



tuana

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# DECONTAMINATION UNITS INFECTION PREVENTION SOLUTIONS

## GENERAL INFORMATION

## HYGIENE MATTERS

Enhanced level of hygiene is required to stop the virus epidemics and pandemics from spreading and infecting public locally and globally. Cleaning and disinfection in hospitals and clinics, means of transport, hotels, commercial and industrial buildings is essential to infection prevention.

Hospital Acquired Infections are a significant and increasing problem in the healthcare sector causing infections for millions of patients globally.

Hygiene lacks especially in emergency and disaster situations and provides the spread of infectious contaminants. In disasters where sanitation is collapsed or not available the prevention of infections and deceases caused by contaminants is crucial for public health and personnel. Lack of hygiene in mobile instant clinics infects personnel and patients and acquire further hospitalization

## REVOLUTIONARY SOLUTIONS

Tuana Projects infection prevention solutions disinfect and decontaminate the infrastructure (rooms, enclosed spaces, tents, vehicles), surfaces, furniture and ambient air in environments.

Our solutions are not classified as medical devices and are not intended to disinfect medical devices or in any how to be in direct contact with patients.





## OUR SOLUTIONS



## INNOVATIVE PORTABLE AND SCALABLE BIO-DECONTAMINATION SOLUTION

Common vaporized hydrogen peroxide  $H_2O_2$  portable and scalable bio-decontamination unit eliminates all harmful contaminants on surfaces. High-quality product from Finland has significantly more powerful  $H_2O_2$  generation than any other device with comparable size and weight. With a broad-spectrum activity it has a good penetration into hard to reach locations. It's environmentally friendly with a complete degeneration to harmless water and oxygen.

Exceptional portability and affordability opens up new decontamination use cases, such as:

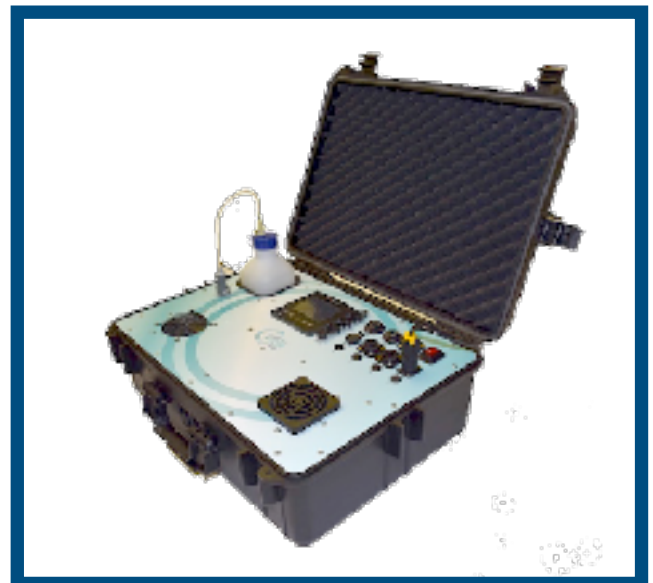
- On-demand decontamination of vehicles such as ambulances, buses and trucks
- Rapid disaster response units; decontamination of field hospitals, returned equipment and freight
- Decontamination of tools, instruments and equipment at their site of operation

### HIGHLY PORTABLE

- Device is a rugged briefcase weighing just 15 kg.
- Unit uses 50%  $H_2O_2$  aqueous solution. This makes travel and transportation a lot easier compared to 60% solution typically required by competing products (UN2014 transport category for hazardous cargo).
- High efficiency means even a 1 liter bottle of  $H_2O_2$  solution is enough for significant decontamination volumes.
- Output efficiency is 80% better compared to other devices on the market.

### SMART

- Cleamix continuously adjusts operation for a steady  $H_2O_2$  concentration in the decontamination volume. Adjustment is real time, based on desired decontamination parameters and a factors. Unit also features automatic alarm and shut-off functionality.
- Unit can control external heating, cooling and de-humidifier equipment for optimal results in a wide variety of use cases.
- Multiple units can work together for exceptional scalability up to 1800  $m^3$  of decontamination volume (room size).



### EXTREMELY EFFICIENT

- Output exceeds 650 ppm/ $m^3$ /min, guaranteeing decontamination of known viruses, bacteria and chemical warfare agents.
- Biggest punch in the smallest package.

**SPECIFICATIONS**

**INNOVATIVE PORTABLE AND SCALABLE  
BIO-DECONTAMINATION SOLUTION**

	VCS-20-C mobile small volume unit	VCS-100-CR mobile master unit
<b>Applications</b>	For de-contamination purposes in cabinets and other enclosed spaces up to 20m <sup>3</sup>	For de-contamination purposes in rooms and vehicles up to 500m <sup>3</sup>
<b>H<sub>2</sub>O<sub>2</sub> liquid</b>	35-60% concentration	35-60% concentration
<b>Dimensions</b>	465 x 360 x 175 mm	557 x 420 x 220 mm
<b>Weight</b>	8 kg	9,5 kg
<b>Operating voltage</b>	230 VAC	230 VAC
<b>Power consumption</b>	Max. 300 W	Max. 800 W
<b>Fan capacity</b>	70 m <sup>3</sup> /h (main fan)	110 m <sup>3</sup> /h (main fan) 1050 m <sup>3</sup> /h (catalytic converter)
<b>Output capacity</b>	220 ppm/m <sup>3</sup> /min, at 1,5 ml/min rate of 50% H <sub>2</sub> O <sub>2</sub> liquid	H <sub>2</sub> O <sub>2</sub> output rate is 1725cc/min which takes a 500 m <sup>3</sup> space to 600 ppm concentration level in 3 hours in cleanroom conditions.
<b>Connectivity</b>	Wi-Fi, cable	Wi-Fi, cable
<b>H<sub>2</sub>O<sub>2</sub> removal</b>	Built-in catalytic converter for rapid H <sub>2</sub> O <sub>2</sub> removal	Separate high-capacity catalytic converter for rapid H <sub>2</sub> O <sub>2</sub> removal
<b>Additional: Slave units</b>		Option to extend the capacity with additional modular VCS-100-SL slave units. Extension 100 m <sup>3</sup> /unit
<b>Operating Time</b>		1L bottle of 50% H <sub>2</sub> O <sub>2</sub> can last for 3 hours in full power operation