

Medical grade deep UV disinfection system with UV-C type LED modules

DATASHEET



Like all viruses, the corona pathogen SARS-CoV-2 can only reproduce with the help of a host. Cells infected by the virus are "reprogrammed" by its ribonucleic acid (RNA) to produce new viruses. These are then released in the body and infect other cells. The host cells are destroyed by the reproduction process, which causes disease in the host body. Since each virus only attacks certain cell types, different disease patterns are triggered; in the current epidemic, for example, the respiratory organs are affected.

UVC is high-energy, short-wave radiation in the wavelength range between 100nm and 300nm. In the range of from approximately 250nm to 290nm, it is absorbed by the RNA strands of the viruses.

This ensures that in the pyrimidine bases — thymine and cytosine — neighboring molecules "clump" together. This prevents the cells from reproducing or even kills them. In either case, the virus is no longer dangerous because it only causes damage when it multiplies.

The natural UVC radiation of sunlight is absorbed by the ozone layer of our atmosphere. Therefore, neither organisms nor viruses have developed protective mechanisms against it. Irradiation with artificially produced UVC is, therefore, a particularly effective method of sterilization and disinfection

Medical grade deep UV disinfection system, it was conceived, to follow the SARS CoV-2 disease control, in objects or personal protective equipment.

The equipment concerns in a sterilization camera, protected against radiation emission to the outside of the camera to avoid human exposure to UVC light.

The main application of this end equipment are fundamentally the viruses cleaning and industrial sterilization in hospitals, nursing homes, healthcare clinics, hotels, offices.

**This product is intended exclusively for industrial or professional customers who are trained in the use of UVC radiation and can ensure hazard-free use, every device used should be flagged with special labels.**

**UVC radiation is extremely aggressive to human body and eyes, any contact with light source must be avoided.**

Further information can be found in:

<https://advanceprobe.pt/covid-19>

Supply specifications	
Standard input voltage	85 – 264V AC (50/60Hz)
Input current	0,65A @ 230V AC
Input mains connector type	IEC-320-C14
Mains protection fuse	2,5A (slow blow)

Protections	
Door open	Reed switch
Emergency Stop	Push emergency stop button
Over temperature	Fan cooled LED devices

UV dosage control	
Programmable timer	User specified
Standard profile timer	5 preset profiles
Medium UV Irradiance	138,1 mW/m <sup>2</sup>
Maximum UV Irradiance	286,2 mW/m <sup>2</sup>
Predominant wavelength	275 nm
Number of light sources	2 beams with 12LED each

Communication interfaces	
<b>USB – Serial port (Internal)</b>	
Type	FT232 TTL transceiver (FTDI, Inc.)
Baud rate	9600
Data bits	8
Parity	none
Flux control	none
Stop bits	1

User interfaces	
LCD	LCD Display (2x16 Char) active matrix
POWER LED	Power LED (Green color)
ACTIVITY LED	Activity LED (Yellow color)
UVC-ON LED	UVC LED ON (Blue color)
5KEY KEYPAD	Embossed 5key keypad

Environmental specs	
Protection grade	IP20
Ambient temperature	-10°C to 80°C
Relative humidity	0 to 90% non-condensing

Safety standards	
<b>2014/35/EU Low voltage directive with harmonized standards</b>	
IEC EN 61000-3-2	Electromagnetic compatibility (EMC) - Limits
IEC EN 60335-1	Requirements for safety of household appliances
IEC EN 61000-6-2	EMC Immunity for industrial environments

Physical dimensions (mm)	
Width	600
Height	450
Depth	450
Weight	10Kg (Approx.)

LEGAL DISCLAIMER

The information in this document is provided in connection with INNOVMICRO, Lda products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of INNOVMICRO – Electronica Industrial, Lda products. EXCEPT AS SET FORTH IN THE INNOVMICRO, LDA TERMS AND CONDITIONS OF SALES, INNOVMICRO, LDA ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL INNOVMICRO, SA BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS AND PROFITS, BUSINESS INTERRUPTION, OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF INNOVMICRO, SA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. INNOVMICRO, LDA makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and products descriptions at any time without notice. INNOVMICRO, SA does not make any commitment to update the information contained herein. Unless specifically provided otherwise, INNOVMICRO, LDA products are not suitable for, and shall not be used in, automotive applications. INNOVMICRO, LDA products are not intended, authorized, or warranted for use as components in applications intended to support or sustain life.