# NanoTech UV-C Disinfection System

A NON-CHEMICAL APPRORACH TO WATER SANITIZATION

For pool & spa, fish pond, and drinking water system



# Product Features

Robust Housing Mirror-Polished Interior

Quartz Sleeve

## Precise design, Top Performance

Durable stainless steel AISI 316 housing, with mirror-polished interior that increases the UV-C radiation reflection, thereby increasing the efficiency by up to 35%

High quality quartz sleeve ensures nearly 100% transmission of UV-C at 254nm. It offers protection against air and water flow, breakage, and temperature fluctuations.



# NanoTech UV-C ADVANTAGES

- **1) USER-FRIENDLY** Easy installation and maintenance. The optional timer can control the running operation hours.
- **2) STRONG AND DURABLE** Robust housing in AISI 2205 Stainless Steel for anti-corrosion long life. Professional quality UV lamp offers a life time over 9,000 ( to 12,000) hours.
- **3) HIGH EFFICIENCY** The mirror-polished interior of the housing increases the UV reflection rate and thus enhances the work efficiency by up to 35%.
- **4) HIGH TRANSMISSION** High-quality quartz sleeve ensures nearly 100% transmission of UV-C at 254nm. It offers protection against air and water flow, breakage, and temperature fluctuations.
- **5) ENVIRONMENTAL-FRIENDLY** It reduces the chlorine consumption of up to 70%. Also water renewal is reduced due to fewer by-products formed.
- **6) BETTER PROTECTION** The disinfected water is free of unpleasant smells and does not irritate the eyes, because of the significant reduction the number of chloramines. No risk of allergies, and your pool is protected against pathogenic organisms and algae.



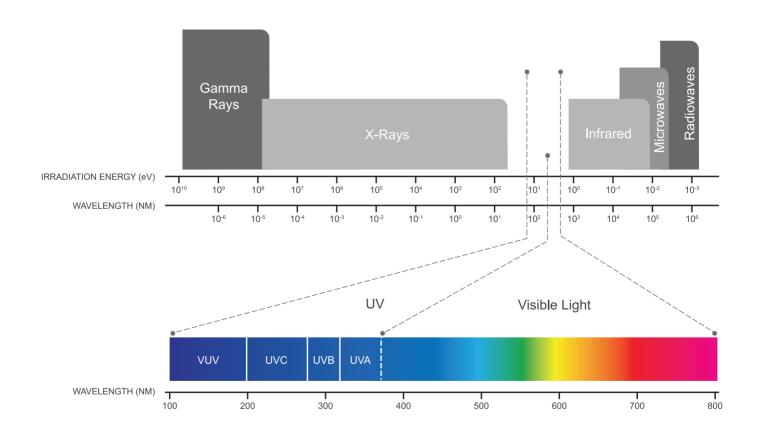
## About UV-C

#### Advantages of using UV-C for water disinfection

At a wavelength of 253.7nm, UV-C light is a very powerful germicide. It deactivates the DNA of bacteria, viruses and other pathogens, destroying their ability to multiply and cause disease.

Ultraviolet technology is a non-chemical approach to pool disinfection. In this method of disinfection, nothing is added which makes this process simple, inexpensive and requiring very low maintenance.

UV-C light is become increasingly favoured by the pool industry for its ability to break down and remove chloramines, which cause eye, skin and nose irritation, and breathing difficulties.



# Product Information

## NanoTech UV-C Standard

These UV systems combine all the benefits listed above in a very compact design. Another advantage is that the lamps are single ended and can be easily replaced.

#### **Main Applications**

- 1) Residential swimming pools
- 2) Fish ponds
- 3) Drinking water





Code 230V	Code 120V	Model	Max Flow Rate (m³/h)	Pool Vol (m³)		Maximum Pressure		Electric Ballast	Maximum Current (A)	UV Lamp lifetime (hr.)
9130401	9130415	NT-UV16	7	15	16W	3 bar	1.5"/50mm or 2"/63mm	120-240V AC; 50-60Hz	0.29	9,000
9130402	9130409	NT-UV40	20	40	40W	3 bar	1.5"/50mm or 2"/63mm	120-240V AC; 50-60Hz	0.29	9,000
9130404	9130414	NT-UV75	25	75	75W	3 bar	1.5"/50mm or 2"/63mm	120-240V AC; 50-60Hz	0.57	9,000



## NanoTech UV-C Timer

Emaux Nano-Tech UV-C Timer includes an integrated TIMER which accurately monitors the operating hours of the UV-C lamp. You will be reminded when the lamp must be replaced.

## Advantages of built-in timer

- 1. User-friendly control pad with time clock digital display
- 2. Built-in adjustable timer for the UV-C lamp
- 3. Digital alert when the lamp needs replacing

Note: "T" stands for Timer

Code 230V	Code 120V	Model	Max Flow Rate (m³/h)	Pool Vol (m³)	Input Power	Maximum Pressure	Connections	Electric Ballast	Maximum Current (A)	UV Lamp lifetime (hr.)
9130403	9130411	NT-UV40-T	20	40	40W	3 bar	1.5"/50mm or 2"/63mm	120-240V AC	0.44(120V) 0.2(240V)	9,000
9130405	9130410	NT-UV75-T	25	75	75W	3 bar	1.5"/50mm or 2"/63mm	120-240V AC	0.82(120V) 0.38(240V)	9,000

# Product Information

## NanoTech UV-C

## With Amalgam Lamps and Flow Switch

Operating between low and medium pressure UV applications, NanoTech amalgam achieves a high relative power density operating in a broad temperature range. The amalgam version includes a flow switch which will cut-off the lamp power to protect the system from over-heating when the water flow is lower than required. Due to a special coating technology, NanoTech guarantees a continued performance of 85% after 12,000 hours operating in a broad temperature range. A timer version is available as an option.

### **Main Applications**

- 1) Drinking water system
- 2) Waste water system
- 3) Process water treatment unit
- 4) Swimming pool & spa





Note : 'F" stands for Flowswitch, "T" stands for Timer

Code 230V	Model	Max Flow Pool Input Maximum Connect Rate (m³/h) Vol (m³) Power Pressure		I Connections I	Electric Ballast	Maximum Current (A)	UV Lamp lifetime (hr.)		
9130407	NT-UV130F	30	130	130W	3 bar	1.5"/50mm or 2"/63mm	240V AC	0.95	12,000
9130408	NT-UV130TF	30	130	130W	3 bar	1.5"/50mm or 2"/63mm	240V AC	0.95	12,000



Emaux NanoTech UV-C Ozone combines UV-C technology with ozone production ensuring fresh and healthy pool water with the minimum use of chlorine.

#### **Advantages**

- 1. Built-in electronic pre-selector ensure a smooth power supply
- 2. Up to 35% more UV-C yield as a result of reflection
- 3. Reduces use of chlorine by up to 80%
- 4. Ozone UV-C lamp life 12,000 hours
- 5. Built-in timer for the UV-C lamp
- 6. Digital alert when the lamp needs replacing

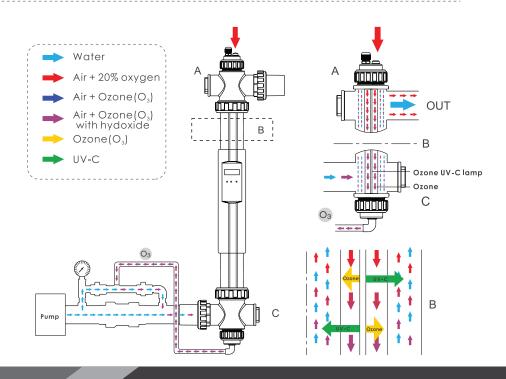


Note: 'O" stands for Ozone, "T" stands for Timer

Code 230V	Model	Max Flow Rate (m <sup>3</sup> /h)	Pool Vol (m <sup>3</sup> )	Input Power	Maximum Pressure	Cell Connections	Electric Ballast	Max Current (A)	UV Lamp lifetime (hr.)	
9130406	NT-UV87-TO	25	90	87W	3 bar	1.5"/50mm or 2"/63mm	240V AC 50-60Hz	0.5	12000	

## **UV-C Ozone Operation**

The water is pumped into the unit through the reactor. Air is drawn through the venturi system into the unit via the air injector and flows through the quartz glass and the ozone UV-C lamp. The air enters the lamp and is charged with ozone molecules, then passes through the ball valve to be mixed with the water in the reactor.



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