



ZEFIRO

VHP Generator



# Zefiro VHP Generator

Zefiro is a high-performance hydrogen peroxide vapor (VHP) generator with reduced consumption. Its high integration flexibility and compact size allow for easy installation on third-party systems and existing setups.

The system's core principle is based on vaporizing a hydrogen peroxide solution (30–35%) into an aerosol using a flow of hot air, generating a high-concentration VHP stream.

#### The generator operates in two modes:

- **Master** the biodecontamination process is managed by the generator
- **Slave** the biodecontamination process is managed by an external supervisor which controls and operates the hydrogen peroxide vapor generation system





# System Functions

- Master or slave operation mode
- Integration capability with third-party systems
- Modbus RTU communication protocol (Modbus TCP/IP optional)
- User management
- Recipe management
- Process parameter logging and display
- Exportable reports in HTML or PDF format

## Cycle Operation

### Preparation

Ventilation to achieve optimal temperature and relative humidity conditions.

### Conditioning

**Phase 1:** VHP generation to reach the target concentration (ppm).

**Phase 2:** Maintenance of the set VHP concentration for the configured exposure time.

### Aeration

Ventilation until the final VHP concentration of 1 ppm is reached.





# Technical Data

## SPECIFICATION

T/RH% probe (optional)	0 ÷ 100% Rh	0 ÷ 100°C
High-concentration H <sub>2</sub> O <sub>2</sub> vapor probe (optional)	0 ÷ 2.000 ppm	
Scale (optional)	0 ÷ 10.000 g	
Aerosol generator	0 ÷ 9 g/min	
Nominal fan flow rate	120 m <sup>3</sup> /h	
Communication protocol	ModBus RTU/TCP	
Power supply	230 V/50 Hz	
Maximum power consumption	3 kW	
Dimensions (WxDxH)	(LxPxH) 380x680x850 mm	
Weight	40 Kg	
Outlet connection	2" Tri-Clamp (standard A SMEBPE)	

## COMPONENT

1	USB	USB 3.0 interface, type A/A connection
2	RJ45	Shielded RJ45 Ethernet interface
3	SACC-8P	8-pin connector for 4–20 mA device
4	SACC-5P	5-pin Modbus connector – H <sub>2</sub> O <sub>2</sub> concentration
5	SACC-5P	5-pin Modbus connector – Scale
6	PLC12	Anti-drip quick-release fitting
7	TC 2"	VHP outlet
8	TC 2 1/2"	Optional supplementary ventilation outlet
9	IPS LCD	10" LCD Touch Screen (optional)
10	AC 240V	Electrical power supply





Via Circondario 1533 · La Cotarda - Pontinia (LT)

Phone: +39 **0773 840032**

Fax: +39 **0773 854057**

E-mail: [ocsrl@ocsrl.it](mailto:ocsrl@ocsrl.it)

[WWW.CLEANROOMOC.COM](http://WWW.CLEANROOMOC.COM)

