

# INTENSE PULSED LIGHT SYSTEM XeMaticA-1L-RepRate-V2

automatic R&D system with one flash lamps

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



## Highlights:

- . Pulse energies 200J, 350J, 500J.
- . Max spectral output - on request UVC to IR,
- . Repetition rates 1Hz, 2Hz and 3Hz.
- . Timed burst pulsing 1-60s + single pulsing.
- . 180° sample exposure.
- . option: one flash lamp above the quartz shelf and another under it, where lamps are pulsing one after another.

## PL chamber:

- 18 cm wide x 16 cm high x 18 cm deep,
- distance between edges of lamp reflectors and the sample shelf can be from 2 to 8 cm.
- provides 180° sample exposure with ca. 20% uniformity due to 98% reflectors over lamps and on all sides around the sample shelf.

## User friendly advantages:

- 1: Selecting most common UV intensities to samples by varying 3 pulse energies, 3 pulse repetition rates and distance between a sample and the lamp, tabulated in the manual;
- 2: Timer starts and stops pulsing from 1 sec (the single pulse at 1 Hz) to 1 hour of pulsing;
- 3: Controlling UV intensities by a UVC sensor with outputs to a digital scope, included.
- 4: Friendly controls with LED lighted rotary switchers;
- 5: based on pre-programmed chips to last for many years without software or hardware upgrades.

## Safety features:

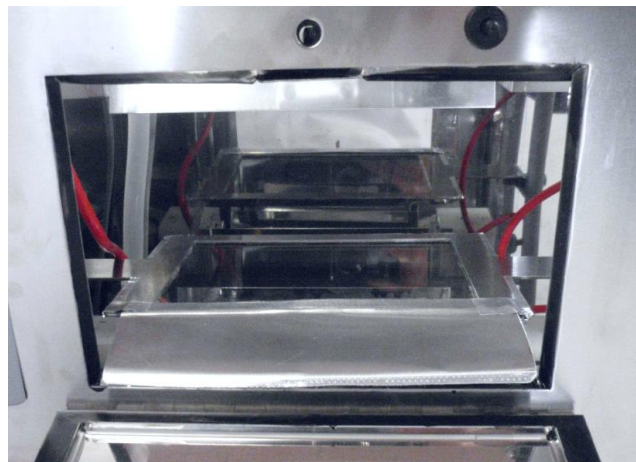
- 6: Flash lamps are filled with Xe-gas (no Mercury), water cooled, no ozone neither heat to samples.
- 7: The large red button is the emergency stop.
- 8: The chamber door is automatically locked and sealed during pulsing.
- 9: No EM waves or UV leaks outside during pulsing.

## 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.



## Sterilization UV Efficiency:

For bacteria: **up to 6 logs /pulse**,  
For common spores: **up to 3 logs /pulse**.  
with UVC fluxes on a product up to 1 J/cm<sup>2</sup>/pulse

## Options:

- 1: adjusting the lamp spectra to a desired maximum output in UV, visible and IR spectra.
- 2: customized chamber and lamp sizes;
3. Lamps independent pulsing: one or both.
4. Various cut-off and broad filters

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