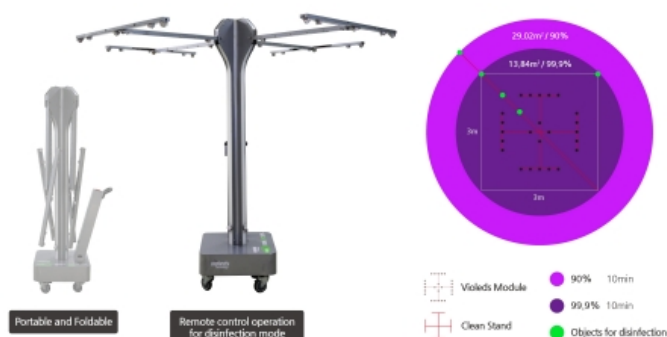


## Korean firms design portable surface disinfection unit

09 February 2021 | News

**The Photon Stand surface disinfection unit kills more than 90 per cent of viruses and bacteria within 10 minutes**



Sensor Electronic Technology, Inc and Seoul Viosys, the leading global providers of UV LED technology and subsidiaries of Seoul Semiconductor in South Korea, have announced the development of a portable surface disinfection unit, the 'Photon Stand,' as a new Violeds UV-C LED technology application.

Designed to disinfect COVID-19 occurrence areas, such as hospital rooms contaminated by infectious patients, or other locations, such as schools and children's day-care centres, the Photon Stand surface disinfection unit kills more than 90 per cent of viruses and bacteria within 10 minutes.

Seoul Viosys and SETi will promote both the Photon Stand surface disinfection unit for OEM manufacture, as well as the Violeds UV-C LED technology to medical equipment manufacturers across global markets.

The Photon Stand surface disinfection unit is the latest application of Violeds technology, Seoul Viosys' patented UV-C LED photon solution that has been demonstrated to disinfect multiple types of bacteria and viruses. The Seoul Viosys BIO research team has confirmed that the Photon Stand disinfects more than 90 per cent of viruses and bacteria within 10 minutes for a room up to 29.02m<sup>2</sup>, and 99 per cent within 10 minutes for a room up to 13.84m<sup>2</sup>.

"The cost of operating the Photon Stand disinfection unit is less than 10 cents for an area of 15m<sup>2</sup>, which is the size of negative pressure (isolation) room used for infectious patients. (Cost was simulated using Violeds' 50,000-hour lifetime.) This represents just 2 per cent of the cost of chemical treatments (\$4) required to disinfect the same size area. The Violeds UV-C LED modules used in the Photon Stand cost less than \$500, meaning that the Violeds disinfection equipment for a large area is only 10 per cent of the cost compared to systems using mercury UV lamps," said an official of Seoul Viosys.

Seoul Viosys has confirmed that Violeds technology disinfects 99.437 per cent of the SARS-CoV-2 in one second, through tests with KR Biotech, a South Korea-based research institute specialising in sterilisation testing for coronavirus. It has also been shown that design modifications can shorten disinfection time.