboratory Unit offers a fast, simple and accurate method to measure the UV output of any GEW UV Arc or LED cassette across its entire width under standard conditions. It allows rapid analysis of UV cassettes from any GEW UV system manufactured since 2000. It is the perfect quality control tool for any pressroom with multiple GEW UV equipped machines.

The DoseGuard sensor is mounted inside the Lab Unit, below the lamp mounting position. When a cassette is inserted, the Lab Unit will run the lamp at the selected power level and scan the entire length of the lamp. Irradiance in mW/cm^2 is measured and UV dose at any speed is calculated for easy comparison of expected curing performance. Warning levels can be set to easily identify non-conforming cassettes and data can be simply exported via USB in Excel format.

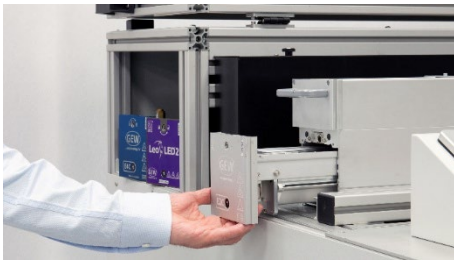
Key Benefits:

- Reduces rejects through early detection of under-curing, enabling timely corrective action.
- Strengthens GMP compliance through reliable, auditable quality control reporting.
- Improves maintenance decisions through early detection of UV lamp ageing.
- Detects and clarifies the impact of reflector and quartz window conditions on curing performance.



DoseGuard Laboratory Unit: 1- Cassette housing unit. 2- GEW lamp control touchscreen. 3- DoseGuard control touchscreen.

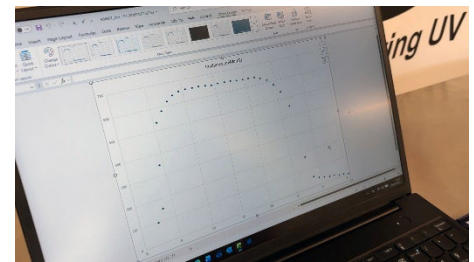
All units include a cassette housing, a power supply, a heatsink, a fan and a touchscreen for operation. UV cassettes are provided by the customer from the production systems to be analysed. An ozone filter can be included as an optional extra, enabling the Lab Unit to be used stand-alone without the need for any extraction ducting.



The DoseGuard Lab Unit is compatible with most GEW lamps from the year 2000 onwards.



User-defined upper and lower limits can be preset to clearly indicate pass/fail results.



All data generated is easily exported via USB in Excel format to facilitate routine data management and GMP.

Measurement method:

1. Insert UV cassette into the adjustable casing and close safety cover.
2. Insert USB specific to system number being analysed.
3. Enter relevant information on touchscreen; select power, add notes, etc.
4. Start lamp on touchscreen and wait for lamp ready.
5. Activate DoseGuard scan on the touchscreen.
6. Opens shutter and waits 10s, then scans across the entire lamphead.
7. Irradiance is measured in mW/cm^2 , at all positions across the cassette.
8. Dose is calculated and reported, according to simulated press speed set by user.
9. Data is easily exported in a user-friendly Excel format via USB.

Model		Option 1	Option 2
Arc length range		15 - 70cm.	15 - 135cm.
Dimensions (mm)		1700W x 1277H x 1200D. 1100mm deck height.	2000W x 1277H x 1200D. 1100mm deck height.
Cassette adaptor housings		Telescopic, multipurpose.* ¹ Fixed, individual.* ²	Fixed, individual.* ³
Compatibility		Newer models: E2C, E4C, NUVA2, AeroLED1/2 and LeoLED1/2. Older models: ECP, GD1/2/3, HCP, VCP, LW1/2.	
Cooling	Internal	Built-in fan and air-cooled heatsink for lamphead cooling.	
	Optional	Chiller required for water-cooled lampheads.	
Power supply unit	Type	RLT 8.4kW.* ⁴	
	Supply	380-480V 50/60Hz 3~ +E.	
Sensors		1x DoseGuard sensor supplied as standard (Mercury or LED). Sensor must be changed for LED / Arc. Additional sensors are available. Purchasing a spare sensor is highly recommended.	
Ozone filter		Optional extra.	
Calibration		Once per 12 months recommended.	
Additional services		Compressed air supply; 5-6 bar, clean and oil-free.	

*1 For most newer GEW lamphead models.

*2 For older GEW lamphead models, and selected newer models.

*3 For all GEW lamphead models, both newer and older.

*4 16 and 22kW options available, price on application.