



# HOW DO YOU CHECK THE PRESENCE OF UV RADIATION?

UV DISINFECTION EXPERT

 BEYOND CLEAN

Daan Hoek | Co-Founder UV Smart

*Beyond Clean UV Disinfection Expert™:*

## HOW DO YOU CHECK THE PRESENCE OF UV RADIATION?

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The radiation emitted by UV light is not visible to the naked eye. So how can we tell if a UV light source actually works? Manufacturers often add color to UV radiation, which allows people to tell if a UV lamp is on. The presence and effectiveness of UV radiation can only be accurately measured with light meters also referred to as radiometers. The effectiveness of UV technology depends on a combination of exposure time, radiation level and distance.

### How to measure UV technology with a radiometer

Radiometers are devices that measure thermal radiation and thus also UV technology. There are two different types: watts per area or dose per surface area. A UV sensor detects the properties of UV and then converts this into a numerical value. The numerical value can be the UV irradiation or dose.

### How to measure UV technology with a dose indicator (dosimeter)

UV technology dose indicators ('dosimeters') are used to check whether the correct UV dose can be achieved. They allow you to see whether UV light reaches where you want it to reach, and thus to check whether the entire product or surface will be disinfected correctly. Depending on the amount of energy to which the indicator is exposed, the color of the sticker will change. This color can then be analyzed. This is a quick and easy way of working

### Choosing the right UV light meter

A major advantage of radiometers is that they provide precise qualitative measurements.

Dosimeters, on the other hand, can be used for quantitative measurements. They only allow you to check whether a UV light dose was measured. For example if there are holes in the object to be disinfected.

Have more UV disinfection questions? Contact Daan at: [daan.hoek@uvsmart.nl](mailto:daan.hoek@uvsmart.nl)

*Beyond Clean UV Disinfection Expert™ Biography:*

## DAAN HOEK CO-FOUNDER UV SMART



Daan Hoek is the Co-Founder of UV Smart and very passionate about UV-C light as a disinfecting agent in the medical field. UV Smart is an innovative company based in the Netherlands with an established US office in New York. The UV Smart devices can disinfect medical equipment quickly, efficiently, and consistently by using UV-C light. By refining this ancient technology, UV Smart made it possible to disinfect medical equipment in a rapid and effective way. UV-C light also eliminates the use of chemical disinfectants that are harmful to medical equipment, operators, and our planet, while saving a substantial amount of turnaround time. UV Smart is the front-runner in applying UV-C technology to medical devices. UV Smart is currently active in over 20 countries worldwide.

Daan is also the chairman of the Taskforce UV-C light of the Dutch Normalization Committee. Along with the taskforce, he developed the first European guideline for UV-C disinfection devices in the medical field. He is also in charge of all the clinical (multi-center) studies of UV Smart, three of which are running in the US and in Europe.

If you have any questions regarding UV-C light, feel free to reach out to him!

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