

## **Hydrogen Peroxide Generator**

The vaporized hydrogen peroxide generator serves to decontaminate and sterilize inner surfaces using liquid hydrogen peroxide. The whole process is possible due to patented technology. In usual conditions, the VHP generator can sanitize and disinfect the inner surfaces of closed boxes or rooms.

In Pharma and Radio pharma fields, decontamination and sterilization of isolators is an important aspect of the daily practice of those who work in this field and a requirement that today is particularly challenging and difficult. The use of VPHP allows effective and safe decontamination.

A vapor Phase Hydrogen Peroxide (VPHP) generator is specifically designed to perform bio-decontamination processes of clean, dry, sealed enclosures used in medical, pharmaceutical, and biological applications.

1) Basic Information 2) features 3) Part 4) Standard And Option 5) Display	6) More details 7) H <sub>2</sub> O <sub>2</sub> Cycle 8) Download	ad
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### 2) Features:

- 1. MOC: SS304/316.
- 2. Decontamination with low temperature.
- 3. Mobile device: possible decontamination of surfaces in various locations.
- 4. Short decontamination cycle.
- 5. Low cost, no interrupt.
- 6. Environmentally friendly (catalytically converts to water and oxygen)
- 7. Wheels for easy movement.

Basic control function is including:

- 8. Monitoring and control the Bio decontamination process.
- 9. Alarm/warnings will be trigged and recorded when the key parameters are out of range.
- 10. The data and records are in compliance with data integrity.
- 11. The local control panel is installed on the VHP generator housing. It main consists of:
- 12. USB port
- 13. Printer
- 14. Touch control panel

#### 3) Parts:

- 1. Alarm/warnings will be trigged and recorded when the key parameters are out of range.
- 2. The data and records are in compliance with data integrity.

The local control panel is installed on the VHP generator housing. It main consists of:

- 3. USB port
- 4. Printer
- 5. Touch control panel

#### 4) STANDARD AND OPTION:

- 1. The company will provide the following documents, and other documents required by the customer will be provided as options.
- 2. Operation Manual (OM)
- 3. Maintenance Manual (MM)
- 4. Pipes & Instruments Drawing (P&ID)
- 5. Layout Drawing
- 6. Electric Drawing
- 7. Instruction for the Main Parts
- 8. Material Certificate
- 9. Site Acceptance Test (SAT)Site Acceptance Test (SAT)
- 10. Installation Qualification (IQ)
- 11. Operational Qualification (OQ)
- 12. Design Qualification (DQ)

## 5) Display (HMI PANEL):

This hydrogen peroxide generator control system is operated with a color touch screen. The screen displays the actual parameters of the environment and monitors emergency statuses.



# 6) More details:

Outside dimensions *		
Width	730	
Height	920	
LENGHT	790	

Details		
Weight	87 kg	
Electrical connection	230 V/ 50 hz , 16 A	
Power consumption max	2.8 kw	
Control system	PLC	
Disinfection agent	Hydrogen peroxide 35%	

#### **7) H2O2 CYCLE**

Hydrogen peroxide is a chemical compound with the formula H2O2. In its pure form, it is a very pale blue liquid that is slightly more viscous than water. It is used as an oxidizer, bleaching agent, and antiseptic, usually as a dilute solution in water for consumer use, and in higher concentrations for industrial use.

Hydrogen peroxide is a reactive oxygen species and the simplest peroxide, a compound having an oxygen—oxygen single bond. It decomposes slowly into the water and elemental oxygen when exposed to light, and rapidly in the presence of organic or reactive compounds. It is typically stored with a stabilizer in a weakly acidic solution in a dark bottle to block light. Hydrogen peroxide is found in biological systems including the human body. Enzymes that use or decompose hydrogen peroxide are classified as peroxidases.

