



PharmaLine ECO

OPTIMIZED UV TREATMENT FOR PHARMACEUTICALS & HEALTHCARE

ECO is purpose-built to ensure uncompromised purity, offering an unmatched level of confidence in critical pharmaceutical and healthcare processes.

Efficiency: Reduce your carbon footprint significantly while maintaining the highest quality standards in your operations.

Compact Brilliance: ECO fits where others can't, delivering uncompromised results in limited space.

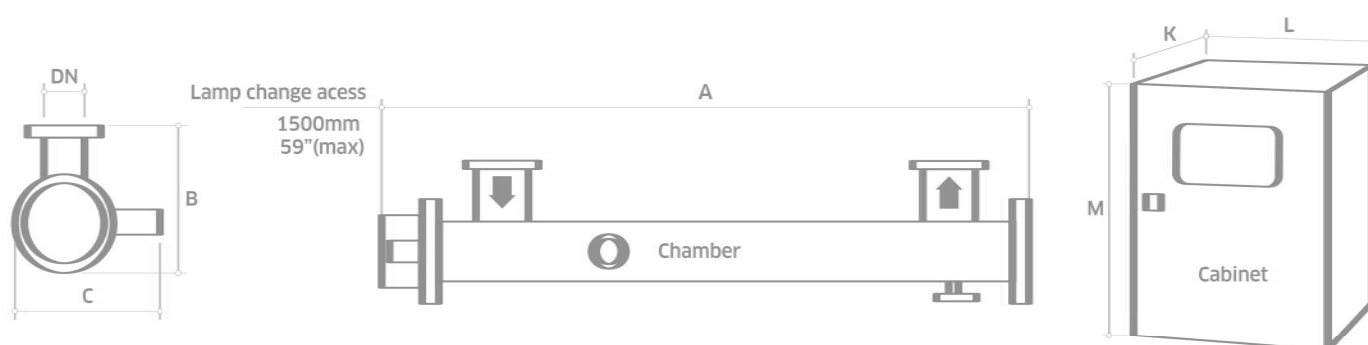
Optimized Performance: ECO is optimized for peak performance, providing consistently reliable water treatment solutions.



Application
Optimized UV for
Pharmaceuticals

UVCELLTM
WYŁĄCZNY DYSTRYBUTOR NA RYNKU POLSKIM

KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
UV intensity monitor measuring active wavelengths	Continuous verification of performance with in-built low dose alarm	Easy to monitor and log system performance
OPTIMIZATION		
UV water treatment	Protect your process waters from microbiological contamination including chlorine resistant Cryptosporidium and Giardia	Does not affect taste and colour of final product No chemicals
Designed for biopharmaceutical	FDA-approved materials used for all wetted parts	Industry compliant materials
	Chamber with tri-clamp connections and 0.38 µm internal finish	Sanitary design
INTEGRATION		
Compact design	Can be retrofitted to existing process	Easy integration



MODEL NUMBER	FLOW* (m³/h) (GPM)	MAX POWER (W)	LAMP (QTY)	CHAMBER SIZE (mm) [in]				APPROX WEIGHT (kg) [lb]
				A	B	C	DN	
Pharmaline ECO 4	4.1 [18.1]	90	1	745 [29.3]	210 [8.3]	245 [9.5]	25 [1]	10.5 [23.1]
Pharmaline ECO 8	8.6 [37.9]	150	1	1245 [49]	230 [9.1]	255 [10.0]	50 [2]	18.5 [40.7]
Pharmaline ECO 15	17.8 [78.4]	250	1	1245 [49]	230 [9.1]	255 [10.0]	50 [2]	18.5 [40.7]
Pharmaline ECO 32	32 [140.9]	360	1	1785 [70.3]	230 [9.1]	275 [10.7]	80 [3]	24.3 [53.6]
Pharmaline ECO 40	41 [180.5]	380	1	1785 [70.3]	335 [13.2]	305 [12.0]	80 [3]	42.7 [94.1]
Pharmaline ECO 85	86 [378.6]	750	2	1785 [70.3]	335 [13.2]	320 [12.6]	100 [4]	42.7 [94.1]
Pharmaline ECO 125	125 [550.4]	1080	3	1785 [70.3]	335 [13.2]	305 [12.0]	*125 [*5]	43.0 [94.8]

*the DN is 150mm [6"] when connection type is Tri-clamp

** The disinfection capacity is based on 30mJ/cm2 at 99% (T10) UVT, end of lamp life

All dimensions are approximate for clearance purposes only. We have a policy of continuous product development, exact drawings are available on request.
All specifications are subject to change without notification. Your distributor or our account manager can advise on correct sizing and specification

UV CHAMBER	
Material:	StSt 316L / 1.4404
Process (mating) connection:	Tri-Clamp BS4825
End plate:	Removable plate
Drain connection:	Tri-Clamp 1" BS4825
Degree of protection:	IP54 equivalent to NEMA 12
Internal finish:	< 0.38 µm Ra (Welds ground out)
Lamp type:	Low Pressure Amalgam
Expected lamp life:	9000 hours
UV sensor:	Dry sensor
Temperature sensor	Yes
Seals:	EPDM, FDA 21 CFR 177.2600
Maximum CIP temperature:	95°C with cabinet electrically isolated
Working fluid temperature	0-40°C
Operating pressure:	10 bar
Document support pack	Included

Document support pack Included

MODEL NUMBER	LAMP (QTY)	STANDARD IP54, NEMA 12 CABINET SIZE mm [in]			OPTIONAL IP56, NEMA 4X CABINET SIZE * mm [in]			MAX. CABINET WEIGHT kg [lb]
		M	L	K	M	L	K	
Pharmaline ECO 4 - ECO 40	1 lamp systems	535 [21.1]	470 [18.5]	180 [7.1]	665 [26.2]	547 [21.5]	240 [9.4]	20.5 [45.2]
Pharmaline ECO 85 - ECO 125	2-3 lamp systems	600 [23.6]	490 [19.3]	210 [8.3]	750 [29.5]	557 [21.9]	270 [10.6]	29.1 [64.2]

Allow dimension L in front of cabinet for door opening and panel access.

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CABINET (UV CONTROLLER)	
Material:	Stainless Steel 304
Controller:	UV Controller
HMI:	7" Touch screen
Interconnecting cable lengths:	5 m
IP rating:	IP54 / NEMA 12
Power supply:	220 V ± 10%, 50/60 Hz, single phase, L+N+G.
Operating temperature range:	5-40°C
Humidity:	< 90% non- condensing
Control & Display:	Stepless power adjustment 50-100% (excluding ECO 4-8) All alarms and warnings Fixed dose running Water temperature Lamp running hours Flow rate (m³/h or gpm) UV dose
Alarm & Warning:	Low UV dose Lamp end pre-warning (time adjustable) Lamp fault alarm Chamber over temperature alarm UV sensor fault alarm Temperature sensor fault alarm Warning for lamp and quartz resetting
Input:	Flow 4-20 mA T ₁₀ 4-20 mA Remote On/Off
Output:	UV dose 4-20 mA Any system alarm VFC Any system warning VFC Low UV dose alarm VFC Lamp fault alarm VFC Lamp preheat VFC Lamp ready VFC

OPTIONS
Interconnecting cable lengths: 5 m
ANSI B 16.5 Class 150 process (mating) connection
PN10 to EN1092-1 process (mating) connection
Internal finish < 0.5 µm Ra (Welds ground out)
Carbon steel cabinet

APPROVALS

CE,
UKCA,
UL,
FCC



PharmaLine ECO

Also available in our ECO product range...



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