

UV SYSTEMS UVSeries



seko

innovation > technology > future

Using light for your disinfection demands

The **UV SERIES** is a Ultraviolet Light-Based system for primary and waste water disinfection, based on **class-C ultraviolet light, ensures thorough and non chemical-based disinfection.**

When compared to other technologies, it offers the following advantages:

- Low operating and maintenance costs
- Easy and safe to install
- No water balance alteration
- No change to water smell or taste
- No risk to users.

Seko has realised range of products, **UVZONE** and **UVRAY**, for industrial applications and **UVDOMESTIC** for small residential applications.

UV-C operates at 254 nm wavelength, to ensure perfect disinfection and high rendering. The **lamps** are rated at **35,000 $\mu\text{Ws}/\text{cm}^2$ and 40,000 $\mu\text{Ws}/\text{cm}^2$** , with an average **lifetime of 9000 hours.**

application fields

- Treatment of primary waters for human consumption
- Drugs and cosmetics industries
- City water purification systems
- Reverse Osmosis systems
- Air conditioning systems
- Legionella prevention in hot water systems
- Legionella prevention in swimming pools
- Drainwater recycling
- Fish farming
- Ultra pure Waters for laboratory analysis
- Gardening irrigation water
- Food and beverage industries

Mono-Lamp

Type 1xA, 1xB, 1xC, 1xD, 1xE, 1xF

Mono-lamp sterilisers are distinguished by their limited size. They are intended for smaller applications, and enjoy the advantages of compact size and easy maintenance. The low-pressure lamp's disinfection capability ensures **30.000 Ws/cm²** dosing.



1xA

1xB

1xC

1xD

1xE

1xF

MODEL	NUMBER OF LAMPS	IRRADIATION	MAX. FLOW RATE (l/min)	CONNECTIONS	MAX. PRESSURE (bar)	MANIFOLD MATERIAL *	CENTRE DISTANCE (mm)	IRRADIATION CONTROL (optional)	ELECTRICAL ABSORPTION (Wh)
1xA	1	30.000 μ Ws/cm ²	5	1/8"	9	S/S AISI 304	190	no	12
1xB	1	30.000 μ Ws/cm ²	10	1/2"	9	S/S AISI 304	280	no	16
1xC•1xD	1	30.000 μ Ws/cm ²	19	3/4"	9	S/S AISI 304	430	1xC no 1xD yes	30
1xE• 1xF	1	30.000 μ Ws/cm ²	45	1"	9	S/S AISI 304	810	1xE no 1xF yes	40

Data valid at T=20 °C and for transmittance 99% at 1 cm. For further information call our offices.

*On demand Manifold material in AISI 316

Multi-Lamp

Type 2xA, 2xB, 3xA, 4xA, 5xA, 6xA

These sterilisersK with two to six installed lamps, are the ideal solution for industrial applications. They ensure simple maintenance and easy installation. The low pressure lamps disinfection capability ensures **40.000 $\mu\text{Ws}/\text{cm}^2$** dosing.



2xA

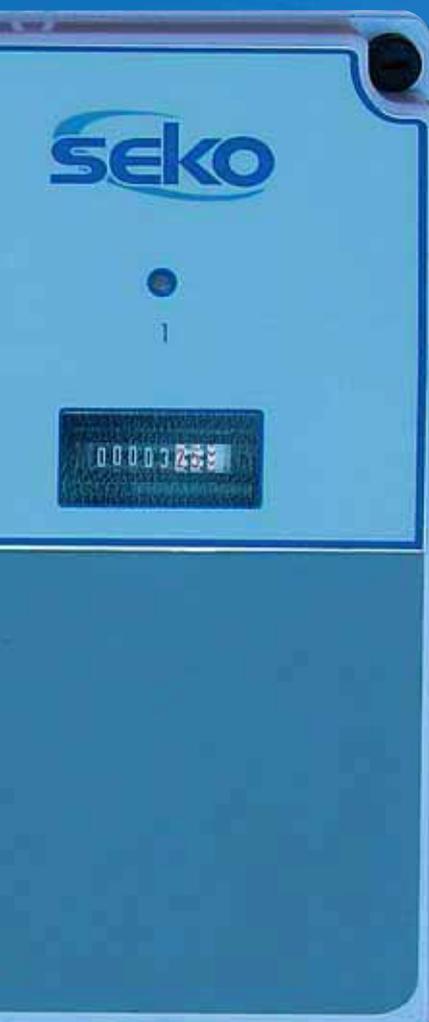
2xB - 3xA - 4xA - 5xA - 6xA

MODEL	NUMBER OF LAMPS	IRRADIATION	MAX. FLOW RATE (l/min)	CONNECTIONS	MAX. PRESSURE (bar)	MANIFOLD MATERIAL	CENTRE DISTANCE (mm)	IRRADIATION CONTROL (optional)	ELECTRICAL ABSORPTION (Wh)
2xA	2	40.000 $\mu\text{Ws}/\text{cm}^2$	75	1"	9	S/S AISI 304	0	no	80
2xB	2	40.000 $\mu\text{Ws}/\text{cm}^2$	100	1 1/2"	9	S/S AISI 304	740	yes	85
3xA	3	40.000 $\mu\text{Ws}/\text{cm}^2$	133	2"	9	S/S AISI 304	670	yes	130
4xA	4	40.000 $\mu\text{Ws}/\text{cm}^2$	233	2"	9	S/S AISI 304	690	yes	175
5xA	5	40.000 $\mu\text{Ws}/\text{cm}^2$	333	2"	9	S/S AISI 304	690	yes	220
6xA	6	40.000 $\mu\text{Ws}/\text{cm}^2$	533	2 1/2"	9	S/S AISI 304	640	yes	260

Data valid at T=20 °C and for transmittance 99% at 1 cm. For further information call our offices.

*On demand Manifold material in AISI 316

Industrial Applications



UVZONE

- POWER SUPPLY
230 VAC 50 HZ
- TIMER
- TWO COLOUR LED
Green= Normal working
Red= Anomaly lamp

NUMBER LAMP	UV ZONE (H-W-D) mm	UV RAY (H-W-D) mm
1	260 x 140 x 130	260 x 280 x 130
2	260 x 290 x 130	260 x 430 x 130
3	260 x 290 x 130	260 x 430 x 130
4	260 x 580 x 130	260 x 720 x 130
5	260 x 580 x 130	260 x 720 x 130
6	260 x 580 x 130	260 x 720 x 130



UVRAY

- POWER SUPPLY
230 VAC 50 HZ
- TIMER
- TWO COLOUR LED
Green= Normal working
Red= Anomaly lamp
- ACOUSTIC ALARM
- FREE CONTACT RELAY
NO/NC
- 230 VAC POWER
SUPPLY RELAY NO/NC
- LIGHT ON AND
TEMPERATURE DISPLAY

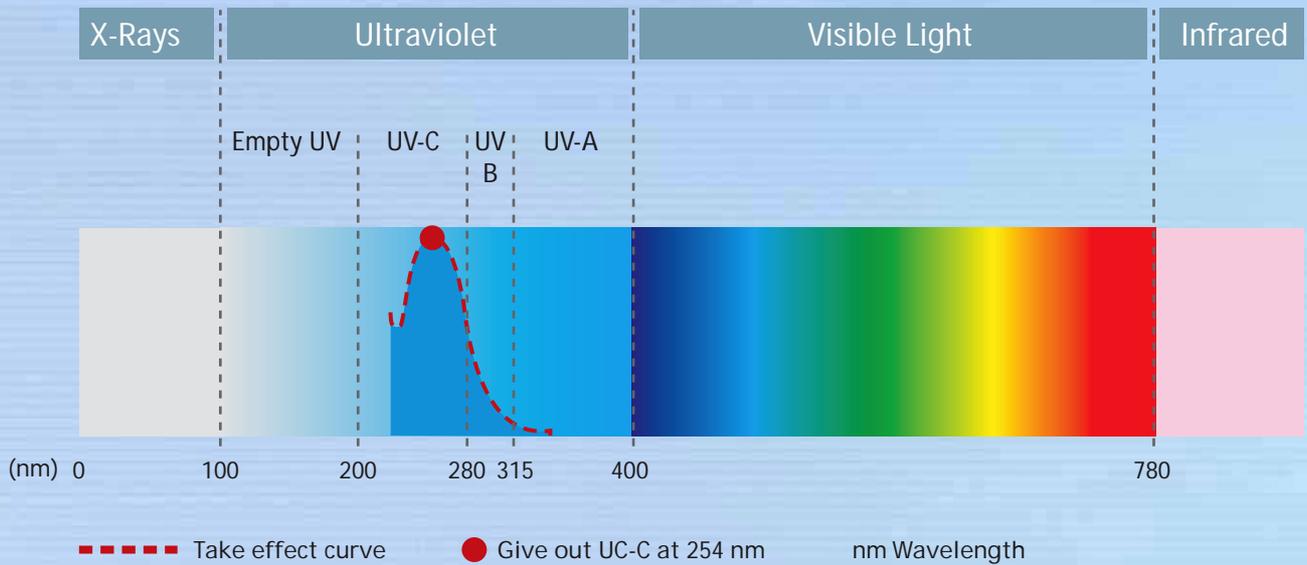
Domestic Applications



SEKO built a combined system starting from the UV unit, adding an active cartridge filter to reduce impurities and an active carbon cartridge to eliminate bad smells and taste.

This is a compact and flexible solution conceived for smaller applications, to ensure maximum results in water intended for human consumption.

MODEL	NUMBER OF LAMPS	MAX. FLOW RATE (l/min)	CONNECTIONS	ELECTRICAL ABSORPTION (Wh)
UV Domestic	1	3.5	1/2"	12



The sterilisation capability of UV-C light is tied to its 254 nm wavelength. This modifies cell bio-structure in bacteria, spores, mildew and algae. Dosing equal or greater than 25.000 $\mu\text{W}/\text{cm}^2$ ensures 99% sterilisation.

A physical light-based system adds nothing to the water, as opposed to chemical alternatives. This ensures that no unwanted by products will be created, even with accidental over-exposure.

Exposure times are limited to a few seconds, and disinfection happens only when water passes through the system.



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