

# Verification of UV Sterilization System

UVBC-CK01-ACC / UVBC-CK02-ACC

## RELIABLE RADIATION STERILIZATION

Recommended for verification of UV lights

## DESIGNED ESPECIALLY FOR LED LIGHT

Wider spectral range compared to traditional UVC probes

## YOUR GUARANTEE FOR ACCURACY

Probe available with ISO 17025 Calibration Certificate

## HANDHELD AND RUGGED

Easy to carry, simple to operate and to save your measurements

### Make sure you get the maximum efficiency from your UV LED light

Faced with the fear of Covid-19, all over the world, researchers are focused on finding solutions and tools to fight the virus. These include as well **UV lamps** and their capacity to inhibit viruses. According to recent studies, it appears that the application of UVC ultraviolet radiation used by the new **LED lamps** has proved to be **highly effective**.

The result is a significant increase in the market of UV LEDs available with a wavelength centered around 265 and 275 nm which corresponds to the maximum germicidal efficiency range.

If the sensitivity of the traditional UVC probes changes rapidly around 270 nm and makes them indicated for other UV light sources, **LP471 UVBC** is the **perfect solution for UV LED lights**. Testing LEDs and getting a clear and accurate reading of the light is of the utmost importance.

With our **UVBC kits** (measuring cell LP471UVBC + one of our handheld instruments), we assure correct and reliable measures. Delta OHM uses a special solar-blind photodiode with an appropriate filter and provided with a diffuser.

Moreover, the **ISO 17025 Calibration Certificate**, issued by our own accredited Photo-radiometry laboratory, guarantees that the correctness of your measurements are carried out according to worldwide standard reference.



### Main Applications

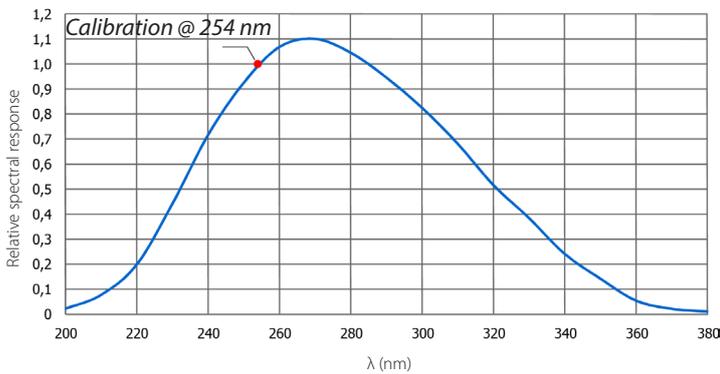
Verification of germicidal lamps used in sterilization systems that use LEDs as UV light sources.



## Technical Specifications of the probe

|                              |  |
|------------------------------|--|
| Measuring range              | $1 \cdot 10^{-3} \dots 2000 \text{ W/m}^2$ |
| Spectral range               | 210...355 nm (Peak 265nm)                  |
| Calibration uncertainty      | <7% (calibration @ 254 nm)                 |
| $f_3$ (linearity)            | <2%  |
| $f_5$ (fatigue)              | <0.5%                                      |
| Drift after 1 year           | <2%  |
| Working temperature          | 0...50 °C                                  |
| Connection to the instrument | Connector with SICRAM module and 2 m cable |

### Typical relative spectral response curve LP471UVBC



At Delta OHM ISO 17025 Photo-Radiometry laboratory, the calibration of the LP471UVBC probe is carried out with Xenon-Mercury lamp, filter at 254 nm.

### Dimensions



## HD2302.0 - Basic version: just measure and read the correct value

|                      |   |
|----------------------|---|
| Protection Degree    | IP67  |
| Operating Conditions | -5...+50°C<br>0...90% RH without condensation |
| Batteries            | 3 1.5V type AA batteries                      |
| Autonomy             | 200 hours with 1800mAh alkaline batteries     |
| Measuring units      | $\text{W/m}^2 - \mu\text{W/cm}^2$             |

## HD2102.2 - Advanced version: logging and free reporting software

|                                     |   |
|-------------------------------------|---|
| Protection Degree                   | IP66  |
| Operating Conditions                | -5...50°C<br>0...90% RH without condensation                        |
| Batteries                           | 4 1.5V type AA batteries  |
| Autonomy                            | 200 hours with 1800mAh alkaline batteries                           |
| Mains                               | Output mains adapter 100-240Vac/12Vdc-1A                            |
| Measuring units                     | $\text{W/m}^2 - \text{J/m}^2 - \mu\text{W/cm}^2 - \mu\text{J/cm}^2$ |
| Security of memorized data          | Unlimited, independently of battery charge conditions               |
| Date and time                       | Schedule in real time   |
| Quantity of measured values storage | Total of 38000 samples  |
| Selectable storage interval         | 1, 5, 10, 15, 30 s,<br>1, 2, 5, 10, 15, 20, 30 min<br>1 hour        |
| USB interface type                  | 1.1 - 2.0 electrically isolated                                     |

## Ordering Codes

**UVBC-CK01-ACC** HD2102.2 datalogger complete with batteries, case, DeltaLog9 software downloadable from website, USB cable CP23, stabilized power supply SWD10, LP471UVBC radiometric probe with ISO 17025 Calibration Certificate VACCREDIA-L6.

**UVBC-CK02-ACC** HD2302.0 complete with batteries, case, LP471UVBC radiometric probe with ISO 17025 Calibration Certificate VACCREDIA-L6.



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In order to ensure the quality of our instruments, we are constantly re-evaluating our products. Improvements can imply changes in specification; we advise you to always check our website for the newest version of our documentation.

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