

Pallas UV systems emit an UV-C irradiation with $\lambda=254$ nm; this wave length causes an alteration of some chemical links present among nucleotids so that the information contained and conveyed by DNA of every organism present in the water change.

These alterations lead to the cellular death and so to the bacteriological elimination.

This disinfection system has a physical working principle and not chemical. Nothing is added to, not taken away from water; in this way there is no formation of undesired by-products even in case of overexposure, in the full respect of environment. The time of interaction water-radiation is of few second; the disinfection directly takes place only during the passage of water. For this it is necessary to install the UV-C system after any other treatment

The LCD series UV-C systems are composed of:

- Stainless steel reactor that contains the special germicidal lamps
- Control panel, made in compliance with the *CE standard*

Main Application:

Water Disinfection for:

- Private water
- Light industrial process water
- Food & Beverage industry

Certification:

CE, WRAS, GOST

Technical description:

Flow rates:	from 1 to 12 m ³ /h (depending on UV –C trasmittance value)
UV-C dose after 9000 hr:	300 - 400 J/m ² (depending on UV model)
Power:	from 30 W to 160 W
Connections:	threated connection
Lamps:	High efficiency low pressure lamps
Lamps lifespan:	9.000 hrs
Sensor:	UV-C selective sensor (only on Plus models)
Max Pressure:	10 bars (optional 16 bars)
Temperature range:	0 – 40 °C
UV reactor material:	Stainless steel 316L
Control Panel material:	Plastic material

Stainless steel reactor:



The UV reactor is totally in stainless steel AISI 304 or 316L internally/externally polished; the stainless steel of its chemical/physical characteristics is particularly suitable for the treatment of primary waters, and being polished also in the internal part it is completely without porosity that could favour the keeping of spores; moreover, being glass polished, the germicidal action of the lamps is increased.

Configuration:	U shape (405 and 412 models) Z shape (440, 480, 550 and 80/2 models)
Mounting:	Vertical
Connections:	Female threaded
UV sensor holder :	Stainless steel 316L
UV sensor:	Selective sensor (option: DWGV or O-Norm Sensor)
Seals:	Silicone and Viton

Control Panels:

The electrical control panel supplied is ready for the installation (complete of all the necessary cables)



- Polypropylene control box
- Protection class: IP 54
- Status messages
- Microprocessor control
- Total hour meter
- Resettable hour meter (only on Plus version)
- Control of each lamp
- Alarm 220 V NA/NC outlet
- Alarm Free contact outlet
- Remote on/off (optional)
- 4-20 mA outlet (optional)
- UV intensity: % (only on Plus version)
- Control of temperature - irradiation (pre set alarm threshold) (only on Plus version)
- Temperature Range: (0-40°C)

2502008173	1 x 30W	405 LCD	1.1 m3/hr
2502009547	1 x 40W	412 LCD	2.7 m3/hr
2502009961	1 x 40W	440 LCD	3.6 m3/hr
2502009548	2 x 40W	450 LCD	4.5 m3/hr
2502009963	1 x 80W	480 LCD	5.1 m3/hr
2502009965	2 x 40W	550 LCD	6.6 m3/hr
2502000071	2 x 80W	80/2 LCD	12m3/hr
2502001246	1 x 30W	405 LCD Plus	1.1 m3/hr
2502009546	1 x 40W	412 LCD Plus	2.7 m3/hr
2502009962	1 x 40W	440 LCD Plus	3.6 m3/hr
2502009964	1 x 80W	480 LCD Plus	5.1 m3/hr
2502009966	2 x 40W	550 LCD Plus	6.6 m3/hr
2502000072	2 x 80W	80/2 LCD Plus	12m3/hr

