

# INTENSE PULSED LIGHT SYSTEM XeMaticA-2L-RepRate-V1

automatic R&D system with two flash lamps

**for evaluation tests in food, pharmaceutical, cosmetic, bio-medical, and tech. applications:**



## Features:

- 1: One upper lamp or both lamps pulsing simultaneously by positioning the black knob.
- 2: 3 fixed pulse energies: 950J, 600J and 300J, split evenly between two lamps. For one lamp – the full energy is applied. Selection is by the left knob with LED controls.
- 3: fixed repetition rates: 2, 4, 8 Hz, selected by the right knob and respective LED controls while the single pulse is by the red button between dialing knobs.
- 4: Timed pulsing from 1s to 10 min by dialing a digital clock,
- 5: Flash lamps have 19 cm active length, water cooled, filled with Xe-gas (no Mercury), now ozone neither heat reach samples.
- 6: The large red button - the emergency stop.

**PL control:** - free positioned UVC (or UV or IR) sensor with PC Scope, it also allows also to measure respective spectral transparency of plastic foils or products.

**Safety:** during pulsing the chamber door is automatically locked/sealed preventing UV&EM leaking

## Highlights:

- . pulse energies from 150J to 950J.
- . max spectral output - on request UVC to IR,
- . repetition rates 2, 4, 8 Hz, automatically adjusted to the power limit of 2000w.
- . pulsing one or both lamps
- . timed pulsing 1-90s and single pulsing,
- . 180° to 360° sample surfaces coverage.

## PL chamber:

- 18 cm wide x 24 cm high x 18 cm deep,
- UV flux is largely uniform within the chamber.
- .flash lamps have parabolic 98% reflectors and
- chamber are covered with 98% reflectors,
- sample shelf is UV-C-UV transparent.

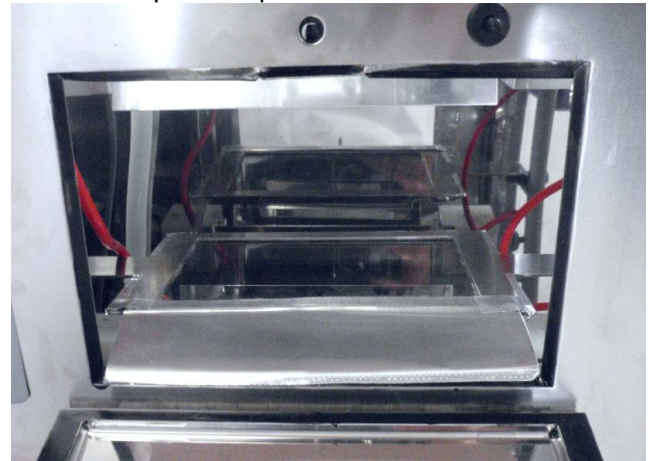
## EI connection:

208-240 VAC, 1-phase, 50-60 Hz, max 2kw.

## Size, Weight, Enclosure Material:

60 cm wide x 40 cm high x 53 cm deep, polished stainless-steel, weight 42 kg.

**Below:** two horizontal Pulsed UV modules and UVC transparent quartz shelf between.



## Sterilization UV Efficiency:

for bacteria: up to 6 logs /pulse,  
for common spores: up to 4 logs /pulse.  
with UVC fluxes on a product up to 2 J/cm<sup>2</sup>/pulse,

## Free options:

- 1: adjusting the lamp spectra to a desired maximum output in UV, visible and IR spectra.
- 2.: customized chamber (e.g. with a single 38 cm long flash lamp above the sample shelf).
- 3.: Pulsed Light controls and PC scope.

*This is our novel Pulsed Light system,  
other our PL R&D systems are in use in universities and production labs worldwide.*