



CATALOG OF PRODUCTS



UVC based disinfection operating principle



configuration options for monitoring of the PURION UV plants









equipment spare parts



63 - 72

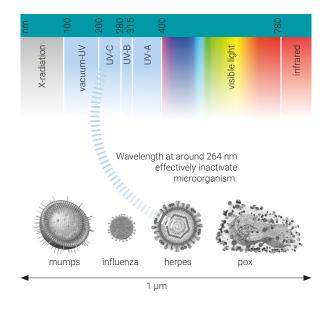


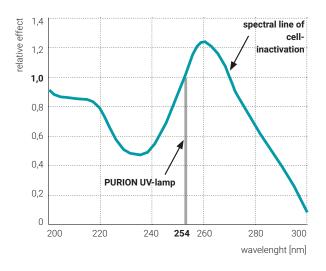


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Disinfection with UVC OPERATING PRINCIPLE







Microorganisms such as bacteria, moulds, yeasts and protozoa can be destroyed or removed by physical, biological and chemical methods.

UVC works using a photolytic effect whereby the radiation destroys or inactivates the microorganism so that it can no longer multiply. The phenomenon whereby microorganisms can be disfigured or destroyed is independent of host state (fluid or solid) and indeed pH or temperature.

Therefore disinfection of fluides, air and surfaces without using chemicals or high temperatures becomes possible in new applications.

Ultraviolet is that part of electro-magnetic radiation bounded by the lower wavelength extreme of the visible spectrum and the upper end of the X-ray radiation band. The spectral range of ultraviolet radiation is, by definition between 100 and 400 nm (1nm=10-9m) and is invisible to human eyes.

A strong germicidal effect is provided by the radiation in the short wave UVC band. The UV radiation emitted by a source is expressed in watts (W) and the irradiation density is expressed in watts per square meter (W/m^2) .

For germicidal action dose is important. The dose is the irradiation density multiplied by the time (t) in seconds and expressed in joules per square meter (J/m²). 1 joule is 1 watt-second.

CONFIGURATION OPTIONES

FOR MONITORING OF THE PURION UV-PLANTS





PURION guarantees disinfection for an operating time up to max. 10.000 h or max. 8.000 h for PURION UV-lamps with Amalgam technology for high ambient temperaturees up to 90 °C.

After 10.000 h or 8.000 h of operation the UVC-intensity falls below 60% of the initial value. All technical performance data of the PURION UV plants have been derived from this "end of life" value.

Therefore the PURION UV-lamp has to be replaced after 10.000 h / 8.000 h.

The UVC-light that is decisive for disinfection has a wavelength of approx. 260 nm and cannot be detected by human eyes. In consequence it is not possible to determine the aging of the PURION UV-lamp without monitoring options.

Besides the basic monitoring of the operation status (control light) PURION provides several options for automatical detection and signaling of the lamps age and disinfection performance

With PURION configuration options for the monitoring of the UV plants it is guaranteed that the replacement of the UV-lamps is duly carried out.

PURION Monitoring of the UV-lamps operational time

Operating Time Counter – OTC



The Operating Time Counter (OTC) option monitors the life time of the UV lamp via summation of the operating time. The current status is displayed via LED's.

advantages	product line	Operating Time Counter - OTC
automatic recording of the exact operating time of the PURION UV lamps	voltage supply	230 V AC or 12 V DC or 24 V DC
automatic (pre-)alarm when	signal input	Operating Time Coter
lamp replacement is necessary	signal output	optional: potential free contact for any LED
optional configuration with po- tential fre contacts for the LED signals	load potential free contacts	up to 100 mA
safe reset procedure	special function	reset after replacment of the lamp
	steady light (green LED)	<95% of the warranted service life
maintenance free operation	pre-alarm (yellow LED)	>95% <100% of the warranted service life
cost efficient monitoring option	main-alarm (red LED)	warranted service life has been exceeded

The OTC option works as a time counter and is integrated in the control box.

The monitoring system is designed as a traffic light. Two thresholds for the operating time have been saved:

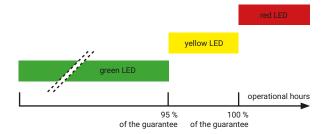
- As long as the operating time is below 95% of the guaranteed life time the green LED is illuminated.
- If the operating time exceeds 95% of the guaranteed life time the yellow LED is illuminated (pre alert).
- If the operating time exceeds the guaranteed life time the red LED is illuminated (main alert). The UV lamp has to be replaced to ensure disinfection.

It is urgently recommended to clean the immersion tube system with the PURION Service KIT at latest during replacement of the UV lamps.





Additionally it is possible to configure the monitoring option OTC with potential free contacts for every LED. Therefore our clients are able to use information regarding the current status for additional switching operations (load potential free contact max. 100 mA).



PURION Monitoring of the UVC-intensity

Operating Power Detection OPD

FURION

PURION

The Operating Power Detection (OPD) option monitors the life time of the UV lamp via detecting the UV intensity. The current status is displayed via LED's.

ndvantages	product line	Operating Power Detection - OPD
automatic recording of the exact JVC intensity that is currently used for disinfection	voltage supply	230 V AC or 12 V DC or 24 V DC
automatic (pre-)alarm when	signal input	SiC-UV-Sensor
amp replacement is necessary	signal output	optional: potential free contact for any LED
ptional configuration with po- ential fre contacts for the LED signals	load potential free contacts	up to 100 mA
afe reset procedure	special function	calibration after repla- cement of the lamp
naintenance free operation	steady light (green LED)	>70% of the initial intensity
паппенапсе нее орегацоп	pre-alarm (yellow LED)	<70% and mind. 60% of the initial intensity
cost efficient monitoring option	main-alarm (red LED)	<60% of the initial intensity

The OPD configuration directly detects the UVC intensity via SiC-UV-Sensor.

The monitoring system is designed as a traffic light and integrated in the control box. Two thresholds for UV intensity have been saved:

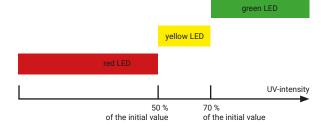
- As long as the UV intensity is more than 70% of the initial value the green LED is illuminated.
- If the UV intensity goes below 70% of the initial value the yellow LED is illuminated.
- If the UV intensity goes below 60% of the initial value the red LED is illuminated. To ensure disinfection the UV lamp has to be replaced.

It is urgently recommended to clean the immersion tube system with the PURION Service KIT at latest during replacement of the UV lamps.





Additionally it is possible to configure the monitoring option OPD with potential free contacts for every LED. Therefore our clients are able to use information regarding the current status for additional switching operations (load potential free contact max. 100 mA).



PURION UVC Sensor

in a stainless steel housing



This sensor is suitable for monitoring of the intensity of PURION UVC low-pressure lamps, PURION UVC high-output lamps und PURION UVC amalgam lamps.

properties of the SiC-sensor	product line	PURION SiC Sensor
wideband	UV-intake	6 mm
OVA-OVB-OVC FIlotodiode	angle spread	approx. 30°
optimal ability for measuring po-	temperature	0°C up to 60°C
werful UVC radiation	housing	stainless steel 1.4571
	connection flanges	G ¼" SW 19
silicon carbide chip warrants extreme radiation power	seal	Viton
	pressure-tight	10 bar
TO-18 metallic housing - 0.054 mm² active chip surface	dimensions (L x Ø in mm)	45 x SW 19
mini active crip surface	signaling	foto voltage

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to lig	0,14 0,12 0,10 0,08 0,06 0,04 0,02		; :					1								 : : : :		
ivity	0,08			/					\							 		
ensit	0.04			/					\									
ear so	0,02		/		;											 		
<u>=</u>	0,00	_	_															
		200 1	220 2	240 :	260) 280	300	320	340	360 3	18U 4	UU 42	20 440	J 460	480			0 600 nm]

The sensor is equipped with a silicon carbide photodiode (SiC).

The photodiode has a very good sensitivity within the range of 250 and 260 nm. Therfore the diode is suitable to monitor UV light that is used for disinfection and with a peak emission rate at $254 \, \text{nm}$.

This is in line with the DNS absorbtion curve.

The monitoring unit is designed as a traffic light. During monitoring the percentage of the UV intensity is evaluated.

PURION UVC Sensor

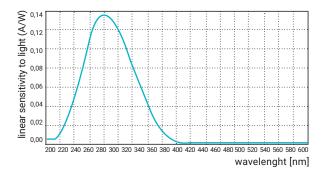
in a stainless steel housing with integrated booster and power output

This sensor is suitable for monitoring of the intensity of PURION UVC low-pressure lamps, PURION UVC high-output lamps und PURION UVC amalgam lamps.

properties of the SiC-sensor	product line
widehand	UV-intake
UVA-UVB-UVC Photodiode	angle spread
	temperature
	housing
optimal ability for measuring po- werful UVC radiation	connection flanges
	seal
	pressure-tight
silicon carbide chip warrants ex- treme radiation power	dimensions (L x Ø in mm)
	power output
TO-18 metallic housing - 0.054	supplied volta

mm² active chip surface

product line	PURION SiC Sensor 4-20 mA
UV-intake	6 mm
angle spread	approx. 30°
temperature	0°C up to 60°C
housing	stainless steel 1.4571
connection flanges	G ¼" SW 19
seal	Viton
pressure-tight	10 bar
dimensions (L x Ø in mm)	67 x SW 19
power output	4-20 mA
supplied voltage	9-24 VDC
UVC-sensitivity	approx. 30 - 300 W/ m ²



The sensor type is SiC-based and therefore only UV-sensible (daylight blind).

High intrinsic insensibility against visible light through semiconducting material with high bandgap.

The snubber circuit of the sensor with 4...20mA enables the integration of the signal in Programmable Logic Controller (PLC) systems.

Sensor

Sensor

J=4...20 mA

+ 0

9...24 VDC

- 0



Single-plants flow rate 300 l/h - 10 m³/h

10 - 30

DUAL-plants flow rate 800 l/h - 20 m³/h 31 - 50

Multi-Radiator-systems

flow rate $10 - 120 \,\text{m}^3/\text{h}$ 51 - 54

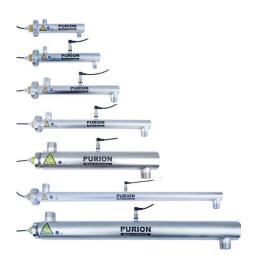
Compact-systems

flow rate 400 l/h 55 - 58

Pool-systems

dimension 40 m³ / 80 m³ 59 - 62

stainless steel 1.4571





PURION Single UV-plants for disinfection of water and liquids are available in stainless steel 1.4571. Therefore Requirements of the drinking water regulation con be met. PURION Single UVplants made from stainless steel are available for several flow

Moreover it is possible to choose from various options for monitoring the disinfection performance of the PURION UV-lamps, e.g. sensor systems to detect the current UVC-intensity.

applications	product line	PURION 400-2501		
drinking water	flow rate	300 l/h - 10 m³/h		
climate water	UVC-transmission	90% T ₁ cm		
pools	reactor	stainless steel 1.4571		
aquarium	flanges	R 1/2" - 1 1/2"		
fish ponds	9			
sewage water	weight	1,8 - 5,5 kg		
pharmacy	life time of lamps	8.000 h / 10.000 h		
greenhouse water	number of lamps	1		
industrial water	dosis	400 J/m²		
cooling lubricant	temperature max.	2°C up to 90°C		
	max. pressure	10 bar		
advantages	protection grade	IP 65		
additional chemicals are not required for disinfection	electrical	230 V/50 Hz or 110-240 V 50/60 Hz		
not affecting smell or taste	connection	12 V DC or 24 V DC		
low-maintenance operation	total power	10 W - 106 W		
low operational costs	over current protection	10 A		

To ensure highest standards of quality the PURION UV-plants made from stainless steel are treated with an elaborate three step procedure for surface treatment. At first the UV-plants are pickled to remove carbon residues from welding. Afterwards the plants are treated via glass bead blasting to ensure a homogeneous and clean surface. Within the third step the UV-plants are electropolished.

Electro polished surfaces are very resistant to corrosion due to high passivity. Adhesions to the surface can be reduced due to improved values of roughness and optimized surface profile.

PURION 400	flow rate 300 l/h
PURION 500	flow rate 400 l/h
PURION 1000	flow rate 1.000 l/h
PURION 2500 36 W	flow rate 2.500 l/h
PURION 2500 90 W	flow rate 4.000 l/h
PURION 2001	flow rate 5.000 l/h
PURION 2501	flow rate 10,000 l/h

PURION Single UV-plants for disinfection of water and liquids are available in PVC-U. Therefore the UV-plants can be operated for applications with saltwater or aggressive fluids. PURION Single UV-plants made from PVC-U are available for several flow rates. Moreover they can be equipped with an operating time counter to monitor the life time of the PURION UV-lamp.

applications	product line	PURION 1000-2501		
drinking water	flow rate	1.000 l/h - 10 m ³ /h		
climate water	UVC-transmission	90% T ₁ cm		
pools	reactor	PVC-U		
aquarium	flanges	R 1/2" - 1 1/2"		
fish ponds	9	11/2 11/2		
sewage water	weight	2,8 - 8 kg		
pharmacy	life time of lamps	10.000 h		
greenhouse water	number of lamps	1		
industrial water	dosis	400 J/m²		
cooling lubricant	temperature max.	2°C up to 40°C		
	max. pressure	10 bar		
advantages	protection grade	IP 65		
additional chemicals are not required for disinfection	electrical	230 V/50 Hz or 110-240 V 50/60 Hz		
not affecting smell or taste	connection	12 V DC or 24 V DC		
low-maintenance operation	total power	17 W - 90 W		
low operational costs	over current protection	10 A		

PVC-U (polyvinyl chloride - unplasticized) does not contain any plasticizer or softener. Therefore PVC-U is used for manufacturing pips, profiles, packaging material for pills and food. PVC-U is very resistant to UVC-light and aggressive fluids like

Therefore it is recommended to use PURION UV-plants made from PVC-U within maritime applications e.g. aquacultures.

PURION 1000 PVC-U	flow rate 1.000 l/h
PURION 2500 36 W PVC-U	flow rate 2.500 l/h
PURION 2001 PVC-U	flow rate 5.000 l/h
PURION 2501 PVC-U	flow rate 10.000 l/h

PURION H Series

PURION PRO Series





PURION guarantees disinfection up to a temperature of 40 C° of the water or fluid as a standard configuration. Temperatures above 40 C° lead to a decreasing UVC output und therefore a less disinfection performance. The UV-plants of the PURION H series are using a special Amalgam technology and have been developed for warm and hot environments up to 90 C°. The PURION UV-lamps of the H series are perfectly suitable to remove Legionella bacteria in warm water circuits.

PURION guarantees disinfection for a UVC transmission of >90%T1cm as a standard configuration.

For disinfection of liquids with very low transmission (e.g. cooling lubricant) the PURION PRO Series has been developed. The very thin film of the fluid to be disinfected ensures reliable disinfection even in case of very low transmission.

applications	product line	PURION 1000 H - 2500 H		
drinking water	flow rate	1.5 - 4 m ³ /h		
climate water		.,,		
pools	UVC-transmission	90% T ₁ cm		
aquarium		stainless steel		
fish ponds	reactor	1.4571		
sewage water	life time of lamps	8.000 h		
pharmacy	ino timo or tampo	0.000 11		
greenhouse water	number of lamps	1		
industrial water		400 J/m²		
cooling lubricant	dosis			
	temperature max.	2°C up to 90°C		
advantages				
additional chemicals are not required for disinfection	max. pressure	10 bar		
not affecting smell or taste	total power	42 W - 106 W		
low-maintenance operation	electrical	110-240 V		
low operational costs	connection	50/60 Hz		

applications	product line	PURION 500 PRO - 2500 90 W PRO		
drinking water	flow rate	200 l/h - 1,5 m³/h		
climate water				
pools	UVC-transmission	90% T ₁ cm		
aquarium		stainless steel		
fish ponds	reactor	1.4571		
sewage water	life time of lamps	10.000 h		
pharmacy				
greenhouse water	number of lamps	1		
industrial water				
cooling lubricant	dosis	up to 400 J/m ²		
	temperature max.	2°C up to 40°C		
advantages	·	·		
additional chemicals are not required for disinfection	max. pressure	10 bar		
not affecting smell or taste	total power	10 W - 106 W		
low-maintenance operation	electrical	230 V/50 Hz or 110-240 V 50/60 Hz		
low operational costs	connection	12 V DC or 24 V DC		

The UV-plants of the PURION H product line are made from electro polished stainless steel which is licensed for drinking water.

The UV-plants will be delivered ready-to-plug together with the corresponding connecting cable and safety plug.

The UV-plants have been designed to ensure a UVC dosis of 400 J/m² which meets drinking-water standards.

Every UV plant of the PURION H series can be equipped with an Operating Time Counter (OTC) and/ or monitoring of the UVC-intensity.

Depending on the transmission of the fluid the PURION UV-plants of the PRO series can be equipped with different PU-RION UV-lamps to ensure the required UVC intensity. The PU-RION PRO product line is designed to have a very thin film of only 2 mm of the fluid to be disinfected.

Therefore the complete UVC penetration and disinfection of the fluid is ensured.

Every UV plant of the PURION PRO series can be equipped with an Operating Time Counter (OTC).

PURION 1000 H	flow rate 1.500 l/h
PURION 2500 H	flow rate 4.000 l/h
PURION 2501 H	flow rate 10.000 l/h

PURION 500 PRO	flow rate 300 l/h
PURION 1000 PRO	flow rate 700 l/h
PURION 2500 36 W PRO	flow rate 1.000 l/h
PURION 2500 90 W PRO	flow rate 1.500 l/h



The UV-plant PURION 400 is made from electropolished stainless steel 1.4571.

The PURION 400 is applied to disinfect drinking water up to a flow rate of 300 l/h and a transmission (or turbidity) of the water of at least 90% per cm.

Due to the compact design and the options for power supply with direct current the UV-Plant PURION 400 is perfectly suitable for mobile applications.

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages

auvantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 400
flow rate	300 l/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1/2"
dimension (LxØ mm)	237 x 42
distance flanges	172 mm
weight	1,9 kg
life time of lamps	10.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz 12 V DC or 24 V DC
total power	10 W
over current protection	10 A

alternating current (VAC)



article number: 104 00100 0000

alternating current AC
wide voltage
Operating Time Counter
Operating Power Detection

Operating Free contacts



alternating current AC
 wide voltage
 Operating Time Counter
 Operating Power Detection



article number: 104 00600 0000 article number: 104 01000 0000

alternating current AC

wide voltage

Operating Time Counter
Operating Free counter

direct current (VAC)



article number: 104 00200 0000 article number: 104 00300 0000

direct current 12 V DC
direct current 24 V DC
Operating Time Counter
Operating Power Detection
potential free contacts



article number: 104 00700 0000 article number: 104 00500 0000 article number: 104 01500 0000 article number: 104 01600 0000

•	direct current 12 V DC
•	direct current 24 V DC
•	Operating Time Counter
	Operating Power Detection
•	potential free contacts

o

equipment PURION 400 & 500

assembly system Single 1

stainless steel article number: 290 11000 0000

assembly system Single 1

galvanized

article number: 290 10900 0000



PURION UV-lamp 10 W article number: 200 01300 0000

service-kit





The UV-plant PURION 500 is made from electropolished stainless steel 1.4571.

The PURION 500 is applied to disinfect drinking water up to a flow rate of 400 l/h and a transmission (or turbidity) of the water of at least 90% per cm.

For the UV-plant PURION 500 the complete range of PURION options to monitor the disinfection performance is available. The PURION 500 can be operated with direct current.

applications	
drinking water	
climate water	
pools	
aquarium	
fish ponds	
sewage water	
pharmacy	
greenhouse water	
industrial water	
cooling lubricant	
advantages	

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 500
flow rate	400 l/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1/2"
dimension (LxØ mm)	320 x 42
distance flanges	255 mm
weight	2,2 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz 12 V DC or 24 V DC
total power	10 W
over current protection	10 A

alternating current (VAC)



article number: 105 00100 0000

Operating Power Detection Operating Time Counter alternating current AC potential free contacts wide voltage

Operating Power Detection Operating Time Counter potential free contacts

wide voltage

alternating current AC



article number: 105 05500 0000

article number: 105 00600 0000

article number: 105 05600 0000

alternating current AC

Operating Time Counter wide voltage

Operating Power Detectior

potential free contacts

Operating Power Detection Operating Time Counter potential free contacts



article number: 105 03600 0000

direct current (VAC)



article number: 105 00200 0000 article number: 105 00300 0000

Operating Power Detection Operating Time Counter direct current 12 V DC direct current 24 V DC potential free contacts



article number: 105 00700 0000 article number: 105 01200 0000 article number: 105 03700 0000 article number: 105 05700 0000

•	•	direct current 12 V DC
•		direct current 24 V DC
•	•	Operating Time Counte
		Operating Power Detect
•		potential free contacts



article number: 105 00800 0000 article number: 105 01100 0000 article number: 105 04300 0000 article number: 105 05800 0000

•	•	direct current 12 V DC
•		direct current 24 V DC
		Operating Time Counter
•	•	Operating Power Detection
•	_	potential free contacts



The UV-plant PURION 1000 is made from electropolished stainless steel 1.4571

The PURION 1000 is applied to disinfect drinking water up to a flow rate of 1.000 l/h and a transmission (or turbidity) of the water of at least 90% per cm.

The UV-plant PURION 1.000 is operates very efficiently with a PURION UV-lamp 17W. Several options for power supply and monitoring of the disinfection performance are available.

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
- duantama

auvantages
additional chemicals are not required for disinfection
not required for distribution

not affecting smell or taste low-maintenance operation low operational costs

product line	PURION 1000
flow rate	1000 l/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	420 x 42
distance flanges	340 mm
weight	2,8 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz 12 V DC or 24 V DC
total power	17 W
over current protection	10 A

alternating current (VAC)



article number: 110 00600 0000



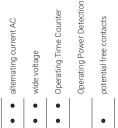


article number: 110 03700 0000





article number: 110 03800 0000 article number: 110 05200 0000





artic article number: 110 02500 0000

PURION	alternating current AC	
cle number: 110 01300 0000	•	١

Operating Time Counter

o

potential free contacts

direct current (VAC)



article number: 110 00700 0000 article number: 110 00800 0000

direct current 12 V DC	direct current 24 V DC	Operating Time Counter	Operating Power Detection	potential free contacts
•	•			



article number: 110 01600 0000 article number: 110 03600 0000 article number: 110 05900 0000 article number: 110 07700 0000

	1
•	 direct current 12 V DC
•	direct current 24 V DC
•	Operating Time Counter
	Operating Power Detectir
•	potential free contacts



article number: 110 01700 0000 article number: 110 02200 0000 article number: 110 05300 0000 article number: 110 08000 0000

direct current 12 V DC	direct current 24 V DC	Operating Time Counter	Operating Power Detection	potential free contacts
•	•		•	•

PURION 1000 PVC-U



This UV plant PURION 1000 is made from PVC-U.

The PURION 1000 PVC-U is applied within maritime environment up to a flow rate of 1.000 l/h and a transmission (or turbidity) of the water of at least 90% per cm.

The advantage of PVC-U consists of the resistance against UVC light, salt water and acid fluids.

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages
additional chamicals are

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 1000 PVC-U
flow rate	1000 l/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	420 x 42
distance flanges	340 mm
weight	2,8 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz 12 V DC or 24 V DC
total power	17 W
over current protection	10 A

alternating current (VAC)



article number: 110 04200 0000

Operating Power Detectior Operating Time Counter potential free contacts alternating current AC wide voltage

article number: 110 07800 0000



article number: 110 06500 0000 article number: 110 07900 0000

Operating Power Detection alternating current AC

direct current (VAC)



article number: 110 08100 0000 article number: 110 08200 0000

Operating Power Detection direct current 12 V DC



article number: 110 08300 0000 article number: 110 08400 0000 article number: 110 08500 0000 article number: 110 08600 0000

direct current 12 V DC direct current 24 V DC Operating Time Counter Operating Power Detection		
•		direct current 12 V DC
•	•	direct current 24 V DC
Operating Power Detection potential free contacts	•	Operating Time Counter
potential free contacts		Operating Power Detectio
	•	potential free contacts

assembly system Single 1

stainless steel

article number: 290 11000 0000

assembly system Single 1 galvanized

article number: 290 10900 0000



equipment PURION 1000 & 1000 PVC-U

PURION UV-lamp 17 W

article number: 200 00300 0000



PURION 2500 36 W



The UV-plant PURION 2500 36 W is made from electropolished stainless steel 1.4571. The PURION 2500 36 W is applied to disinfect drinking water up to a flow rate of 2.500 l/h and a transmission (or turbidity) of the water of at least 90% per cm.

The UV-plant PURION 2500 36 W can be optionally operated with 24 V direct current. The very attractive relation between the electrical power of 36 W and the flow rate of 2.500 l/h is to be emphasized.

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation

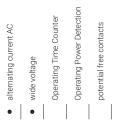
low operational costs

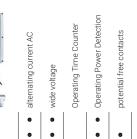
product line	PURION 2500 36 W
flow rate	2.500 l/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	928 x 42
distance flanges	850 mm
weight	3,4 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz or 24 V DC
total power	36 W
over current protection	10 A

alternating current (VAC)



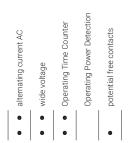
article number: 130 00400 0000







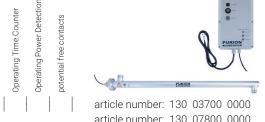
article number: 130 03600 0000

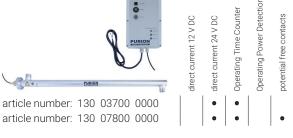


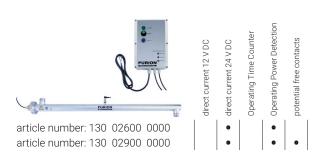
direct current (VAC)

article number: 130 01000 0000 article number: 130 02000 0000









PURION 2500 36 W PVC-U



This UV plant PURION 2500 36 W is made from PVC-U.

The PURION 2500 PVC-U is applied within maritime environment up to a flow rate of 2.500 I/h and a transmission (or turbidity) of the water of at least 90% per cm.

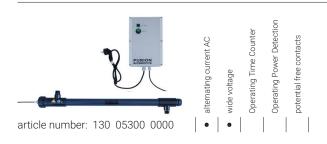
The advantage of PVC-U consists of the resistance against UVC light, salt water and acid fluids.

applications	product line	
drinking water	flow rate	
climate water	UVC-transmis	
pools	temperature	
aquarium	flanges	
fish ponds	ŭ	
sewage water	dimension (Lx	
pharmacy	distance flang	
greenhouse water	weight	
industrial water	life time of lan	
cooling lubricant	dosis	
	max. pressure	
advantages	protection gra	
additional chemicals are not required for disinfection	electrical	
not affecting smell or taste	connection	
low-maintenance operation	total power	

low operational costs

product line	PURION 2500 36 W PVC-U
flow rate	2.500 l/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	930 x 50
distance flanges	790 mm
weight	4 kg
life time of lamps	10.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz or 24 V DC
total power	36 W
over current protection	10 A

alternating current (VAC)





equipment PURION 2500 36 W & 2500 36 W PVC-U

assembly system Single 1

stainless steel article number: 290 11000 0000

assembly system Single 1

galvanized

article number: 290 10900 0000



PURION UV-lamp 36 W article number: 200 00400 0000

service-kit





The UV-plant PURION 2000 is made from electropolished stainless steel 1.4571.

The PURION 2000 is applied to disinfect drinking water up to a flow rate of 2.000 l/h and a transmission (or turbidity) of the water of at least 90% per cm.

The UV-plant PURION 2000 has a very compact design in relation to the maximum flow rate of 2.000 l/h.

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 2000
flow rate	2.000 l/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	578 x 42
distance flanges	500 mm
weight	2,8 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	48 W
over current protection	10 A

alternating current (VAC)



article number: 120 00200 0000

alternating current AC
 wide voltage
 Operating Time Counter
 Operating Power Detection
 potential free contacts



article number: 120 00400 0000 article number: 120 00800 0000





article number: 120 00300 0000 article number: 120 01000 0000

alternating current AC	wide voltage	Operating Time Counter	Operating Power Detection	potential free contacts
•	•	•		

equipment PURION 2000

assembly system Single 1 stainless steel

article number: 290 11000 0000

assembly system Single 1 galvanized

article number: 290 10900 0000



PURION UV-lamp 48 W article number: 200 00500 0000

service-kit



PURION 2500 90 W



The UV-plant PURION 2500 90 W is made from electropolished stainless steel 1.4571.

The PURION 2500 90 W is applied to disinfect drinking water up to a flow rate of $4.000\,l/h$ and a transmission (or turbidity) of the water of at least 90% per cm.

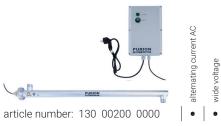
The UV-plant PURION 2500 90 W can be applied for drinking water supply of 1-2 households. A permanent flow of water should be ensured during operation of the UV-plant.

applications	
drinking water	
climate water	
pools	
aquarium	
fish ponds	
sewage water	
pharmacy	
greenhouse water	
industrial water	
cooling lubricant	
advantages	

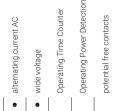
advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

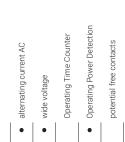
product line	PURION 2500 90 W
flow rate	4.000 l/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	928 x 42
distance flanges	850 mm
weight	3,4 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	90 W
over current protection	10 A

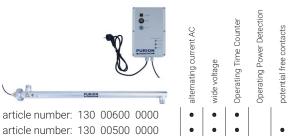
alternating current (VAC)



article number: 130 00700 0000 article number: 130 02100 0000







equipment PURION 2500 90 W

assembly system Single 1 stainless steel

article number: 290 11000 0000

assembly system Single 1 galvanized

article number: 290 10900 0000



PURION UV-lamp 90 W article number: 200 00600 0000

service-kit





The UV-plant PURION 2001 is made from electropolished stainless steel 1.4571.

The PURION 2001 is applied to disinfect drinking water up to a flow rate of 5.000 l/h. and a transmission (or turbidity) of the water of at least 90% per cm. It is also used for disinfection of circulation water e.g. from pools or fish ponds up to a dimension of 40.000 l (15 hours operation per day).

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 2001
flow rate	5 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1 1/2"
dimension (LxØ mm)	578 x 85
distance flanges	460 mm
weight	4,1 kg
life time of lamps	10.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	48 W
over current protection	10 A

alternating current (VAC)



article number: 121 00200 0000

alternating current AC
 wide voltage
 Operating Time Counter
 Operating Power Detection
 potential free contacts



article number: 121 00400 0000 article number: 121 01500 0000



article number: 121 00300 0000 article number: 121 01600 0000

alternating current AC	wide voltage	Operating Time Counter	Operating Power Detection	potential free contacts
•	•	•		

equipment PURION 2001

assembly system Single 2 stainless steel

article number: 290 11200 0000

assembly system Single 2 galvanized

article number: 290 11100 0000



PURION UV-lamp 48 W article number: 200 00500 0000

service-kit



PURION 2001 PVC-U



This UV plant PURION 2001 is made from PVC-U.

The PURION 2001 is applied within maritime environment up to a flow rate of 5.000 l/h and a transmission (or turbidity) of the water of at least 90% per cm. It is also used for disinfection of circulation water e.g. from saltwater pools or fish ponds up to a dimension of 40.000 l (20 hours operation per day). The advantage of PVC-U consists of the resistance against UVC light, salt water and acid fluids.

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 2001 PVC-U
flow rate	5 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1 1/2"
dimension (LxØ mm)	670 x 100
distance flanges	360 mm
weight	6 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	48 W
over current protection	10 A

alternating current (VAC)



article number: 121 00700 0000

alternating current AC
 wide voltage
 Operating Time Counter
 Operating Power Detection
 Detential free contacts



article number: 121 00800 0000 article number: 121 01700 0000

 alternating current AC 	wide voltage	Operating Time Counter	Operating Power Detection	potential free contacts

equipment PURION 2001 PVC-U

assembly system Single 2 stainless steel

article number: 290 11200 0000

assembly system Single 2 galvanized

article number: 290 11100 0000



PURION UV-lamp 48 W article number: 200 00500 0000

service-kit





The UV-plant PURION 2501 is made from electropolished stainless steel 1.4571.

The PURION 2501 is applied to disinfect drinking water up to a flow rate of 10.000 l/h. and a transmission (or turbidity) of the water of at least 90% per cm.

It is also used for disinfection of circulation water e.g. from pools or fish ponds up to a dimension of 80.000 I (20 hours operation per day).

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 2501
flow rate	10 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1 1/2"
dimension (LxØ mm)	928 x 85
distance flanges	810 mm
weight	5,5 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	90 W
over current protection	10 A

alternating current (VAC)



article number: 131 00200 0000

alternating current AC
 wide voltage
 Operating Time Counter
 Operating Power Detection
 potential free contacts



article number: 131 00500 0000 article number: 131 02600 0000





article number: 131 00400 0000 article number: 131 04100 0000

equipment PURION 2501

assembly system Single 2 stainless steel

article number: 290 11200 0000

assembly system Single 2 galvanized

article number: 290 11100 0000



PURION UV-lamp 90 W article number: 200 00600 0000

service-kit



PURION 2501 PVC-U



This UV plant PURION 2501 is made from PVC-U.

The PURION 2501 is applied within maritime environment up to a flow rate of $10.000 \, l/h$ and a transmission (or turbidity) of the water of at least 90% per cm.

It is also used for disinfection of circulation water e.g. from saltwater pools or fish ponds up to a dimension of 80.000 l (20 hours operation per day). The advantage of PVC-U consists of the resistance against UVC light, salt water and acid fluids.

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 2501 PVC-U
flow rate	10 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1 1/2"
dimension (LxØ mm)	928 x 85
distance flanges	710 mm
weight	8 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	90 W
over current protection	10 A

alternating current (VAC)



alternating current AC
 wide voltage
 Operating Time Counter
 Operating Power Detection
 potential free contacts



article number: 131 00800 0000 article number: 131 04200 0000

	alternating current AC	wide voltage	Operating Time Counter	Operating Power Detection	potential free contacts	
	•	•	•			
1						

equipment PURION 2501 PVC-U

assembly system Single 2 stainless steel

article number: 290 11200 0000

assembly system Single 2 galvanized

article number: 290 11100 0000



PURION UV-lamp 90 W article number: 200 00600 0000

service-kit



PURION 1000 H



The UV-plant PURION 1000 H is made from electropolished stainless steel 1.4571. The PURION 1000 H is applied to disinfect drinking water up to a flow rate of 1.500 l/h and a transmission (or turbidity) of the water of at least 90% per cm.

The UV-plant PURION 1000 H has been developed for temperatures above 40 $\mbox{C}^{\circ}.$

The used PURION UV-lamp 42 W operates with a special Amalgam technology. Several options for monitoring of the disinfection performance are available.

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 1000 H
flow rate	1,5 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 90°C
flanges	R 1"
dimension (LxØ mm)	420 x 42
distance flanges	340 mm
weight	2,8 kg
life time of lamps	8.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	42 W
over current protection	10 A

alternating current (VAC)



article number: 110 04400 0000

alternating current AC
 wide voltage
 Operating Time Counter
 Operating Power Detection
 Detential free contacts



article number: 110 04800 0000 article number: 110 05000 0000





article number: 110 04500 0000 article number: 110 08700 0000

alternating current AC	wide voltage -	Operating Time Counter	Operating Power Detection	potential free contacts	
•	•	•			

equipment PURION 1000 H

assembly system Single 1 stainless steel

article number: 290 11000 0000

assembly system Single 1 galvanized

article number: 290 10900 0000



PURION UV-lamp 42 W article number: 200 01700 0000

service-kit



PURION 2500 H



The UV-plant PURION 2500 H is made from electropolished stainless steel 1.4571. The PURION 2500 H is applied to disinfect drinking water up to a flow rate of 4.000 l/h and a transmission (or turbidity) of the water of at least 90% per cm.

The UV-plant PURION 2500 H can be applied for drinking water supply of 1-2 households and has been developed for temperatures above 40 $\rm C^\circ.$

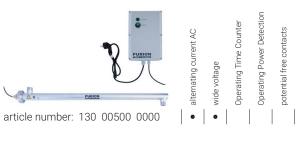
The used PURION UV-lamp 106 W operates with a special Amalgam technology. Several options for monitoring of the disinfection performance are available.

applications	product line	PURION 2500 H	
drinking water	flow rate	4 m³/h	
climate water	UVC-transmission	90% T ₁ cm	
pools	temperature	2°C - 90°C	
aquarium	flanges	R 1"	
fish ponds	nungeo		
sewage water	dimension (LxØ mm)	928 x 42	
pharmacy	distance flanges	850 mm	
greenhouse water	weight	3,4 kg	
industrial water	life time of lamps	8.000 h	
cooling lubricant	dosis	400 J/m²	
	max. pressure	10 bar	
advantages	protection grade	IP 65	
additional chemicals are not required for disinfection	electrical	110-240 V 50/60 Hz	
not affecting smell or taste	connection		
low-maintenance operation	total power	106 W	

low operational costs

alternating current (VAC)

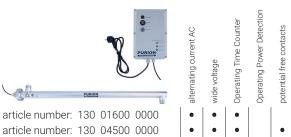
over current protection 10 A





article number: 130 02200 0000 article number: 130 02400 0000





equipment PURION 2500 H

assembly system Single 1 stainless steel

article number: 290 11000 0000

assembly system Single 1 galvanized

article number: 290 10900 0000



PURION UV-lamp 106 W article number: 200 00800 0000

service-kit



PURION 2501 H



The UV-plant PURION 2501 H is made from electropolished stainless steel 1.4571. The PURION 2501 H is applied in case of temperatures above 40 C° to disinfect drinking water up to a flow rate of 10.000 I/h and a transmission (or turbidity) of the water of at least 90% per cm. It is also used for disinfection of circulation water up to a tank dimension of 80.000 I (20 hours operation per day). The used PURION UV-lamp 106 W operates with a special Amalgam technology. Several options for monitoring of the disinfection performance are available.

applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 2501 H
flow rate	10 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 90°C
flanges	R 1 1/2"
dimension (LxØ mm)	928 x 85
distance flanges	810 mm
weight	5,5 kg
life time of lamps	8.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	106 W
over current protection	10 A

alternating current (VAC)

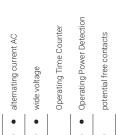


article number: 131 00300 0000





article number: 131 00800 0000 article number: 131 02400 0000





article number: 131 00900 0000 article number: 131 02800 0000

I	alternating current AC	wide voltage	Operating Time Counter	Operating Power Detection	potential free contacts
		•			

equipment PURION 2501 H

assembly system Single 2 stainless steel

article number: 290 11200 0000

assembly system Single 2 galvanized

article number: 290 11100 0000



PURION UV-lamp 106 W article number: 200 00800 0000

service-kit



PURION 500 PRO



The UV-plant PURION 500 PRO is made from electropolished stainless steel 1.4571

The PURION 500 PRO is applied to disinfect industrial water up to a flow rate of 200 l/h and fluids up to a flow rate of 200 I/h with a transmission (or turbidity) of the fluids of 20 - 90% per cm.

The PURION 500 PRO can equipped with an Operating Time Counter (OTC) to monitor the UV lamps service live. It is possible to have the power supply with direct current.

applications	product line	PURION 500 PRO
drinking water	flow rate	200 l/h
climate water		
pools	UVC-transmission	> 20% T ₁ cm
aquarium	temperature	2°C - 40°C
fish ponds	flanges	R 1/2"
sewage water	dimension (LxØ mm)	320 x 42
pharmacy greenhouse water industrial water cooling lubricant	distance flanges	255 mm
	weight	2,2 kg
	life time of lamps	10.000 h
	dosis	400 J/m²
advantages	max. pressure	10 bar
additional chemicals are	protection grade	IP 65
not required for disinfection	electrical	230 V/50 Hz or
not affecting smell or taste	connection	110-240 V 50/60 Hz 12 V DC or 24 V DC
low-maintenance operation	total power	10 W
low operational costs	over current protection	10 A

alternating current (VAC)



article number: 105 02000 0000

Operating Power Detection Operating Time Counter alternating current AC potential free contacts wide voltage



potential free contacts



article number: 105 02100 0000 article number: 105 03500 0000

Operating Power Detection Operating Time Counter alternating current AC

direct current (VAC)



article number: 105 02200 0000 article number: 105 02400 0000

Operating Power Detection Operating Time Counter direct current 12 V DC direct current 24 V DC



article number: 105 02300 0000 article number: 105 02500 0000 article number: 105 06000 0000 article number: 105 06100 0000

•	 direct current 12 V DC
•	direct current 24 V DC
•	Operating Time Counter
	Operating Power Detectio
•	potential free contacts

equipment PURION 500 PRO

assembly system Single 1

stainless steel

article number: 290 11000 0000

assembly system Single 1 galvanized

article number: 290 10900 0000



PURION UV-lamp 10 W article number: 200 01300 0000



PURION 1000 PRO



The UV-plant PURION 1000 PRO is made from electropolished stainless steel 1.4571.

The PURION 1000 PRO is applied to disinfect industrial water and emulsions up to a flow rate of 400 l/h with a transmission (or turbidity) of the fluids of 20 - 90% per cm.

The PURION 1000 PRO can equipped with an Operating Time Counter (OTC) to monitor the UV lamps service live. It is possible to have the power supply with direct current.

applicat	ions		
drinking	water		
climate	water		
pools			
aquariu	m		
fish pon	ds		
sewage	water		
pharma	су		
greenho	use wat	ter	
industria	al water		
cooling	lubrican	it	
advanta	ges		
addition		icals are disinfecti	on

additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 1000 PRO
flow rate	400 l/h
UVC-transmission	> 20% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	420 x 42
distance flanges	340 mm
weight	2,8 kg
life time of lamps	10.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz 12 V DC or 24 V DC
total power	17 W
over current protection	10 A

alternating current (VAC)



article number: 110 01100 0000

alternating current AC
wide voltage
Operating Time Counter
Operating Power Detection
potential free contacts



alternating current A
 wide voltage
 Operating Time Cou



article number: 110 01500 0000 article number: 110 05100 0000

alternating current AC
 wide voltage
 Operating Time Counter
 Operating Power Detection
 potential free contacts

direct current (VAC)



article number: 110 03100 0000 article number: 110 02600 0000

direct current 12 V DC
 direct current 24 V DC
 Operating Time Counter
 Operating Power Detection
 potential free contacts



article number: 110 05700 0000 article number: 110 05400 0000 article number: 110 08900 0000 article number: 110 09000 0000

•	 direct current 12 V DC
•	direct current 24 V DC
•	Operating Time Counter
	Operating Power Detection
•	potential free contacts

equipment PURION 1000 PRO

assembly system Single 1

stainless steel article number: 290 11000 0000

assembly system Single 1

galvanized

article number: 290 10900 0000



PURION UV-lamp 17 W article number: 200 00300 0000

service-kit



PURION 2500 36 W PRO



The UV-plant PURION 2500 36 W PRO is made from electropolished stainless steel 1.4571.

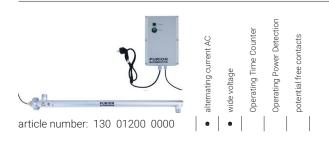
The PURION 2500 36 W PRO is applied to disinfect industrial water and emulsions up to a flow rate of 1000 l/h with a transmission (or turbidity) of the fluids of 20 - 90% per cm.

The PURION 2500 36 W PRO can equipped with an Operating Time Counter (OTC) to monitor the UV lamps service live. It is possible to have the power supply with direct current 24 V DC.

	applications
	drinking water
	climate water
	pools
	aquarium
	fish ponds
	sewage water
	pharmacy
	greenhouse water
	industrial water
	cooling lubricant
	advantages
	additional chemicals are not required for disinfection
ı	not affecting smell or taste
	low-maintenance operation
	low operational costs

product line	PURION 2500 36 W PRO
flow rate	1 m³/h
UVC-transmission	> 20% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	928 x 42
distance flanges	850 mm
weight	3,4 kg
life time of lamps	10.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz or 24 V DC
total power	36 W
over current protection	10 A

alternating current (VAC)





equipment PURION 2500 36 W PRO

assembly system Single 1 stainless steel

article number: 290 11000 0000

assembly system Single 1

galvanized

article number: 290 10900 0000



PURION UV-lamp 36 W article number: 200 00400 0000

service-kit



PURION 2500 90 W



The UV-plant PURION 2500 90 W PRO is made from electropolished stainless steel 1.4571. The PURION 2500 90 W PRO is applied to disinfect industrial water and emulsions up to a flow rate of 2,5 m³/h with a transmission (or turbidity) of the fluids of 20 - 90% per cm.

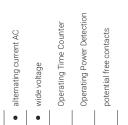
The PURION 2500 90 W PRO can equipped with an Operating Time Counter (OTC) to monitor the UV lamps service live.

A permanent flow should be ensured during operation of the UV-plant.

applications	product line	PURION 2500 90 W PRO
drinking water		
climate water	flow rate	2,5 m³/h
pools	UVC-transmission	. 00% T
aquarium		> 20% T ₁ cm
fish ponds	temperature	2°C - 40°C
sewage water	flanges	R 1"
pharmacy	dimension (LxØ mm)	928 x 42
greenhouse water	distance flanges	850 mm
industrial water	weight	3,4 kg
cooling lubricant	life time of lamps	10.000 h
	ne time or tampo	10.000 11
advantages	dosis	400 J/m²
additional chemicals are	max. pressure	10 bar
not required for disinfection	protection grade	IP 65
not affecting smell or taste	electrical connection	110-240 V 50/60 Hz
low-maintenance operation	total power	90 W
low operational costs	over current protection	10 A

alternating current (VAC)







article number: 130 08900 0000

Operating Time Counter

equipment PURION 2500 90 W PRO

assembly system Single 1 stainless steel

article number: 290 11000 0000

assembly system Single 1 galvanized

article number: 290 10900 0000



PURION UV-lamp 90 W article number: 200 00600 0000



stainless steel 1.4571 PVC-U with PRO- & H-series









PURION DUAL UV-plants for disinfection of water and liquids are available in stainless steel 1.4571.

Therefore requirements of the drinking water regulation are fulfilled

The product line PURION DUAL plants enable for advanced applications. On the one hand it is possible to guarantee disinfection for higher flow rates. Moreover the different operating and monitoring options for the PURION DUAL plants allow for the implementation of additional operating and safety concepts.

PURION DUAL UV-plants for disinfection of water and liquids are available in PVC-U.

Therefore it is possible to operate the PURION DUAL PVC-U plants in applications with saltwater or aggressive fluids.

The product line PURION DUAL PVC-U plants enable for advanced applications. On the one hand it is possible to guarantee disinfection for higher flow rates. Moreover the different operating and monitoring options for the PURION DUAL plants allow for the implementation of additional operating and safety concepts.

applications	Product line	PURION DUAL-Plants
drinking water	flow rate	2 - 20 m ³ /h
climate water	UVC-transmission	90% T ₁ cm
pools	reactor	stainless steel 1.4571
aquarium	flanges	R 1" - 1 1/2"
fish ponds	•	·
sewage water pharmacy greenhouse water industrial water cooling lubricant	weight	6 - 12 kg
	life time of lamps	8.000 h / 10.000 h
	number of lamps	2
	dosis	400 J/m²
	temperature	2°C up to 65°C
advantages	max. pressure	10 bar
	protection grade	IP 65
additional chemicals are not required for disinfection	electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz
not affecting smell or taste		12 V DC or 24 V DC
low-maintenance operation	total power	2x 17 W - 2x 106 W
low operational costs	over current protection	10 A

To ensure highest standards of quality the PURION UV-plants made from stainless steel are treated with an elaborate three step procedure for surface treatment. At first the UV-plants are pickled to remove carbon residues from welding. Afterwards the plants are treated via glass bead blasting to ensure a homogeneous and clean surface. Within the third step the UV-plants are electropolished.

Electro polished surfaces are very resistant to corrosion due to high passivity. Adhesions to the surface can be reduced due to improved values of roughness and optimized surface profile.

applications	product line	PURION DUAL-plants
drinking water	flow rate	2 - 20 m ³ /h
climate water	UVC-transmission	90% T ₁ cm
pools	reactor	PVC-U
aquarium	flanges	R 1" - 1 1/2"
fish ponds	•	
sewage water pharmacy greenhouse water industrial water	weight	6 - 12 kg
	life time of lamps	10.000 h
	number of lamps	2
	dosis	400 J/m²
cooling lubricant	temperature	2°C up to 40°C
	max. pressure	10 bar
advantages	protection grade	IP 65
additional chemicals are not required for disinfection	electrical	230 V/50 Hz or 110-240 V 50/60 Hz
not affecting smell or taste	connection	12 V DC or 24 V DC
low-maintenance operation	total power	2x 17 W - 2x 90 W
low operational costs	over current protection	10 A

PVC-U (polyvinyl chloride – unplasticized) does not contain any plasticizer or softener. Therefore PVC-U is used for manufacturing pips, profiles, packaging material for pills and food. PVC-U is very resistant to UVC-light and aggressive fluids like saltwater.

Therefore it is recommended to use PURION UV-plants DUAL made from PVC-U within maritime applications e.g. aquacultures

DUAL BASIC

monitoring option



DUAL OTC

monitoring option





With the basic version of the product family PURION DUAL both UV plants are switched and operated parallel. Control system is realized integrated in one electronic control cabinet. The renunciation of additional direct monitoring of the disinfection power leads to a very cost effective configuration.

Signal lights indicate the current status of operation. Power supply is carried out with 110 - 240 V 50/60 Hz. For the UV plant PURION 1000 Dual power supply can also be carried out with 12 V DC.

advantages	product line
electric control system integra- ted in one cabinet	number of c
	dimensions cabinet (Wxl
one switch button for both UV plants	no. of signa for operating
	no. signal lig
basic protection via signal lights	number pote free contact
of the status of operation	electrical

cost effective equipment
acquisition

product line	PURION DUAL Basic
number of control cabinet	1
dimensions control cabinet (WxHxD mm)	160 x 250 x 100 or 250 x 350 x 160
no. of signal lights for operating status	2
no. signal lights for disinfection power	0
number potential free contacts	0
electrical connection	110-240 V 50/60 Hz 12 V DC
over current protection	10 A (110-240 V AC) 6 A (12 V DC)
housing's type of protection	IP 54

With the version PURION DUAL OTC both UV plants are switched and operated parallel. The control system is realized in one electronic control cabinet. Additionally one Operating Time Counter (OTC) is integrated.

Due to the simultaneous switching of both UV plants the current life time of the UV lamps is displayed for the whole DUAL plant. Power supply is carried out with 110 - 240 V 50/60 Hz. For the UV plant PURION 1000 Dual power supply can also be carried out with 12 V DC.

advantages
electric control system integra- ted in one cabinet
one switch button for both UV plants
safety mechanism to ensure guaranteed disinfection power via monitoring of the life time of the UV lamp (OTC)
cost effective equipment acquisition

product line	PURION DUAL OTC
number of control cabinet	1
dimensions control cabinet (WxHxD mm)	160 x 250 x 100 or 250 x 350 x 160
no. of signal lights for operating status	2
no. signal lights for disinfection power	1x OTC
number potential free contacts	0
electrical connection	110-240 V 50/60 Hz 12 V DC
over current protection	10 A (110-240 V AC) 6 A (12 V DC)
housing's type of protection	IP 54

PURION 1000 DUAL	flow rate 2 m³/h
PURION 2500 DUAL 36 W	flow rate 5 m ³ /h
PURION 2500 DUAL 90 W	flow rate 8 m³/h
PURION 2001 DUAL	flow rate 10 m³/h
PURION 2501 DUAL	flow rate 20 m³/h
PURION 1000 DUAL PVC-U	flow rate 2 m³/h
PURION 2500 DUAL 36 W PVC-U	flow rate 5 m³/h
PURION 2500 DUAL 90 W PVC-U	flow rate 8 m³/h
PURION 2001 DUAL PVC-U	flow rate 10 m³/h
PURION 2501 DUAL PVC-U	flow rate 20 m³/h
PURION 1000 DUAL H	flow rate 3 m ³ /h
PURION 2500 DUAL H	flow rate 8 m ³ /h
PURION 2501 DUAL H	flow rate 20 m ³ /h
PURION 1000 DUAL PRO	flow rate 0,8 m ³ /h
PURION 2500 DUAL 36 W PRO	flow rate 2 m³/h
PURION 2500 DUAL 90 W PRO	flow rate 5 m ³ /h

PURION	1000	DUAL	flow rate 2 m³/h
PURION:	2500	DUAL 36 W	flow rate 5 m³/h
PURION:	2500	DUAL 90 W	flow rate 8 m³/h
PURION:	2001	DUAL	flow rate 10 m ³ /h
PURION:	2501	DUAL	flow rate 20 m³/h
PURION '	1000	DUAL PVC-U	flow rate 2 m ³ /h
PURION:	2500	DUAL 36 W PVC-U	flow rate 5 m³/h
PURION:	2500	DUAL 90 W PVC-U	flow rate 8 m³/h
PURION:	2001	DUAL PVC-U	flow rate 10 m³/h
PURION:	2501	DUAL PVC-U	flow rate 20 m³/h
PURION '	1000	DUAL H	flow rate 3 m ³ /h
PURION:	2500	DUAL H	flow rate 8 m³/h
PURION:	2501	DUAL H	flow rate 20 m³/h
PURION	1000	DUAL PRO	flow rate 0,8 m ³ /h
PURION:	2500	DUAL 36 W PRO	flow rate 2 m³/h
PURION:	2500	DUAL 90 W PRO	flow rate 5 m³/h

DUAL OTC Professional

monitoring option



monitoring option







With the version PURION DUAL OTC Professional it is possible to operate one or both UV reactors.

The control system is realized integrated in one electronic control cabinet. For both PURION UV-lamps a monitoring of the life time of the UV lamp is integrated (OTC 2).

The second UV plant in flow direction can be additionally switched on (priority circuit). If only the first UV plant (in flow direction) is operated the second UV plant will be immediately and automatically switched on if there is an error or the life time of the UV lamp expires. With this backup mechanisms in case of operation only the first UV lamp a very high degree of safety is ensured.

With the version PURION DUAL OPD both UV plants are switched and operated parallel. The control system is realized in one electronic control cabinet with one Operating Power Detection (OPD) to monitor the UVC intensity.

The first UV plant in flow direction is equipped with a direct monitoring of the UVC intensity.

Due to the simultaneous switching of both UV plants the current UVC intensity for the whole DUAL plant is displayed.

Power supply is carried out with 110 - 240 V 50/60 Hz. For the UV plant PURION 1000 Dual power supply can also be carried out with 12 V DC.

advantages
electric control system integra- ted in one cabinet
very high degree of safety to ensure guaranteed disinfection via combination of monitoring of the life time of the UV lamp (2 x OTC 2) and technical backup mechanism
main switch for operation mode
cost effective equipment acquisition

product line	PURION DUAL OTC Professional
number of control cabinet	1
dimensions control cabinet (WxHxD mm)	250 x 350 x 160
no. of signal lights for operating status	2
no. signal lights for disinfection power	2x OTC 2
number potential free contacts	2
electrical connection	110-240 V 50/60 Hz 12 V DC
over current protection	10 A (110-240 V AC) 6 A (12 V DC)
housing's type of protection	IP 54

				()
cost effective equipment acquisition	housing's protection	type	of	IP 54
PURION 1000 DUAL				flow rate 2 m³/h
PURION 2500 DUAL 36 W				flow rate 5 m³/h
PURION 2500 DUAL 90 W				flow rate 8 m³/h
PURION 2001 DUAL				flow rate 10 m³/h
PURION 2501 DUAL				flow rate 20 m³/h
PURION 1000 DUAL PVC-U PURION 2500 DUAL 36 W P PURION 2500 DUAL 90 W P PURION 2001 DUAL PVC-U				flow rate 2 m³/h flow rate 5 m³/h flow rate 8 m³/h flow rate 10 m³/h
PURION 2501 DUAL PVC-U				flow rate 20 m ³ /h
PURION 1000 DUAL H PURION 2500 DUAL H PURION 2501 DUAL H				flow rate 3 m ³ /h flow rate 8 m ³ /h flow rate 20 m ³ /h
PURION 1000 DUAL PRO				flow rate 0,8 m ³ /h
PURION 2500 DUAL 36 W P	RO			flow rate 2 m³/h
PURION 2500 DUAL 90 W P	RO			flow rate 5 m³/h

advantages
electric control system integra- ted in one cabinet
safety mechanism to ensure guaranteed disinfection power via monitoring of the UVC intensity (OPD)
one switch button for both UV plants
cost effective equipment acquisition

product line	PURION DUAL OPD
number of control cabinet	1
dimensions control cabinet (WxHxD mm)	160 x 250 x 100 or 250 x 350 x 160
no. of signal lights for operating status	2
no. signal lights for disinfection power	2x OPD
number potential free contacts	0
electrical connection	110-240 V 50/60 Hz 12 V DC
over current protection	10 A (110-240 V AC) 6 A (12 V DC)
housing's type of protection	IP 54

PURION 1000 DUAL	flow rate 2 m ³ /h
PURION 2500 DUAL 36 W	flow rate 5 m ³ /h
PURION 2500 DUAL 90 W	flow rate 8 m ³ /h
PURION 2001 DUAL	flow rate 10 m ³ /h
PURION 2501 DUAL	flow rate 20 m ³ /h
PURION 1000 DUAL H	flow rate 3 m ³ /h
PURION 2500 DUAL H	flow rate 8 m ³ /h
PURION 2501 DUAL H	flow rate 20 m ³ /h

DUAL OPD Professional

monitoring option



monitoring option





With the version PURION DUAL OPD is possible to operate one or both UV lamps. The control system is realized in one electronic control cabinet with Operating Power Detection (OPD 2) for both UV lamps to monitor the UVC intensity.

The second UV plant in flow direction can be additionally switched on (priority circuit). If only the first UV plant (in flow direction) is operated the second UV plant will be immediately and automatically switched on if there is an error or too less UVC intensity within the first UV plant.

With this backup mechanisms in case of operation only one UV lamp, a very high degree of safety is ensured.

With the version PURION DUAL OPD Ultra both UV lamps are switched and operated simultaneously. For both plants a monitoring of the UVC intensity is integrated (OPD 2). Both plants are equipped with a potential free contact to switch the magnet valve.

In case of an error or too less UVC intensity the water flow will be immediately and automatically interrupted by the magnet valve. A renewed release of the water flow requires the correction of the error.

The version DUAL Professional OPD enables a well engineered protection to ensure the guaranteed disinfection power.

advantages
electric control system integra- ted in one cabinet
very high degree of safety to ensure guaranteed disinfection via combination of monitoring UVC intensity (2x OPD 2) and technical backup mechanism
main switch for operation mode
cost effective equipment acquisition

product line	PURION DUAL OPD Professional			
number of control cabinet	1			
dimensions control cabinet (WxHxD mm)	250 x 350 x 160			
no. of signal lights for operating status	2			
no. signal lights for disinfection power	2x OPD 2			
number potential free contacts	2			
electrical connection	110-240 V 50/60 Hz 12 V DC			
over current protection	10 A (110-240 V AC) 6 A (12 V DC)			
housing's type of protection	IP 54			

advantages
electric control system integra- ted in one cabinet
supplied and electrically prefabricated magnet valve
highest degree of safety to ensure guaranteed disinfection via combination of monitoring the UVC intensity (2x OPD 2) and technical backup mechanism (magnet valve)
cost effective equipment acquisition

product line	PURION DUAL OPD Ultra				
number of control cabinet	1				
dimensions control cabinet (WxHxD mm)	250 x 350 x 160				
no. of signal lights for operating status	2				
no. signal lights for disinfection power	2x OPD 2				
number potential free contacts	2				
electrical connection	110-240 V 50/60 Hz				
over current protection	10 A (110-240 V AC)				
additional equip- ment	magnet vale (electrically prefab- ricated)				

PURION 1000 DUAL	flow rate 2 m ³ /h
PURION 2500 DUAL 36 W	flow rate 5 m ³ /h
PURION 2500 DUAL 90 W	flow rate 8 m ³ /h
PURION 2001 DUAL	flow rate 10 m³/h
PURION 2501 DUAL	flow rate 20 m³/h
PURION 1000 DUAL H	flow rate 3 m ³ /h
PURION 2500 DUAL H	flow rate 8 m ³ /h
PURION 2501 DUAL H	flow rate 20 m³/h

PURION 1000 DUAL	flow rate 2 m ³ /h
PURION 2500 DUAL 36 W	flow rate 5 m ³ /h
PURION 2500 DUAL 90 W	flow rate 8 m ³ /h
PURION 2001 DUAL	flow rate 10 m ³ /h
PURION 2501 DUAL	flow rate 20 m³/h
PURION 1000 DUAL H	flow rate 3 m ³ /h
PURION 2500 DUAL H	flow rate 8 m ³ /h
PURION 2501 DUAL H	flow rate 20 m³/h

PURION 1000 DUAL

The UV-plant PURION 1000 DUAL is made from electropolished stainless steel 1.4571.

The PURION 1000 DUAL is applied to disinfect drinking water up to a flow rate of 2 m³/h and a transmission (or turbidity) of the water of at least 90%

The PURION 1.000 DUAL operates very efficiently with two PURION UV-lamps 17W. Several options for power supply and monitoring of the disinfection performance are available.



applications	
drinking water	
climate water	
pools	
aquarium	
fish ponds	
sewage water	
pharmacy	
greenhouse water	
industrial water	
cooling lubricant	
advantages	
additional chemicals are not required for disinfection	
not affecting smell or taste	
low-maintenance operation	
low operational costs	

product line	PURION 1000 DUAL		
flow rate	2 m³/h		
UVC-transmission	90% T ₁ cm		
temperature	2°C - 40°C		
flanges	R 1"		
dimension (LxØ mm)	420 x 42 (2x)		
distance flanges	340 mm		
weight	12,0 kg		
life time of lamps	10.000 h		
dosis	400 J/m ²		
max. pressure	10 bar		
protection grade	IP 65		
electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz 12 V DC or 24 V DC		
total power	2x 17 W		
over current protection	10 A		

alternating current (VAC)



DUAL OPD Professional DUAL OTC Profe wide voltage **DUAL Basic DUAL OTC** •

DUAL OPD Ultra

article-no.: 110 07000 0000 | • |

DUAL OPD Professional DUAL OTC Professiona DUAL OPD Ultra **DUAL Basic** DUAL OPD



article-no.: 110 07200 0000 •

DUAL OPD Professional **DUAL OTC Professional** alternating current AC **DUAL OPD Ultra** wide voltage **DUAL Basic** DUAL OTC •



article-no.: 110 06600 0000 • •

DUAL OTC Professional **DUAL OPD Professional DUAL OPD Ultra** wide voltage **DUAL Basic** DUAL OPD



article-no.: 110 07300 0000

DUAL OPD Professional DUAL OTC Professiona alternating current AC DUAL OPD Ultra wide voltage **DUAL Basic** DUAL OTC



article-no.: 110 07400 0000



direct current (VAC)



article-no.: 110 06900 0000 article-no.: 110 10100 0000 article-no.: 110 07100 0000 article-no.: 110 10600 0000

DUAL OPD Professional DUAL OTC Professional direct current 12 V DC direct current 24 V DC DUAL OPD Ultra DUAL OTC



article-no.: 110 06700 00 article-no.: 110 10700 0000 | • | • |

- 0									
•	direct current 12 V DC	direct current 24 V DC	DUAL Basic	DUAL OTC	DUAL OTC Professional	DUAL OPD	DUAL OPD Professional	DUAL OPD Ultra	
000	•					•			
)UU					1		l	1	

PURION 1000 DUAL PVC-U

The UV plant PURION 1000 DUAL PVC-U is applied to disinfect saltwater or iother aggressive fluids up to a flow rate of 2 m³/h and a transmission (or turbidity) of the water of at least 90% per cm.

The PURION 1.000 DUAL PVC-U operates very efficiently with two PURION UV-lamps 17 W.

Several options for power supply and monitoring of the disinfection performance are available.



	applications
	drinking water
	climate water
	pools
	aquarium
	fish ponds
	sewage water
	pharmacy
	greenhouse water
	industrial water
	cooling lubricant
	advantages
	additional chemicals are not required for disinfection
	not affecting smell or taste
	low-maintenance operation

low operational costs

product line	PURION 1000 DUAL PVC-U			
flow rate	2 m³/h			
UVC-transmission	90% T ₁ cm			
temperature	2°C - 40°C			
flanges	Ø 50 mm			
dimension (LxØ mm)	420 x 50 (2x)			
distance flanges	280 mm			
weight	12,0 kg			
life time of lamps	10.000 h			
dosis	400 J/m ²			
max. pressure	10 bar			
protection grade	IP 65			
electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz 12 V DC or 24 V DC			
total power	2x 17 W			
over current protection	10 A			

alternating current (VAC)



wide voltage DUAL OTC DUAL

DUAL OPD Professional DUAL OTC Profession DUAL OPD Ultra

DUAL OPD Professional

DUAL OPD Ultra

article-no.: 110 13500 0000 | • | •

DUAL OTC Professional **DUAL OPD Professional DUAL OPD Ultra** DUAL OPD



alternating current AC

DUAL OTC Professional wide voltage DUAL OTC

direct current (VAC)



article-no.: 110 11100 0000

DUAL OPD Professional DUAL OTC Professional direct current 24 V DC direct current 12 V DC OPD Ultra DUAL OTC



article-no.: 110 11300 0000

direct current 12 V DC	direct current 24 V DC	DUAL Basic	DUAL OTC	DUAL OTC Professional	DUAL OPD	DUAL OPD Professional	DUAL OPD Ultra
•			•				

equipment PURION 1000 DUAL & 1000 DUAL PVC-U

assembly system Dual 1

stainless steel

article number: 290 11400 0000

assembly system Dual 1

galvanized

article number: 290 11300 0000



PURION UV-lamp 17 W article number: 200 00300 0000



PURION 2500 DUAL

36 W

The UV-plant PURION 2500 DUAL 36 W is made from electropolished stainless steel 1.4571.

The PURION 2500 DUAL 36 W DUAL is applied to disinfect drinking water up to a flow rate of 5 m³/h and a transmission (or turbidity) of the water of at least 90% per cm.

The PURION 2.500 DUAL 36 W operates very efficiently with two PURION UV-lamps 36 W. Several options for power supply and monitoring of the disinfection performance are available.



applications	
drinking water	
climate water	
pools	
aquarium	
fish ponds	
sewage water	
pharmacy	
greenhouse water	
industrial water	
cooling lubricant	
advantages	
additional chemicals are not required for disinfection	
not affecting smell or taste	
low-maintenance operation	
low operational costs	

product line	PURION 2500 DUAL 36 W
flow rate	5 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	928 x 42 (2x)
distance flanges	850 mm
weight	14,0 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz or 24 V DC
total power	2x 36 W
over current protection	10 A

DUAL OPD Professional

DUAL OPD Professional

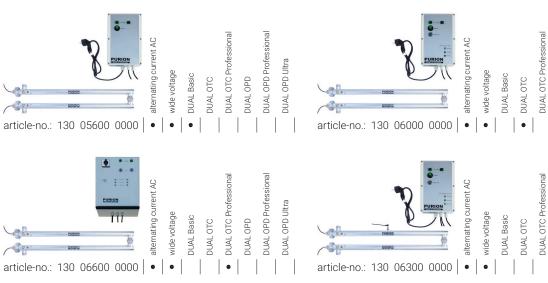
DUAL OPD

DUAL OPD Ultra

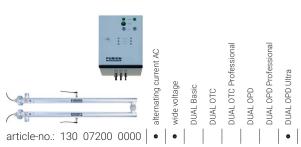
DUAL OPD

DUAL OPD Ultra

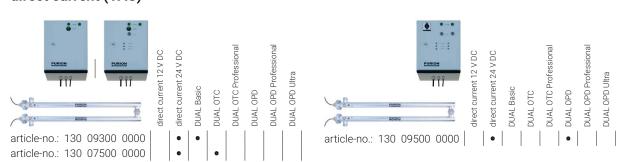
alternating current (VAC)







direct current (VAC)



PURION 2500 DUAL 36 W PVC-U

The UV plant PURION 2.500 DUAL 36 W PVC-U is applied to disinfect saltwater or other aggressive fluids up to a flow rate of 5 m³/h and a transmission (or turbidity) of the water of at least 90%

The PURION 2.500 DUAL 36 W PVC-U operates very efficiently with two PURI-ON UV-lamps 36 W.

per cm.

Several options for power supply and monitoring of the disinfection performance are available.



DUAL OPD Professional

DUAL OPD Ultra

applications	
drinking water	
climate water	
pools	
aquarium	
fish ponds	
sewage water	
pharmacy	
greenhouse water	
industrial water	
cooling lubricant	
advantages	
additional chemicals are not required for disinfection	
not affecting smell or taste	
low-maintenance operation	
low operational costs	

advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 2500 DUAL 36 W PVC-U
flow rate	5 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	Ø 50 mm
dimension (LxØ mm)	930 x 50 (2x)
distance flanges	790 mm
weight	14,0 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz or 24 V DC
total power	2x 36 W
over current protection	10 A

alternating current (VAC)







direct current (VAC)



equipment PURION 2500 DUAL 36 W & 2500 DUAL 36 W PVC-U

assembly system Dual 1 stainless steel

article number: 290 11400 0000

assembly system Dual 1 galvanized

article number: 290 11300 0000



PURION UV-lamp 36 W article number: 200 00400 0000



PURION 2500 DUAL

90 W

The UV-plant PURION 2500 DUAL 90 W is made from electropolished stainless steel 1.4571.

The PURION 2500 DUAL 90 W DUAL is applied to disinfect drinking water up to a flow rate of 8 m³/h and a transmission (or turbidity) of the water of at least 90% per cm.

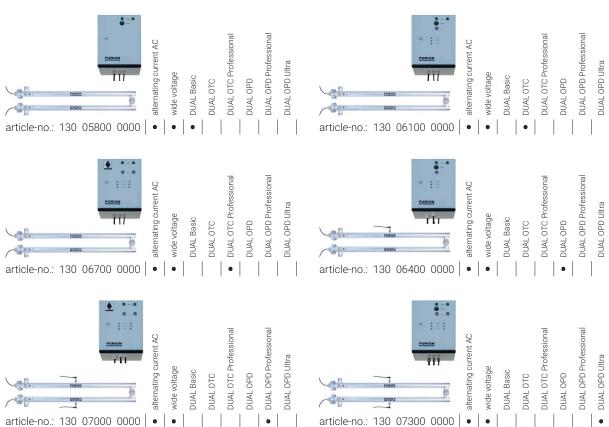
Several options for monitoring of the disinfection performance are available.



applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

90 W
8 m³/h
90% T ₁ cm
2°C - 40°C
R 1"
928 x 42 (2x)
850 mm
14,0 kg
10.000 h
400 J/m ²
10 bar
IP 65
110-240 V 50/60 Hz
2x 90 W
10 A

alternating current (VAC)



equipment PURION 2500 DUAL 90 W

assembly system Dual 1

stainless steel

article number: 290 11400 0000

assembly system Dual 1

galvanized

article number: 290 11300 0000



PURION UV-lamp 90 W article number: 200 00600 0000

service-kit



PURION 2500 DUAL

90 W PVC-U

The UV plant PURION 2.500 DUAL 90 W PVC-U is applied to disinfect saltwater or other aggressive fluids up to a flow rate of 8 m³/h and a transmission (or turbidity) of the water of at least 90% per cm.

Several options for monitoring of the disinfection performance are available.



ć	applications
C	drinking water
C	climate water
F	oools
ć	aquarium
f	ish ponds
S	sewage water
ŗ	pharmacy
ç	greenhouse water
i	ndustrial water
C	cooling lubricant
a	dvantages
_	dditional chemicals are ot required for disinfection
n	ot affecting smell or taste
lc	ow-maintenance operation
	ow operational costs

product line	PURION 2500 DUAL
flow rate	8 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	930 x 50 (2x)
distance flanges	790 mm
weight	14,0 kg
life time of lamps	10.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	2x 90 W
over current protection	10 A

alternating current (VAC)







equipment PURION 2500 DUAL 90 W PVC-U

assembly system Dual 1

stainless steel article number: 290 11400 0000

assembly system Dual 1

galvanized

article number: 290 11300 0000



PURION UV-lamp 90 W article number: 200 00600 0000

service-kit



PURION 2001 DUAL

The UV-plant PURION 2001 DUAL is made from electropolished stainless steel 1.4571.

The PURION 2001 DUAL is applied to disinfect drinking water up to a flow rate of 10 $\rm m^3/h$ and a transmission (or turbidity) of the water of at least 90% per cm.

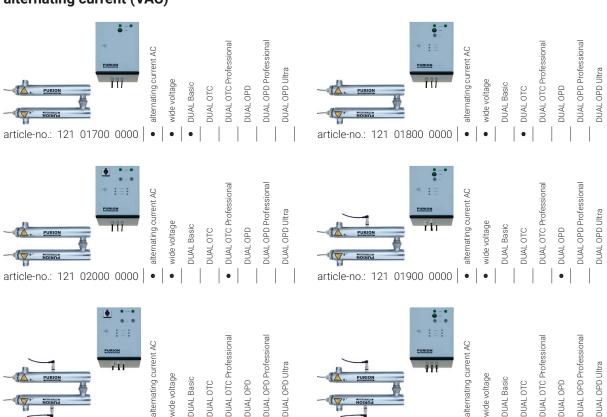
Several options for monitoring of the disinfection performance are available.



applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 2001 DUAL
flow rate	10 m³/h (Pools/Teiche: up to 80 m³)
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1 1/2"
dimension (LxØ mm)	578 x 85 (2x)
distance flanges	460 mm
weight	14,0 kg
life time of lamps	10.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	2x 48 W
over current protection	10 A

alternating current (VAC) -



equipment PURION 2001 DUAL

assembly system Dual 2

stainless steel article number: 290 11600 0000

article-no.: 121 02100 0000

assembly system Dual 2

galvanized

article number: 290 11500 0000



PURION UV-lamp 48 W article number: 200 00500 0000

article-no.: 121 02200 0000

•

service-kit



PURION 2001 DUAL

PVC-U

The UV plant PURION 2.001 DUAL PVC-U is applied to disinfect saltwater or other aggressive fluids up to a flow rate of 10 m³/h and a transmission (or turbidity) of the water of at least 90% per cm.

Several options for monitoring of the disinfection performance are available.



low operational costs

product line	PURION 2001 DUAL PVC-U
flow rate	10 m ³ /h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	Ø 50 mm
dimension (LxØ mm)	928 x 100 (2x)
distance flanges	710 mm
weight	14,0 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	2x 90 W
over current protection	10 A

alternating current (VAC)



article-no.: 121 02300 0000 | •

DUAL OPD Professional DUAL OTC Professional DUAL OPD Ultra wide voltage DUAL OTC DUAL

PURION



DUAL OPD Professional DUAL OTC Professional alternating current AC **DUAL OPD Ultra** DUAL OPD



article-no.: 121 02500 0000 •

DUAL OPD Professional **DUAL OTC Professional** alternating current AC **DUAL OPD Ultra** wide voltage DUAL OTC

equipment PURION 2001 DUAL PVC-U

assembly system Dual 2

stainless steel

article number: 290 11600 0000

assembly system Dual 2 galvanized

article number: 290 11500 0000



PURION UV-lamp 48 W article number: 200 00500 0000



PURION 2501 DUAL

The UV-plant PURION 2501 DUAL is made from electropolished stainless steel 1.4571.

The PURION 2501 DUAL is applied to disinfect drinking water up to a flow rate of 20 m³/h and a transmission (or turbidity) of the water of at least 90% per cm.

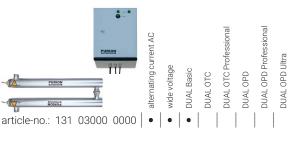
Several options for monitoring of the disinfection performance are available.



applications	
drinking water	
climate water	
pools	
aquarium	
fish ponds	
sewage water	
pharmacy	
greenhouse water	
industrial water	
cooling lubricant	
advantages	
additional chemicals are not required for disinfection	
not affecting smell or taste	
low-maintenance operation	
low operational costs	

product line	PURION 2501 DUAL
flow rate	20 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	R 1 1/2"
dimension (LxØ mm)	928 x 85 (2x)
distance flanges	810 mm
weight	16,0 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	2x 90 W
over current protection	10 A

alternating current (VAC)













equipment PURION 2501 DUAL

assembly system Dual 2 stainless steel

article number: 290 11600 0000

assembly system Dual 2

galvanized

article number: 290 11500 0000



PURION UV-lamp 90 W article number: 200 00600 0000

service-kit



PURION 2501 DUAL PVC-U

The UV plant PURION 2.501 DUAL PVC-U is applied to disinfect saltwater or other aggressive fluids up to a flow rate of 20 m³/h and a transmission (or turbidity) of the water of at least 90% per cm.

Several options for monitoring of the disinfection performance are available.



DUAL OPD Ultra

applicat	ions
drinking	water
climate v	water
pools	
aquariur	n
fish pone	ds
sewage	water
pharmad	су
greenho	use water
industria	al water
cooling I	ubricant
advantag	jes
	al chemicals are red for disinfection
not affec	ting smell or taste
low-main	tenance operation
low opera	ational costs

product line	PURION 2501 DUAL PVC-U
flow rate	20 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 40°C
flanges	Ø 50 mm
dimension (LxØ mm)	928 x 100 (2x)
distance flanges	710 mm
weight	16,0 kg
life time of lamps	10.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	2x 90 W
over current protection	10 A

alternating current (VAC)







equipment PURION 2501 DUAL PVC-U

assembly system Dual 2

stainless steel

article number: 290 11600 0000

assembly system Dual 2

galvanized

article number: 290 11500 0000



PURION UV-lamp 90 W article number: 200 00600 0000

service-kit



PURION 1000 DUAL H

The UV-plant PURION 1000 DUAL H is made from electropolished stainless steel 1.4571.

The PURION 1000 DUAL H is applied to disinfect drinking water up to a flow rate of 3 m³/h and a transmission (or turbidity) of the water of at least 90% per cm.

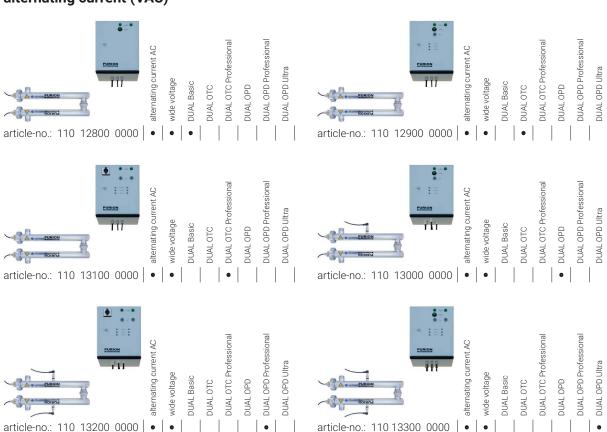
The UV-plant PURION 1000 DUAL H has been developed for temperatures above 40 C° e.g. in warm water circulations. Several options for monitoring of the disinfection performance are available.



applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 1000 DUAL H
flow rate	3 m³/h drinking water
UVC-transmission	90% T ₁ cm
temperature	up to 90°C
flanges	R 1"
dimension (LxØ mm)	420 x 42 (2x)
distance flanges	340 mm
weight	12,0 kg
life time of lamps	8.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	2x 42 W
over current protection	10 A

alternating current (VAC)



equipment PURION 1000 DUAL H

assembly system Dual 1

stainless steel

article number: 290 11400 0000

assembly system Dual 1

galvanized

article number: 290 11300 0000



PURION UV-lamp 42 W article number: 200 01700 0000

service-kit



PURION 2500 DUAL H

The UV-plant PURION 2500 DUAL H is made from electropolished stainless steel 1.4571.

The PURION 2500 DUAL H is applied to disinfect drinking water up to a flow rate of 8 m³/h and a transmission (or turbidity) of the water of at least 90% per cm.

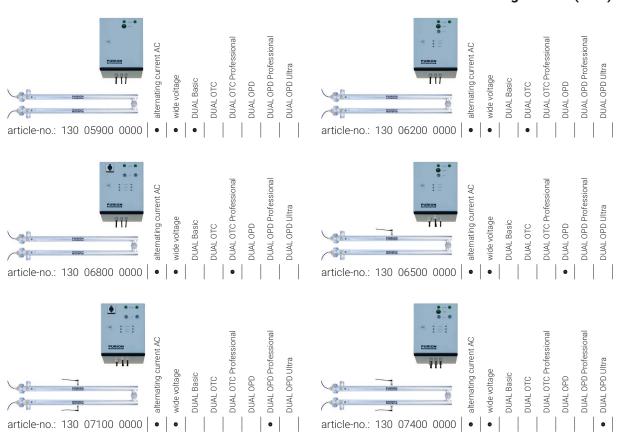
The UV-plant PURION 2500 DUAL H has been developed for temperatures above 40 C° e.g. in warm water circulations. Several options for monitoring of the disinfection performance are available.



	_
applications	
drinking water	
climate water	
pools	
aquarium	
fish ponds	
sewage water	
pharmacy	
greenhouse water	
industrial water	
cooling lubricant	
advantages	
additional chemicals are not required for disinfection	
not affecting smell or taste	
low-maintenance operation	
low operational costs	

product line	PURION 2500 DUAL H
flow rate	8 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 90°C
flanges	R 1"
dimension (LxØ mm)	928 x 42 (2x)
distance flanges	850 mm
weight	14,0 kg
life time of lamps	8.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	2x 106 W
over current protection	10 A

alternating current (VAC)



equipment PURION 2500 DUAL H

assembly system Dual 1

stainless steel

article number: 290 11400 0000

assembly system Dual 1

galvanized

article number: 290 11300 0000



PURION UV-lamp 106 W article number: 200 00800 0000

service-kit



PURION 2501 DUAL H

The UV-plant PURION 2501 DUAL H is made from electropolished stainless steel 1.4571.

The PURION 2501 DUAL H is applied to disinfect drinking water up to a flow rate of 20 m³/h and a transmission (or turbidity) of the water of at least 90% per cm.

The UV-plant PURION 2501 DUAL H has been developed for temperatures above 40 C° e.g. in warm water circulations.

Several options for monitoring of the disinfection performance are available.

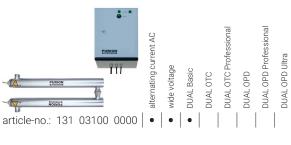


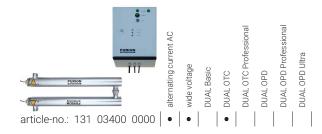
••	
drinking water	
climate water	
pools	
aquarium	
fish ponds	
sewage water	
pharmacy	
greenhouse water	
industrial water	
cooling lubricant	
advantages	
additional chemicals are not required for disinfection	
not affecting smell or taste	
low-maintenance operation	
low operational costs	

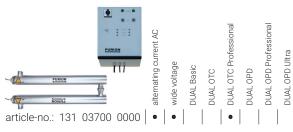
applications

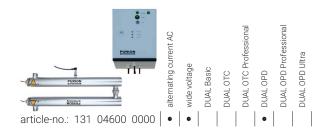
product line	PURION 2501 DUAL H
flow rate	20 m³/h
UVC-transmission	90% T ₁ cm
temperature	2°C - 90°C
flanges	R 1 1/2"
dimension (LxØ mm)	928 x 85 (2x)
distance flanges	810 mm
weight	16,0 kg
life time of lamps	8.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	2x 106 W
over current protection	10 A

alternating current (VAC)













equipment PURION 2501 DUAL H

assembly system Dual 2 stainless steel

article number: 290 11600 0000

assembly system Dual 2

galvanized

article number: 290 11500 0000



PURION UV-lamp 106 W article number: 200 00800 0000

service-kit



PURION 1000 DUAL PRO

The UV-plant PURION 1000 DUAL PRO is made from electropolished stainless steel 1.4571.

The PURION 1000 DUAL PRO is applied to disinfect industrial water and emulsions up to a flow rate of 800 l/h with a transmission (or turbidity) of the fluids of 20 - 90% per cm.

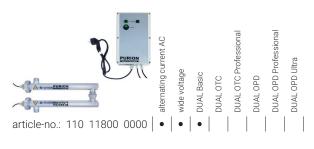
Several options for power supply and monitoring of the disinfection performance are available.



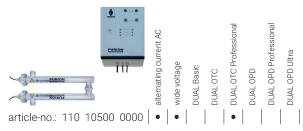
applica	itions
drinkin	g water
climate	water
pools	
aquario	ım
fish po	nds
sewag	e water
pharma	асу
greenh	ouse water
industr	ial water
cooling	lubricant
advanta	ages
	nal chemicals are uired for disinfection
not affe	ecting smell or taste
low-ma	intenance operation
low ope	erational costs

product line	PURION 1000 DUAL PRO
flow rate	800 l/h
UVC-transmission	> 20% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	420 x 42 (2x)
distance flanges	340 mm
weight	12,0 kg
life time of lamps	10.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	230 V/50 Hz or 110-240 V 50/60 Hz 12 V DC or 24 V DC
total power	2x 17 W
over current protection	10 A

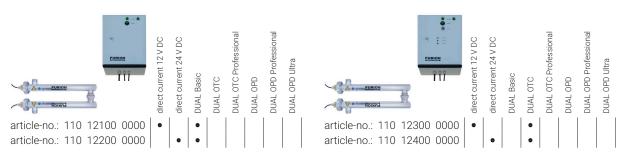
alternating current (VAC)







direct current (VAC)



equipment PURION 1000 DUAL PRO

assembly system Dual 1

stainless steel

article number: 290 11400 0000

assembly system Dual 1

galvanized

article number: 290 11300 0000



PURION UV-lamp 17 W article number: 200 00300 0000

service-kit



PURION 2500 DUAL

36 W PRO

The UV-plant PURION 2500 DUAL 36 W PRO is made from electropolished stainless steel 1.4571.

The PURION 2500 DUAL 36 W PRO is applied to disinfect industrial water and emulsions up to a flow rate of 2 m^3 /h with a transmission (or turbidity) of the fluids of 20 - 90% per cm.

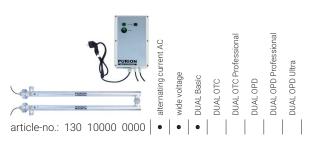
Several options for power supply and monitoring of the disinfection performance are available.

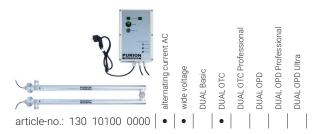


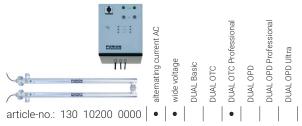
applications
drinking water
climate water
pools
aquarium
fish ponds
sewage water
pharmacy
greenhouse water
industrial water
cooling lubricant
advantages
additional chemicals are not required for disinfection
not affecting smell or taste
low-maintenance operation
low operational costs

product line	PURION 2500 DUAL 36 W PRO
flow rate	2 m³/h
UVC-transmission	> 20% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	928 x 42 (2x)
distance flanges	850 mm
weight	14,0 kg
life time of lamps	10.000 h
dosis	400 J/m²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz or 24 V DC
total power	2x 36 W
over current protection	10 A

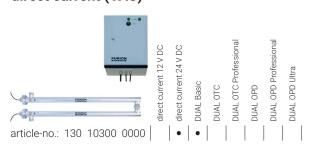
alternating current (VAC)

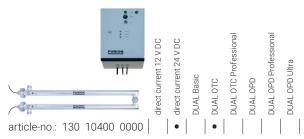






direct current (VAC)





equipment PURION 2500 DUAL 36 W PRO

assembly system Dual 1

stainless steel

article number: 290 11400 0000

assembly system Dual 1

galvanized

article number: 290 11300 0000



PURION UV-lamp 36 W article number: 200 00400 0000

service-kit



PURION 2500 DUAL

90 W PRO

The UV-plant PURION 2500 DUAL 90 W PRO is made from electropolished stainless steel 1.4571.

The PURION 2500 DUAL 90 W PRO is applied to disinfect industrial water and emulsions up to a flow rate of 5 m³/h with a transmission (or turbidity) of the fluids of 20 - 90% per cm.

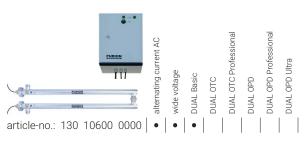
Several options for monitoring of the disinfection performance are available.

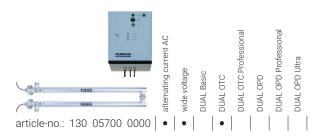


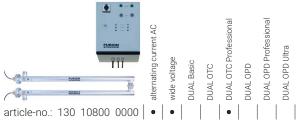
applications	
drinking water	
climate water	
pools	
aquarium	
fish ponds	
sewage water	
pharmacy	
greenhouse water	
industrial water	
cooling lubricant	
advantages	
additional chemicals are not required for disinfection	
not affecting smell or taste	
not affecting smell or taste low-maintenance operation	
-	

product line	PURION 2500 DUAL 90 W PRO
flow rate	5 m³/h
UVC-transmission	> 20% T ₁ cm
temperature	2°C - 40°C
flanges	R 1"
dimension (LxØ mm)	928 x 42 (2x)
distance flanges	850 mm
weight	14,0 kg
life time of lamps	10.000 h
dosis	400 J/m ²
max. pressure	10 bar
protection grade	IP 65
electrical connection	110-240 V 50/60 Hz
total power	2x 90 W
over current protection	10 A

alternating current (VAC)







equipment PURION 2500 DUAL 90 W PRO

assembly system Dual 1 stainless steel

article number: 290 11400 0000

assembly system Dual 1

galvanized

article number: 290 11300 0000



PURION UV-lamp 90 W article number: 200 00600 0000

service-kit



PURION MULTIPLANT

2501 / 6



The PURION MULTIPLANT 2501 / 6 is designed to enable UV based disinfection for high flow rates up to 90 m³/h. The electric control cabinet can be equipped with the Operating Time Counter (OTC 2) or Operating Power Detection (OPD 2) via sensor. The potential free contact D1-D2 (error sum signal) enables easy integration into existing monitoring systems.

applications /
PURION MULTIPLANTS are
suitable for:

drinking water

cooling water

options for configuration

Operating Time Counter OTC 2

Operating Power Detection OPD 2

hot water up to 90 °C

pool water

product line	PURION MULTIPLANT 2501 / 6
flow rate for given UVC- transmission	> 94 % T ₁ cm: 90 m ³ /h > 90 % T ₁ cm: 60 m ³ /h
dosis	400 J/m ²
dimension (L x B x H mm)	approx. 900 x 1.100 x 1.600
weight	80 kg
no. of lamps	6
max. operating pressure	10 bar
electrical connection	PURION controll cabinet Model 1: • 3 ~/N/PE 50 Hz 400/230V • L/N/PE 50 Hz 230V
total power	6 x 90 W or 6 x 106 W (depends on configuration)
current protection	3 x 6A
rack	grooved aluminium



article number: 131 05000 0000 article number: 131 05600 0000

	hot water up to 90 °C	Operating Time Counter (OTC 2)	Operating Power Detection (OPD 2)
3	hot	O TO	90



article number: 131 05100 0000 article number: 131 05200 0000 article number: 131 05700 0000 article number: 131 05800 0000

•	water up to 40 °C
•	hot water up to 90 °C
•	Operating Time Counter (OTC 2)
•	Operating Power Detectio



article number: 131 05300 0000 article number: 131 05900 0000

water up to 40 °C	hot water up to 90 °C	Operating Time Counter (OTC 2)	Operating Power Detection (OPD 2)
•	•		



article number: 131 05400 0000 article number: 131 05500 0000 article number: 131 06000 0000 article number: 131 06100 0000

•	 water up to 40 °C
•	hot water up to 90 °C
•	Operating Time Counter (OTC 2)
•	Operating Power Detection (OPD 2)

equipment PURION MULTIPLANT 2501 / 6

PURION UV-lamp 90 W article number: 200 00600 0000

PURION UV-lamp 106 W article number: 200 00800 0000





Service-Kit article number: 292 00900 0000



PURION MULTIPLANT

2501/8



The PURION MULTIPLANT 2501 / 8 is designed to enable UV based disinfection for high flow rates up to 120 m³/h. The electric control cabinet can be equipped with the Operating Time Counter (OTC 2) or Operating Power Detection (OPD 2) via sensor. The potential free contact D1-D2 (error sum signal) enables easy integration into existing monitoring systems.

applications /
PURION MULTIPLANTS are
suitable for:

drinking water

cooling water

options for configuration

Operating Time Counter OTC 2

Operating Power Detection OPD 2

hot water up to 90 °C

pool water

product line	PURION MULTIPLANT 2501 / 8
flow rate for given UVC- transmission	> 94 % T ₁ cm: 120 m ³ /h > 90 % T ₁ cm: 80 m ³ /h
dosis	400 J/m ²
dimension (L x B x H mm)	approx. 1.100 x 1.100 x 1.600
weight	100 kg
no. of lamps	8
max. operating pressure	10 bar
electrical connection	PURION controll cabinet Model 1: •3 ~/N/PE 50 Hz 400/230V •L/N/PE 50 Hz 230V
total power	8 x 90 W or 8 x 106 W (depends on configuration)
current protection	3 x 6A

grooved aluminium



article number: 131 06200 0000 article number: 131 06800 0000

	hot water up to 90 °C	Operating Time Counter (OTC 2)	Operating Power Detection (OPD 2)
1		1	1 1



article number: 131 06300 0000 article number: 131 06400 0000 article number: 131 06900 0000 article number: 131 07000 0000

•	 water up to 40 °C
•	hot water up to 90 °C
•	Operating Time Counter (OTC 2)
•	Operating Power Detection

L C



article number: 131 06500 0000 article number: 131 07100 0000

water up to 40 °C	hot water up to 90 °C	Operating Time Counter (OTC 2)	Operating Power Detection (OPD 2)	
•	•			



article number: 131 06600 0000 article number: 131 06700 0000 article number: 131 07200 0000 article number: 131 07300 0000

•	water up to 40 °C
•	hot water up to 90 °C
•	Operating Time Count (OTC 2)
•	Operating Power Deter

equipment PURION MULTIPLANT 2501 / 8

PURION UV-lamp 90 W article number: 200 00600 0000







PURION UV-lamp 106 W article number: 200 00800 0000

PURION PRO MULTIPLANT 2500 / 6

The PURION PRO MULTIPLAN 2500 / 6 is designed for UV based disinfection in case of high flow rates and special liquids with very low transmission. The electric control cabinet can be equipped with the Operating Time Counter (OTC 2). The potential free contact D1-D2 (error sum signal) enables easy integration into existing monitoring systems.

applications / PURION PRO MULTIPLANTS are suitable for:

coolant/ lubricant

circulation water from washing processes

applications in agriculture

options for configuration

hot water up to 90 °C

Operating Time Counter OTC 2

product line	PURION PRO MULTIPLANT 2500 / 6	
flow rate for given UVC- transmission	> 20 % T ₁ cm: 15 m ³ /h > 10 % T ₁ cm: 5 m ³ /h	
dosis	400 J/m ²	
dimension (L x B x H mm)	approx. 600 x 400 x 1.200	
weight	75 kg	
no. of lamps	6	
max. operating pressure	10 bar	
electrical connection	PURION controll cabinet Model 1: • 3 ~/N/PE 50 Hz 400/230V • L/N/PE 50 Hz 230V	
total power	6 x 90 W or 6 x 106 W (depends on configuration)	
current protection	3 x 6A	

grooved aluminium



article number: 130 11300 0000 article number: 130 11700 0000

hot water up to 40 °C

hot water up to 90 °C

Operating Time Counter
(0TC 2)



article number: 130 11400 0000 article number: 130 11800 0000



article number: 130 11500 0000 article number: 130 11900 0000

water up to 40 °C
 hot water up to 90 °C
 Operating Time Counter
 (OTC 2)



article number: 130 11600 0000 article number: 130 12000 0000

equipment PURION MULTIPLANT 2500 / 6

PURION UV-lamp 90 W article number: 200 00600 0000





Service-Kit article number: 292 00900 0000



PURION PRO MULTIPLANT 2500 / 8



The PURION PRO MULTIPLAN 2500 / 8 is designed for UV based disinfection in case of high flow rates and special liquids with very low transmission. The electric control cabinet can be equipped with the Operating Time Counter (OTC 2). The potential free contact D1-D2 (error sum signal) enables easy integration into existing monitoring systems.

applications / PURION PRO MULTIPLANTS are suitable for:

coolant/ lubricant

circulation water from washing processes

applications in agriculture

options for configuration

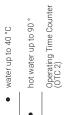
hot water up to 90 °C

Operating Time Counter OTC 2

product line	PURION PRO MULTIPLANT 2500 / 8
flow rate for given UVC- transmission	> 20 % T ₁ cm: 20 m³/h > 10 % T ₁ cm: 7 m³/h
dosis	400 J/m ²
dimension (L x B x H mm)	approx. 600 x 400 x 1.200
weight	85 kg
no. of lamps	8
max. operating pressure	10 bar
electrical connection	PURION controll cabinet Model 1: • 3 ~/N/PE 50 Hz 400/230V • L/N/PE 50 Hz 230V
total power	8 x 90 W or 8 x 106 W (depends on configuration)
current protection	3 x 6A
rack	grooved aluminium



article number: 130 12100 0000 article number: 130 12500 0000





article number: 130 12200 0000 article number: 130 12600 0000

water up to 40 °C	hot water up to 90 °C	Operating Time Counter
•	•	•



article number: 130 12300 0000 article number: 130 12700 0000





article number: 130 12400 0000 article number: 130 12800 0000

water up to 40 °C	hot water up to 90 °C	Operating Time Counter (OTC 2)
•	•	•

equipment PURION MULTIPLANT 2500 / 8

PURION UV-lamp 90 W article number: 200 00600 0000







PURION UV-lamp 106 W article number: 200 00800 0000



PURION Compact system active

The pre assembled PURION Compact system active allows for

the immediate supply of drinking water and consists of an UV

The PURION UV-plant is equipped with an Operating Time

Furthermore three filters can be equipped with filter cartridges.

applications camping & caravan expedition mobile water supply

PURION Compact product line system active 400 I/h drinking water flow rate UVC-transmission 90% T₁ cm 2°C up to 40°C temperature UV-plant PURION 500 nı de

advantages

additional chemicals are not required for disinfection smell and taste of the water are not influenced by radiation

option for adjustment to local conditions via configuration of the filters

mobility / flexibility

low-maintenance operation low operational costs

•	
nonitoring UV-plant	Operating Time Counter (OTC)
umber of filters	2
lelivery rate pump	400 l/h
limension total system L x B x H in mm)	480 x 300 x 420
veight total system	11,0 kg
nax. pressure	10 bar
rotection grade	IP 65
electrical connection	12 / 24 V DC
otal power	1x 10 W (UV) 1x 18 W (pump)

over current protection

direct current (VAC) -

plant, filters and a pump.

Counter (OTC).

article-no.: 105 04800 0000 article-no.: 105 04900 0000





equipment PURION Compact system active

PURION cartridge activated carbon article number: 410 01000 0000 PURION cartridge coarse filter article number: 410 00800 0000 PURION cartridge fine filter article number: 410 00900 0000



PURION UV-lamp 10 W article number: 200 01300 0000



PURION Compact system MAX

The pre assembled PURION Compact system MAX allows for the immediate supply of drinking water and consists of an UV plant and three filters.

The PURION UV-plant is equipped with an Operating Time Counter (OTC).

Furthermore three filters can be equipped with filter cartridges.

applications	product line	PURION Compact system MAX
camping & caravan	flow rate	400 l/h drinking water
expedition	UVC-transmission	90% T ₁ cm
mobile water supply	temperature	2°C up to 40°C
	UV-plant	PURION 500
	monitoring UV-plant	Operating Time Counter (OTC)
	number of filters	3
advantages	delivery rate pump	400 l/h
additional chemicals are not required for disinfection	dimension total system (L x B x H in mm)	580 x 300 x 420
smell and taste of the water are not influenced by radiation	weight total system	11,0 kg
option for adjustment to local	max. pressure	10 bar
conditions via configuration of the filters	protection grade	IP 65
the liners	electrical connection	230 V AC, 12/24 V D
mobility / flexibility	total nawar	1× 10 W (UV)
low-maintenance operation	total power	1x 10 W (UV)
low operational costs	over current protection	8 A

alternating current-/ direct current (VAC)

alternating current AC direct current 12 V DC direct current 24 V DC direct current 24

article-no.: 105 05200 0000 article-no.: 105 05000 0000 article-no.: 105 05100 0000





PURION cartridge activated carbon article number: 410 01000 0000 PURION cartridge coarse filter article number: 410 00800 0000 PURION cartridge Ffne filter article number: 410 00900 0000



equipment PURION Compact system MAX

PURION UV-lamp 10 W article number: 200 01300 0000

service-kit



PURION Compact system MAX active

The pre assembled PURION Compact system MAX active allows for the immediate supply of drinking water and consists

of an UV plant, filters and a pump. The PURION UV-plant is equipped with an Operating Time Counter (OTC).

Furthermore three filters can be equipped with filter cartridges.

applications
camping & caravan
expedition
mobile water supply

advantages

additional chemicals are not required for disinfection smell and taste of the water are not influenced by radiation

option for adjustment to local conditions via configuration of the filters

mobility / flexibility low-maintenance operation

low operational costs

product line	PURION Compact system MAX active
flow rate	400 l/h drinking water
UVC-transmission	90% T ₁ cm
temperature	2°C up to 40°C
UV-plant	PURION 500
monitoring UV-plant	Operating Time Counter (OTC)
number of filters	3
delivery rate pump	400 l/h
dimension total system (L x B x H in mm)	580 x 300 x 420
weight total system	11,0 kg
max. pressure	10 bar
protection grade	IP 65
electrical connection	12 / 24 V DC
total power	1x 10 W (UV) 1x 18 W (pump)

over current protection 8 A

direct current (VAC)

direct current 24 V DC Operating Time Counter

article-no.: 105 05300 0000 article-no.: 105 05400 0000





equipment PURION Compact system active

PURION cartridge activated carbon article number: 410 01000 0000 PURION cartridge coarse filter article number: 410 00800 0000 PURION cartridge fine filter article number: 410 00900 0000



PURION UV-lamp 10 W article number: 200 01300 0000

service-kit



PURION Tropicalbox active



The PURION "tropical-box active" is a compact plant for water disinfection. Due to its low energy consumption, the system can be operated up to 20 hours with the integrated lead-acid battery.

Charging of the battery can be done with a solar panel or 110-230V power supply.

applications
drinking water supply in remote areas

low operational costs

mobile drinking water supply	dimensions (L x B x H in mm)	600 x 270 x 380
(e.g. expedition vehicles, boats)	weight	17 kg
	UVC-transmission	90% T ₁ cm
	temperature max.	2°C up to 40°C
	reactor	stainless steel 1.4571
advantages	flanges	R 1/2"
plug & play system for immediate operation	life time of lamps	10.000 h
	max. pressure	10 bar
suitable for mobile applications without central power supply	delivery rate pump	400 l/h
	valtage battery	12 V DC, 24 Ah
	material battery	lead-gel

total power

product line

battery power

flow rate

PURION

Tropical-box active

400 I/h drinking water

approx. 20 hours

1x 10 W (UV) 1x 18 W (pump)

The PURION "tropical-box active" is been used to provide remote villages in the Amazon region of Brazil with drinking water

In cooperation with the "world's food initiative" these plants have been also used successfully in Haiti which was heavily devastated by an earthquake.

The PURION "tropical-box active" has proven the performance, reliability and robustness very often.



article-no.: 105 02800 0000

Operating Time Counte direct current 12 V DC direct current 24 V DC



equipment PURION Tropical-box active

PURION UV-lamp 10 W article number: 200 01300 0000

service-kit



PURION Pool 40



The integrated plant PURION PooL 40 consists of a filtration of sediments and UV based disinfection of pool water. It is applied to disinfect circulation water of pools.

The pre filter removes sediment from the pool water. The following UV based disinfection prevents biological activities especially forming of algae.

applications	product line	PURION Pool 40
UV based disinfection of	pool dimension	40 m³ (20 h operation) 30 m³ (15 h operation)
pool water up to 40 m³	dimension (L x B x H in mm)	770 x 530 x 940
	UV plant	PURION 2001
advantages	life time of lamps	10.000 h
plug and play system for immedi-	max. delivery rate rotary pump	6 m³/h
ate operation up to 95% reduction of chemicals	weight (without quartz granulate)	34 kg
compared to chemical treatment	quantity quarztz	35 kg
considerable cost cutting due to	valve filter tank	top mount 4 port valve
less cost for chemicals	protection grade	IP 54
low-maintenance operation	electrical connection	230 V
low operational costs	over current protection	10 A

1st step: filtration of sediments

The upstream filter unit with "top mount" 4-port valve consists of a polyethylene filter tank (filled with activated filter granulate - special quartz) and a rotary pump. This pre filter has two layers with different granulate

dimension that removes sediment from the pool water.

2nd step: disinfection with UV-light

The following UV based disinfection prevents biological activities - especially the formation of algae.

Unlike other cleaning procedures this approach does not produce potentially dangerous byproducts.



article-no.: 140 00100 0000 article-no.: 140 00200 0000

equipment PURION Pool 40

Quartz-granulate fine granularity article number: 292 02300 0000

Quartz-granulate

coarse granularity article number: 292 02400 0000





PURION UV-lamp 48 W article number: 200 00500 0000

service-kit



PURION Pool 40 PVC-U



The integrated plant PURION PooL 40 PVC-U consists of a filtration of sediments and UV based disinfection of pool water. It is applied to disinfect circulation water of pools.

The pre filter removes sediment from the pool water. The following UV based disinfection prevents biological activities especially forming of algae.

applications	product line	PURION Pool 40 PVC-U
UV based disinfection of pool water up to 40 m ³	pool dimension	40 m³ (20 h operation) 30 m³ (15 h operation)
	dimension (L x B x H in mm)	770 x 530 x 940
	UV plant	PURION 2001 PVC-U
advantages	life time of lamps	10.000 h
plug and play system for immedi-	ine time or lamps	10.00011
ate operation up to 95% reduction of chemicals	max. delivery rate rotary pump	6 m³/h
compared to chemical treatment of the water	weight (without quartz granulate)	34 kg
considerable cost cutting due to	quantity quarztz	35 kg
less cost for chemicals	valve filter tank	top mount
suitable for salt water application	varve miler lank	4 port valve
	protection grade	IP 54
low-maintenance operation	electrical connection	230 V

over current protection 10 A

low operational costs

1st step: filtration of sediments

The upstream filter unit with "top mount" 4-port valve consists of a polyethylene filter tank (filled with activated filter granulate - special quartz) and a rotary pump. This pre filter has two layers with different granulate

dimension that removes sediment from the pool water.

2nd step: disinfection with UV-light

The following UV based disinfection prevents biological activities - especially the formation of algae.

Unlike other cleaning procedures this approach does not produce potentially dangerous byproducts.

Operating Time Coun

article-no.: 140 00300 0000

article-no.: 140 00400 0000

equipment PURION Pool 40 PVC-U

Quartz-granulate fine granularity article number: 292 02300 0000

Quartz-granulate

coarse granularity article number: 292 02400 0000



alternating current

PVC-U



PURION UV-lamp 48 W article number: 200 00500 0000

service-kit



PURION Pool 80



The integrated plant PURION PooL 80 consists of a filtration of sediments and UV based disinfection of pool water. It is applied to disinfect circulation water of pools.

The pre filter removes sediment from the pool water. The following UV based disinfection prevents biological activities especially forming of algae.

applications	product line	PURION Pool 80
UV based disinfection of	pool dimension	80m^3 (20 h operation) 60m^3 (15 h operation)
pool water up to 80 m ³	dimension (L x B x H in mm)	850 x 630 x 1.290
	UV plant	PURION 2501
advantages	life time of lamps	10.000 h
plug and play system for immedi-	max. delivery rate rotary pump	12 m³/h
ate operation up to 95% reduction of chemicals	weight (without quartz granulate)	48 kg
compared to chemical treatment	quantity quarztz	85 kg
considerable cost cutting due to	valve filter tank	top mount 4-Wege-Ventil
less cost for chemicals	protection grade	IP 54
low-maintenance operation	electrical connection	230 V
low operational costs	over current protection	10 A

1st step: filtration of sediments

The upstream filter unit with "top mount" 4-port valve consists of a polyethylene filter tank (filled with activated filter granulate - special quartz) and a rotary pump. This pre filter has two layers with different granulate

dimension that removes sediment from the pool water.

2nd step: disinfection with UV-light

The following UV based disinfection prevents biological activities - especially the formation of algae.

Unlike other cleaning procedures this approach does not produce potentially dangerous byproducts.

Operating Time Coun alternating current

article-no.: 140 00500 0000 article-no.: 140 00600 0000



equipment PURION Pool 80

Quartz-granulate fine granularity article number: 292 02300 0000

Quartz-granulate

coarse granularity article number: 292 02400 0000





PURION UV-lamp 90 W article number: 200 00600 0000

service-kit



PURION Pool 80 PVC-U



The integrated plant PURION POOL 80 PVC-U consists of a filtration of sediments and UV based disinfection of pool water. It is applied to disinfect circulation water of pools.

The pre filter removes sediment from the pool water. The following UV based disinfection prevents biological activities especially forming of algae.

applications	product line	PURION Pool 80
	P	PVC-U
UV based disinfection of pool water up to 80 m ³	pool dimension	80 m³ (20 h operation) 60 m³ (15 h operation)
	dimension (L x B x H in mm)	850 x 630 x 1.290
	UV plant	PURION 2501 PVC-U
advantages plug & play system for immediate operation	life time of lamps	10.000 h
up to zu 95 % reduction of chemi-	max. delivery rate rotary pump	12 m³/h
cals compared to chemical treat- ment of the water	weight (without quartz granulate)	48 kg
considerable cost cutting due to	quantity quarztz	85 kg
less cost for chemicals suitable for salt water application	valve filter tank	top mount 4-Wege-Ventil
suitable for sait water application		

protection grade

over current protection 10 A

electrical connection

IP 54

230 V

1st step: filtration of sediments

The upstream filter unit with "top mount" 4-port valve consists of a polyethylene filter tank (filled with activated filter granulate - special quartz) and a rotary pump. This pre filter has two layers with different granulate

dimension that removes sediment from the pool water.

2nd step: disinfection with UV-light

The following UV based disinfection prevents biological activities - especially the formation of algae.

Unlike other cleaning procedures this approach does not produce potentially dangerous byproducts.

Operating Time Coun alternating current PVC-U

low-maintenance operation

low operational costs

article-no.: 140 00700 0000 article-no.: 140 00800 0000

equipment PURION Pool 80 PVC-U

Quartz-granulate fine granularity article number: 292 02300 0000

Quartz-granulate

coarse granularity article number: 292 02400 0000





PURION UV-lamp 90 W article number: 200 00600 0000

service-kit



equipment Spare parts



PURION guarantees that essential equipment and spare parts are promptly delivered.

The optional equipment for the PURION UV-plants can expand possible applications. This is especially valid for the pre filtration options in the field of treatment of water.

Moreover the optional equipment for assembly makes it very easy to install the PURION plants and put them into operation.

Important spare parts e.g. PURION UV-lamps or filter cartridges are always at stock. Therefore it is ensured that even in a "emergency situation" the application is only interrupted for a very short period of time.

PURION guarantees that essential equipment and spare parts are promptly delivered.

PURION UV-lamps

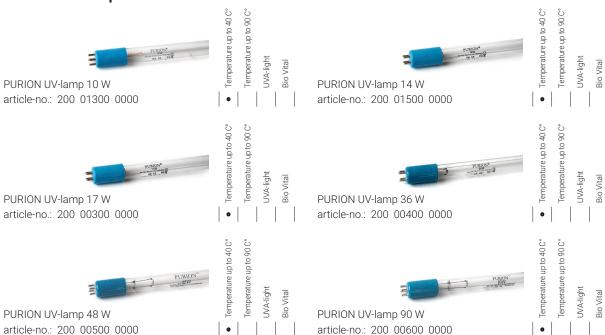


PURION low pressure UV Lamps are working without generating OZONE. They emit UV C radiation at a wave-length of 254 nm.

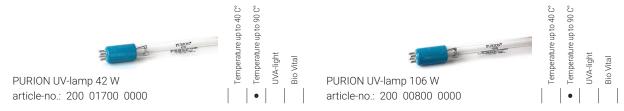
The guaranteed life time is valid in case of not exceeded 6 switching operations of the UV-lamp per day (in average). For temperatures above 40 °C special PURION UV-lamps that are operating with Amalgam technology are available.

advantages	product line	PURION UV-lamps
germs cannot become resistant to UV C radiation	total power	10 W - 106 W
PURION UV-lamps do not pro-	lamp current	425 mA - 1,2 A
duce OZONE	lamp voltage	25 V - 88 V
A special coating on the UV- lamps glass guarantees a stable UVC-radiation	life time of lamps	10.000 h / 8.000 h
low operational costs	diameter	15 mm
special options for temperatures	length (without pin)	212 mm – 843 mm
up to 90 C°	length pin	7,7 mm
PURION electronic ballasts are technically coordinated with the PURION UV-lamps	temperatures	-20 C° up to 90 C°

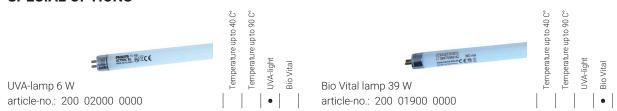
PURION UV-lamps - HIGH OUTPUT



PURION UV-lamps - AMALGAM TECHNOLOGY



SPECIAL OPTIONS



Hints regarding PURION UV-lamps

PURION low pressure UV Lamps are working without generating OZONE. They emit UV C radiation at a wavelength of 254 nm. At this wavelength UV radiation is most effective against bacterias, viruses and spores.

A special coating on the inside of the lamp tube guarantees stable UV C radiation. The lamp's glass serves as a filter for UV radiation < 240 nm.

At the end of the guaranteed life time PURION UV Lamps emit at least 60% of the initial UV C radiation intensity.

advatages

- germs and bacterias cannot become resistant to UV C radiation,
- PURION UV Lamps do not generate OZONE,
- disinfection be means of PURION UV Lamps implies low costs compared to chemical methods.

For the optimal operation of PURION UV lamps the correct handling and maintenance is essential. The following rules should be considered:

- It is unfavorable for the life span if the PURION UV lamp is switched very often. Every switch on reduces the life time approx. 1/2 h 1 h.
 Therefore: please only switch of the PURION UV-lamps if the expected interuption of operation is at least 30 minutes.
- The PURION UV-lamps should not be touched with fingers at the quartz made tube.
 Sweat of the hand is very aggressive against quartz and causes re-crystallization (cloudiness).
 If a PURION UV-lamp has been touched it is necessary to clean it with the PURION Service Kit.

Considering of this points ensures that the UV lamp reaches it's maximum life time.

The guaranteed life time of operation is valid in case of not exceeding 6 switching operations of the UV lamp per day (in average). To keep the warranty valid the PURION UV Lamps needs to be operated with PURION electronic ballasts.

Caution

During operation of PURION UV-lamps regulation and official guidelines have to be considered!

UV radiation is dangerous for human skin and eyes! Eyes and skin have to be appropriately protected. The user will be responsible for his own safety, as well as for the safety of people who are staying in areas where these radiation is used!

Please bear in mind that materials which are not UVC resistant may be damaged!

PURION immersion tube systems for reactors





The PURION immersion tube systems for reactors consists of a head made from stainless steel and a special quartz glass that allows for transmittance of UVC light.

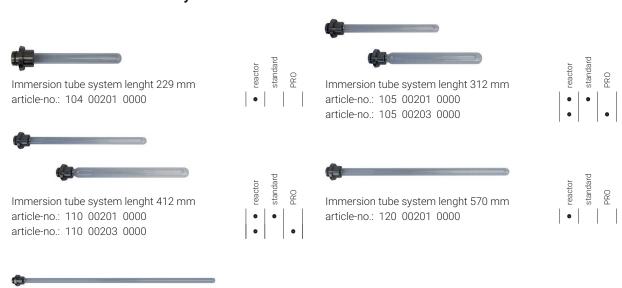
Optionally configurations as PRO systems or with Splinter Protection are available.

Immersion tube system lenght 920 mm

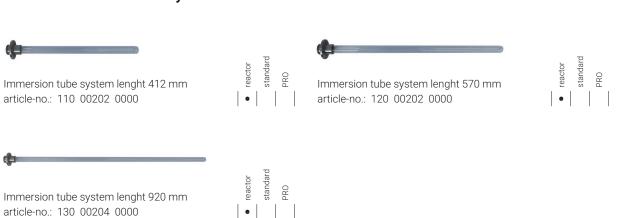
article-no.: 130 00201 0000 article-no.: 130 00202 0000



PURION Immersion tube systems for reactors made from stainless steel -



PURION Immersion tube systems for reactors made from PVC-U -



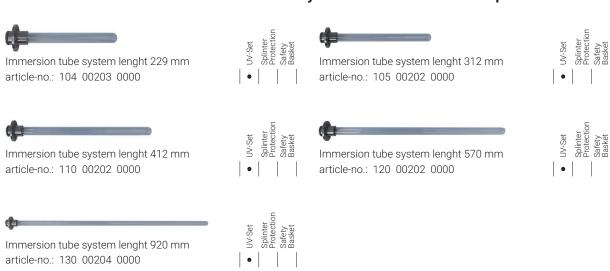
PURION immersion tube systems for UV-Sets



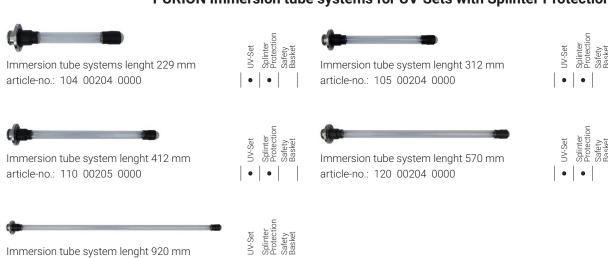
The PURION immersion tube systems for UV-Sets consists of a head made from stainless steel and a special quartz glass that allows for transmittance of UVC light.

Optionally configurations with Safety Basket or with Splinter Protection are available.

PURION Immersion tube systems for UV-Sets withou Splinter Protection



PURION Immersion tube systems for UV-Sets with Splinter Protection



PURION Immersion tube systems for UV-Sets with Safety Basket



article-no.: 130 00206 0000





PURION UV lamp cables



PURION UV lamp cable 1,50 m article-no.: 250 01500 0000



PURION UV lamp cable 10 m

article-no.: 250 09600 0000

PURION UV lamp cable 3 m

article-no.: 250 02800 0000



PURION UV lamp cable 5 m article-no.: 250 04300 0000









PURION assembly systems allow for a convenient installation of the PURION UV-lamps. Several configurations are available for different applications.

PURION assembly system



PURION assembly system

Single 1

article-no.: 290 11000 0000 article-no.: 290 10900 0000



PURION assembly system

Single 2

article-no.: 290 11200 0000 article-no.: 290 11100 0000





PURION assembly system

Dual 1

article-no.: 290 11400 0000 article-no.: 290 11300 0000



PURION assembly system

Dual 2

article-no.: 290 11600 0000 article-no.: 290 11500 0000



PURION assembly system switch box article-no.: 290 12100 0000

stainless steel

AIRPURION assembly system



ceiling suspension with variable height

AIRPURION mounting rack article-no.: 160 00040 0000 direct ceiling suspension

filters

for treatment of water



Combination of filters to supplement the PURION UV plants enable the complete recycling of the water combined with a compact construction design and efficient energy consumption.

The replacement of the filter cartridges is to be reviewed at least on annual basis.

On request the different filters will be provided pre assembled.

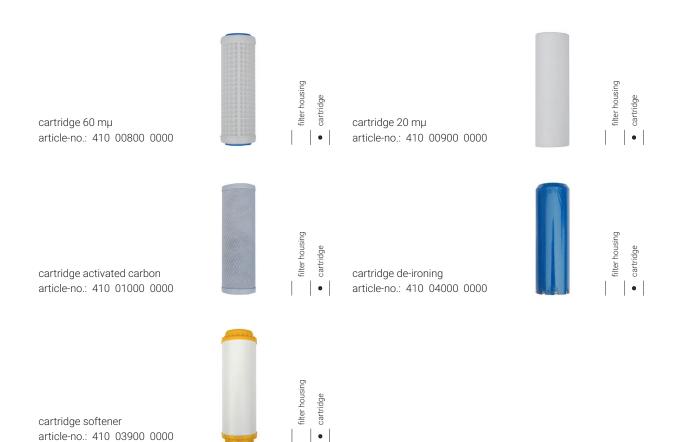
advantages	product line	filter as additional equipment for PURION UV-plants
compact design	height	335 mm
robust construction	diameter	135 mm
low energy consumption	configuration	pre filter 60 µm fine filter 20 µm activated carbon filter de-ironing filter softener
easy replacement of cartridges		
low investment costs	connection	1" inside thread
	working pressure	8 bar max.
low operational costs	temperature	0 - 50 C°



filter housing 10" x 2,5" article-no.: 410 01400 0001

The PURION UV plant needs to be installed behind the last filter the water flows through.

Herewith disinfection of the water close to the sampling point is ensured.



filter

for treatment of water



Combination of filters to supplement the PURION UV plants enable the complete recycling of the water combined with a compact construction design and efficient energy consumption.

The replacement of the filter cartridges is to be reviewed at least on annual basis.

least on annual	dasis.		
On request the o	different filters	will be provided	l pre assembled.

advantages	product line	filter as additional equipment for PURION UV-plants
compact design	height	335 mm
robust construction	diameter	180 mm
low energy consumption	configuration	pre filter 60 µm fine filter 20 µm activated carbon filter
easy replacement of cartridges	connection	1" inside thread
low investment costs	working pressure	8 bar max.
low operational costs	temperature	0 - 50 C°

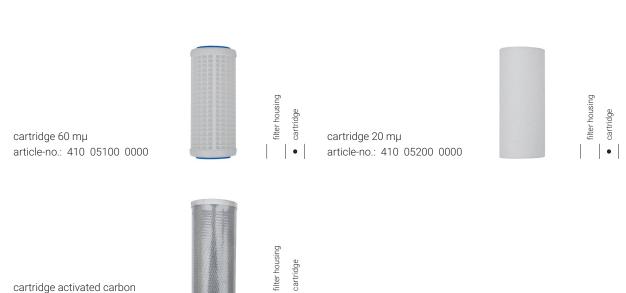


Filter housing 10" x 4,5" article-no.: 410 05000 0000

article-no.: 410 05300 0000

The PURION UV plant needs to be installed behind the last filter the water flows through.

Herewith disinfection of the water close to the sampling point is ensured.



maintenance support / others



UVC-light is dangerous for the human eye. The PURION safety goggles effectively protect the eyes against the UVC radiation. The visible part of the light is not retained.

Especially during operation of the PURION UV Sets or the AIR-PURION product line it is important to protect the eyes.



The PURION Service KIT enables a reliable and convenient cleaning of the immersion tube system. Cleaning should be carried out latest when the UV lamp is replaced at the end of the lifetime or if operation conditions require it.

The special cleaning tissues made from 100% cotton guarantee that the sensitive quartz glass is not damaged by scratches during the cleaning procedure.

The cleaning solution ensures that after the cleaning no residues of soap can lead to foam formation. Therefore the PURION Service KIT is suitable to drinking water applications.



PURION Quartz-granulate article-no.: 292 02300 0000 article-no.: 292 02400 0000

The PURION filter granulates made from special quartz is applied within the PURION Pool plants.

The Quartz-granulate is available with rough grain and fine grain. Therefore sediments are removed very efficiently from the circulation water before the UV based disinfection is carried out

The Quartz-granulate can be flushed out from filtrated sediments very easy during backwash procedure.

Company



with TRADITION & INNOVATION



The PURION® GmbH is a European company with a global focus. Our future-oriented and ecologically friendly methods help to improve a worth living environment.

PURION® GmbH is member of the BMBF-program "Twenty20 - Partnership

for Innovation", "Research Regarding UV-LED-Light for Innovative Appli-cations within Health Care, Water Treatment, Production Technology and Sensor Technology". Highly reputable German research institutions are co-operation partners within this program.

PURION® GmbH is partner of the cooperation's network HySic – Hygienic Safety. The aim is to develop and to realize solutions for the improvement of the hygienic safety in different important applications.



To ensure compliance with high quality standards production and manage-ment processes of PU-RION GmbH are established in line with the certified standard management system DIN EN ISO 9001:2015. The certification is renewed annually.



PURION GmbH

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H: www.purion.eu



I. General terms of the contract

The Costumer has notice of the following general conditions for sales and supplies. The Costumer agrees with the fact that following general conditions are essential elements of contracts concluded between the Costumer and the Supplier.

II. Scope of supplies and services

- 1. The scope of any supplies or services effected hereunder shall be governed by the written statements supplied by the two parties. If a contract is concluded and the parties have failed to make any such statements, then either the Supplier's or the Service Provider's (hereinafter referred to as »Supplier«) written order confirmation, or, failing such, the written order from the Customer shall be binding.
- 2. For all supplies or services, the provisions stipulated by the Verband Deutscher Elektrotechniker (= Association of German Electrotechnical Engineers) shall be applied as far as they are relevant for the safety of the supplies and services. Variations are allowed if the same safety standard is ensured by other means.
- 3. The Supplier reserves the unrestricted right of ownership and the copyrights to all quotations, drawings, and other documentation; they shall be made available to third parties only if prior written approval from the Supplier has been obtained.
- 4. The scope of the delivery shall be as indicated in the written order confirmation from the Supplier. If such confirmation is not available, the delivery note shall be considered the order confirmation.
- 5. Any verbal collateral agreement shall be effective only if confirmed in writing.

III. Price

The prices are understood net, plus V.A.T. as provided by law. They are valid ex works, exclusive of packaging, freight charges, postage, insurance, and other additional expenses. Samples or similar preparatory work occasioned by the Customer will be charged for even if the contract is not awarded.

IV. Reservation of title

The goods remain the property of the Supplier until all claims he may have vis-a-vis the Customer as a result of the said business transaction are satisfied. Prior to this, any pledging or transfer of ownership by way of security is not allowed, and reselling is only permitted for resellers in the normal course of business under the proviso that the reseller receives payment from his customer. Any costs incurred in connection with interventions shall be borne by the Customer.

V. Terms of payment

- 1. The payments shall be effected free place of payment of the Supplier.
- 2. The Customer may effect set-offs only against undisputed or legally established debts.
- 3. In case of non-observance of payment terms, or if reasonable doubts in respect of the credit-worthiness of the Customer exist, the Supplier has the right to request advance payments and other payments for all outstanding accounts and even for those accounts that are not yet due, have any unpaid deliveries returned at the Customer's expenses, or withdraw from the contract without notice.

VI. Time allowed for deliveries and services

- 1. Delivery times/deadlines shall only be binding if expressly approved by the Supplier in writing. Compliance with the deadlines can only be assured if the Customer has fulfilled all of its contractual obligations and/or has effected any agreed advance payments and/or has met any other duty he may have in respect of prior performance or cooperation. Another prerequisite for observance of the deadlines is the correct and on-time delivery by the suppliers of the Supplier as far as the Supplier has selected them with due care and in a business-like manner.
- 2. The deadline is considered met if the ready-for-use consignment was dispatched or collected within the time specified for delivery or performance. In case of delayed delivery due to Customer's fault, the deadline is considered met if the information of readiness for dispatch was given within the agreed period of time.
- 3. If proof can be furnished that non-observance of the deadline for the deliveries and services happened because of mobilization, war, riot, strike, acts of the authorities, or occurrence of unpredictable circumstances, the time shall be reasonably extended.
- 4. The same holds if Sub-Contractors are affected by these circumstances.
- 5. If the Supplier is in default, and if an additional period of time granted by the Customer has lapsed without any response on the part of the Supplier, the Customer has the right to withdraw from contract. Damages for non-performance cannot be claimed unless the default occurred as a result of the Suppliers' wrongful intent or gross negligence.
- 6. In case dispatch or delivery of the goods are delayed on request of the Customer, then, beginning one month after the date of advice of readiness for shipment, a storage fee amounting to ½ % of the invoice amount can be charged to the Customer for any commenced month; such storage fee, however, shall be limited to 5% unless proof of higher costs is furnished.
- 7. In case of orders for goods to be delivered on demand, the call time for the overall order shall be one year from the date of confirmation by the Supplier. The Customer agrees to inform about his forthcoming request not later than four production weeks in advance. If the Customer fails to demand the full quantity until expiration of the time specified, the Supplier may, after prior notice, opt for performance or withdraw from the contract. Claims for damages, if any, shall not be affected.

VII. Passing of the risk

- 1. Upon delivery of the goods to the carrier company, the risk will pass to the Customer, even if delivery on carriage paid basis or self-collection had been agreed upon, or the ready-for-use consignment was dispatched or collected.
- 2. In the absence of other agreements, the Supplier is free to choose the kind of packaging, the routing, and the mode of dispatch. The costs for packaging shall be borne by the Customer.
- 3. The packaging will be effected with best care, the dispatch will be effected to the Supplier's best discretion. At the Customer's request and expenses, the Supplier will insure the consignment against damage by breakage, transport damage, and fire damage.
- 4. In case the dispatch or delivery of the goods is delayed on request of the Customer or for reasons lying with him, then the risk shall pass on to him for the time of the delay. The Supplier, however, undertakes to effect the insurances required by the Customer at the Customer's request and expenses.

VIII. Acceptance

- 1. Delivered items have to be accepted by the Customer, even if those items show minor shortcomings.
- 2. Partial deliveries are allowed.

IX. Liability for defects

For any defects, including the absence of warranted qualities, the Supplier shall be liable as follows:

- 1. All parts or services which within a period of 24 months from the date of the passing of the risk, irrespective of their operating time become unuseable as a consequence of any circumstances that have existed already prior to the time of the passing of the risk, i.e. in particular, due to defective design, faulty material, or faulty workmanship, or whose useability is considerably impaired, shall, at the Supplier's option and at no cost, either be repaired or replaced by new items or be provided again.
 - Any such defects found shall be promptly notified to the Supplier in writing; the goods shall be sent to the Supplier for examination.
- 2. The Customer affords the Supplier the opportunity and grants it such reasonable period of time as necessary to remedy the defects. If he fails to do so, the Supplier shall be exempt from the liability for defects.
- 3. In case the Supplier fails to remedy the defect within the additional period of time granted to him, the Customer may require the contract to be cancelled (exchange) or request reduction of the price (diminution).
- 4. The Customer agrees to fulfill all his contractual obligations, i.e. in particular regarding the agreed Terms of Payment. In case a notification of defects is put forward, then payments from the Customer may be withheld to an amount reasonably proportionate to the defects found
- 5. The liability for defects does not include normal wear as well as any defects developing after the passing of the risk as a result of faulty or negligent handling, due to non-observance of specifications issued by the Supplier, excessive use, unsuitable production equipment, and such influences of a chemical, electrochemical or electrical nature which are not expressly provided for in the contract; not included are also defects attributable to the use of material supplied by the Customer.
- 6. Any changes or repairs performed in an improper manner by the Customer or third parties without the prior consent from the Supplier will void any liability for the consequences resulting from this.
- 7. The warranty period shall be 3 months for remedied items, and six months for replacement deliveries. It runs, at least, until the end of the original warranty period for the delivered item. The duration of the warranty period for defects shall be extended by the duration of the downtime necessary for such remedying, replacement deliveries or services.
- 8. The provisions regarding warranty periods under 1. and 7. shall not apply as far as longer periods are provided for by law.
- 9. Any further claims of the Customer vis-a-vis the Supplier and the Supplier's agents shall be excluded, in particular claims because of damages not to the delivery item proper. This shall not apply as far as either liability to the Product Liability Act, e.g. for personal injuries and damages to objects of private use, or compulsory liability in cases of wrongful intent, gross negligence, or absence of warranted qualities, is invoked.
- 10. The Articles 1. through 9. shall also apply to any right to claim corrective work, replacement delivery or damages the Customer may have as a result of advice or consultation provided under the contract, or due to breach of additional contractual obligations.

X. Impossibility of performance, adjustment of contract

If it should be impossible for the Supplier or the Customer to effect the agreed supplies or services, then the general legal principles shall apply as follows:

The Customer is authorized to claim damages from the Supplier in case of premeditation or gross negligence. Such damages, however, shall be limited to 10% of the value of that part of the delivery or service which cannot be put into operation as desired due to the said impossibility. Any claims for damages on the part of the Customer exceeding the said limit of 10% are excluded. This shall not apply if compulsory liability is invoked, e.g. in instances of wrongful intent or gross negligence. Nothing hereunder shall affect the Customer's right to withdraw from the contract.

Inasmuch as unforeseen circumstances to Article V, clause 3, para. 1, effect a considerable change in the economic significance or the contents of the delivery or service, or exert a major influence on the Supplier's operations, the contract shall be reasonably adapted in accordance with the requirements of good faith. As far as this proves to be in conflict with economic interests, the Supplier has the right to withdraw from the contract. If he opts to exercise this right, he shall, after he became aware of the consequences resulting from said circumstances, inform the Customer accordingly even if extension of delivery time had been agreed upon with the Customer.

XI. Other claims for damages

Claims for damages on the part of the Customer resulting from breach of contract, breach of obligations during the contract negotiations, or tort, are excluded. This shall not apply inasmuch as either liability according to the Product Liability Act, e.g. for personal injuries and damage to goods of private use, or compulsory liability for cases of wrongful intent and gross negligence, is invoked. The same limitation of liability shall also be valid for the Customer.

XII. Place of jurisdiction

- 1. If the Customer is a fully qualified merchant, the Supplier is free to decide if either the place of the Supplier's head office or the place of the Supplier's branch office shall be the exclusive place of jurisdiction for all direct or indirect disputes arising from the contractual relationship.
- 2. The contractual relationship shall be governed exclusively by German law, without any recourse to the UN Right of Purchase (CISG).

XIII. Validity of the contract

If any provision of the contract is held to be ineffective, this shall not affect and impair the validity of the other provisions. The foregoing shall not apply if adherence to the contract would constitute an unreasonable hardship for one of the parties.

WARRANTY for PURION UV-lamps

The PURION® GmbH grants for low pressure UV lamps the following warranty:

- Basis of the decision on a warranty or replacement is the evaluation in our PURION labs. Therefore complaints need to be sent to PURION® GmbH.
- The warranty is granted for 10.000 hours of operation for PURION UV low pressure lamps and 8.000 hours for PURION UV Amalgam lamps up to maximum 2 years from the date of delivery.
- Up to 1.000 hours of operation the lamps will be fully replaced.
- Up to 10.000 hours of operation the replacement and financial compensation will be proportional referring to the operating time.
- For PURION Amalgam lamps the proportional compensation refers to the operation time of 8.000 hours.
- To keep the warranty valid the number of switching operation must not exceed an average of 5-6 per day.
- Operating time and switching operations needs to be proved with suitable measures.
- To keep the warranty valid the PURION UV lamps needs to be operated with PURION electronic ballasts.
- Breakage of glass will not be compensated.

These conditions are valid, when no other special agreement is stated. Special agreements must put down in writing.