INTENSE PULSED UV R&D SYSTEM XeMaticA-1L-Basic

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



Pulse controls:

- by two BNC outputs to the scope to see the voltage trace (green) and the UVC signal (yellow):



Pulse energy selection is by pressing the green knob on the front panel and controlling it by kV as per the chart Voltage vs. Joule/pulse:



Pulse features:

. Pulse energies 150-450J dialled for each pulse from the front panel.

. As the extra feature the pulse energies can be extended to 1000J/pulse.

. Repetition rates – single pulsing with intervals between pulsing at 30s for the lamp air cooling. . Pulse spectra are to be adjusted per request to shift its emission either in the deep UVC (180-220nm), or 220-270 nm, or UVB or UVA.

. respective pulse durations: 100µs to 500µs.

UV chamber for samples:

- 20cm wide x 14cm high x 10cm deep,
- all walls including the door are 98% reflective,
- sample shelf 20x10cm, fixed position,
- the max allowed sample size is 15x8x8cm.
- provides from 180° to 270° sample exposure

- UV flux to samples sides is less than the top, the bottom is not exposed.

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 0,5 J/cm²/pulse.

Safety features:

1: Flash lamp has 15 cm active length, filled with Xe-gas (no Mercury), forced air cooled, 2: The chamber door is locked during pulsing, 3: it is fully interlocked to prevent the inside access when the system is el. connected, 4: No EM waves or UV leaks outside during pulsing.

El connection:

208-240 VAC, 1-phase, 50-60 Hz, max el. load 0.5kw.

Size, Enclosure Material, Weight:

36cm wide x 34cm high x 38cm deep, Polished stainless-steel enclosure, weight 24kg.

Options:

 two lamps configuration for 360° exposure is on a special order, details are on request.
pulse energy for 1 lamp system can be extended to 1000j, providing the largest UVC does per pulse to the samples of up to 1J/cm²

our R&D PL systems are at many labs worldwide & are well referenced.

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