AM Series

UV system emitting an UV-C irradiation with λ =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 AM series UV systems are composed of:

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

Main Application:

Water Disinfection for:

- Municipal water
- Industrial process water
- Food & Beverage industry
- Hospitals
- Hot water
- Horticulture

Certification:

CE, WRAS, GOST

Technical description:

Flow rates: from 20 to 160 m³/h (depending on UV-C transmittance value)

UV-C dose after 12000 hr: 400 J/m²

Power: from 0,44 kW to 6 kW

Connections: treated or flange type depending on model

Lamps: High efficiency low pressure amalgam lamps – 200W

Lamps lifespan: 12.000 hrs

Sensor: UV-C selective sensor (on PLUS models)

Max Pressure: 10 bars (optional 16 or 25 bars)

Temperature range: 0 - 50 °C (ask for higher temperature)

UV reactor material: AM 24-50 aand 60 Stainless steel 304 (SS 316L optional)

AM 96-125 and 160 only SS 316L

Control Panel material: Painted steel – RAL 7035

Stainless steel reactor:



The UV reactor is totally in stainless steel AISI 304 or 316L <u>internally/externally polished</u>; 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.

To make the maintenance and inspection operations easier the chamber can be opened on the side.

Configuration: L shape

Mounting: horizontal or vertical

Connections: treated or flanges PN 10 (UNI EN 1092 -1)

UV sensor holder: Stainless steel 316L

UV sensor: selective sensor (option: DWGV or Ö-Norm Sensor)

Seals: Silicone and Viton

Mixing plates: present on all the models

Control Panel:







AM 96 - 125 - 160

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

AM 24 - 50 - 60

- Steel painted control panel box (RAL 7035)
- 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)
- GSM box for remote monitoring and control with mobile phone PE22- PE 60 (optional)
- Temperature Range: (0-40°C)

AM 96 - 125 - 160

- Steel painted control panel box (RAL 7035) with 2 doors, main switch, cooling fans and UV cube monitor
- Protection class: IP 54
- Status messages (5 languages: Italian, English, Spanish, Portuguese, German)
- Microprocessor control
- Total hour meter
- Resettable hour meter
- Control of each lamp
- Electrical panel temperature control
- ON/OFF timer
- Alarm 220 V NA/NC outlet
- Remote on/off
- Alarm Free contact outlet
- 4-20 mA outlet (optional)
- UV intensity: W/m² or %
- Pre alarm UV intesity
- Shutdown for high temperature in the UV chamber and in the electrical panel
- Control of temperature & UV irradiation (pre set alarm threshold) (only on Plus version)
- Shut off for flooding
- Provision for connection with external flow: online flow visualisation, shuttoff in case of no flow, possible shut off for low flow, possible shut off for high flow (optional)

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- Datalog of the flow rate (optional)
- Datalog of UV irradiance and panel & UV chamber temperature (optional)
- GSM box for remote monitoring and control with mobile phone (optional)
- Temperature Range: 0-45°C

		in/out
1 x 200W	AM 24, 24 m3/hr	2" M
2 x 200W	AM 50, 50 m3/hr	DN 80
2 x 200W	AM 60, 60 m3/hr	DN 80
3 x 200W	AM 96, 96 m3/hr	DN 100
4 x 200W	AM 125, 125 m3/hr	DN 150
4 x 200W	AM 160, 160 m3/hr	DN 150
1 x 200W	AM 24 Plus, 24 m3/hr	2" M
2 x 200W	AM 50 Plus, 50 m3/hr	DN 80
2 x 200W	AM 60 Plus, 60 m3/hr	DN 80
3 x 200W	AM 96 Plus, 96 m3/hr	DN 100
4 x 200W	AM 125 Plus, 125 m3/hr	DN 150
4 x 200W	AM 160 Plus, 160 m3/hr	DN 150