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SCHEMA TECNICA PRO BETA LED UVC



PRO beta UV-C



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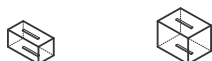
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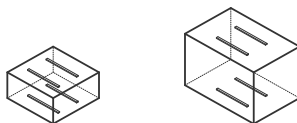
Utile per sanificazione di :

- Ambienti di lavoro: uffici, aree ristoro
- Ambienti scolastici: aule, laboratori, mense
- Superfici di lavoro: desk, sale di attesa, ambulatori
- Sanificazione di scatole, box o armadi

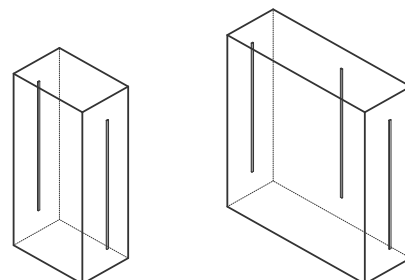
Esempio di applicazione
col nostro profilo meno potente:
Dimensioni scatola - da 40x20x20 cm a 60x40x40 cm
Modello dispositivo - Profilo UV-C 250mm 50mW IP20 on-off
Tempo di trattamento - 30min.*
Livello di sanificazione - 90%*



Esempio di applicazione
col nostro profilo meno potente:
Dimensioni box - da 60x60x40 cm a 100x60x60 cm
Modello dispositivo - Profilo UV-C 250mm 50mW IP20 on-off
Tempo di trattamento - 30min.*
Livello di sanificazione - 90%*



Esempio di applicazione
col nostro profilo meno potente:
Dimensioni armadio - da 90x60x200 cm a 180x60x200 cm
Modello dispositivo - Profilo UV-C 1500mm 300mW IP20 on-off
Tempo di trattamento - 30min.*
Livello di sanificazione - 90%*



* dati indicativi
** utilizzando profili più potenti si possono diminuire i tempi di sanificazione o aumentarne i livelli

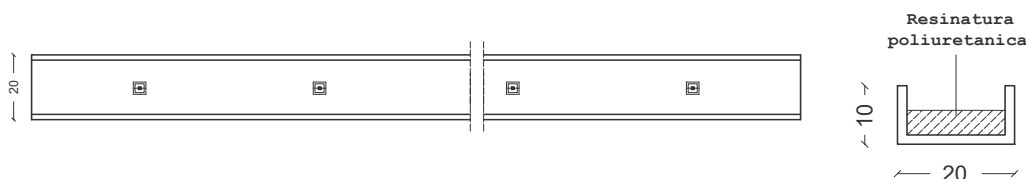
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Descrizione

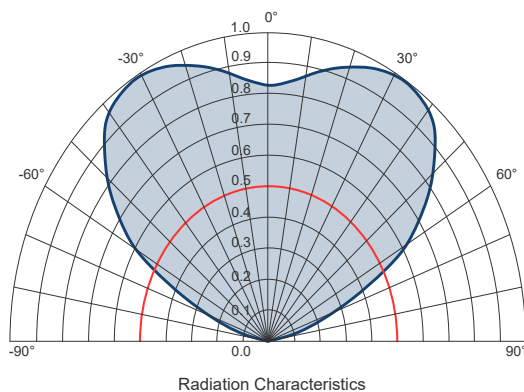
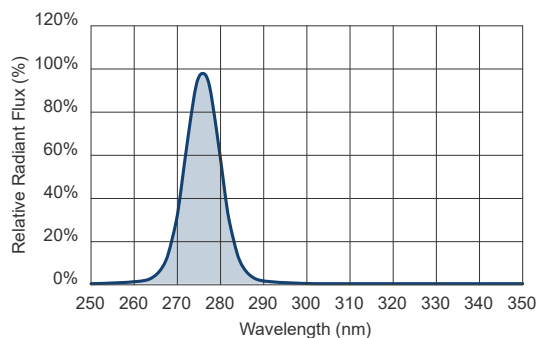
Profilo LED UV-C, resinato con resina poliuretanica, di lunghezza 500mm, 1000mm e 1500mm, sviluppato appositamente per la sanificazione e la sterilizzazione di superfici di lavoro, contenitori e arredamenti. Profilo in alluminio anodizzato, modulo led in alluminio (IMS) altamente performante che garantisce un'ottima dissipazione termica. Le dimensioni molto ridotte lo rendono perfetto per essere utilizzato ad incasso o a plafone, all'interno di contenitori o box per la sanificazione di molteplici oggetti. Il modulo LED UV-C è equipaggiato con LED UV-A utili per segnalare all'operatore il funzionamento del prodotto e proteggerlo da esposizioni accidentali ai raggi UV-C. Il profilo è alimentato tramite driver esterno remotizzato e viene fornito completo di staffe e ganci per il suo corretto fissaggio.

Caratteristiche

- Profilo modulare
- Dimensioni ridotte (L x20x10mm)
- Alta efficienza



modello	potenza tipica	flusso radiante	dimensioni	PCB	picco lunghezza d'onda	angolo di emissione
PRO beta 500	3,78W	60mW	520 x 10 x 20 (mm)	IMS	275nm	120°
	5,40W	126mW				
	9,30W	204mW				
PRO beta 1000	7,56W	120mW	1020 x 10 x 20 (mm)			
	10,80W	252mW				
	18,60W	408mW				
PRO beta 1500	11,34W	180mW	1520 x 10 x 20 (mm)			
	16,20W	378mW				
	27,90W	612mW				





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Installation must be carried out under observation of the relevant regulations and standards. The LED modules are designed for operation within a casing or luminaire. Installation must be carried out in a voltage-free state (i.e. disconnection from the mains).

The following advice must be observed; non-observance can result in the destruction of the LED assembly modules, fire and/or other hazards.

- Consider safety regulations acc. EN 60598 in the luminaire design, especially when the operating LED driver is not galvanic isolated.
- In mode of operation regard to sufficient isolation.
- Live parts must not be touched in operation mode. Danger in life!!!
- ESD (electrostatic discharge) protection measures must be observed when handling and installing the LED modules. See VS's application notes on ESD protection.
- Adequate anti-static electricity measures, including the use of conductive shoes, ionizers, work bench grounding, wrist straps, flooring and stools should be used.
- LED assembly modules must not be subjected to any undue mechanical stress, e. g.:
 - do not treat as bulk cargo
 - avoid shear and compressive forces during handling and installation
 - do not damage circuit paths
 - avoid any pressure on the light emitting surface
- Safe operation only possible by the use of external constant current sources (I_{max}. see table "Electrical Characteristics").
- Operation only with power supply units that feature the following protection:
 - Short-circuit protection
 - Overload protection
 - Overheating protection
- The module can be fixed with M3 screws. Fixation only with flat or cylinder head screws (M3) (no countersank screws) Max. torque: 1.2 Nm (M3)
- Please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the modules.
- For interconnection the LED modules is equipped with push-in terminals (WAGO 2060).
- Safety regulations acc. to EN 60598 (or further standards) has to be observed if the maximum output voltage exceed the permitted touchable value.
- The following points must be observed when connecting LED modules in parallel:
 - All LED strings that are wired in parallel must contain the same number of LEDs (symmetrical loading).
 - Owing to differing forward biases, there can be a difference of up to 10% in brightness between modules connected in parallel.
- To ensure problem-free operation, the specified maximum temperature at the tp point (see "Operating Life") must be observed (and measured in accordance with EN 60598-1). To satisfy this point, it may be necessary to put measures in place to ensure any heat is dissipated from the PCB to the environment.
- In the event of outdoor applications or applications in damp locations, care must be taken to protect LED assembly modules against humidity, splashes and jets of water. Any corrosion damage resulting from humidity or contact with condensation will not be recognized as a defect or manufacturing fault. LED assembly modules are not specially protected against foreign bodies or dust. Depending on the type of application, further protection must be ensured to prevent dust and foreign bodies from entering.
- Due to the manufacturing process, the PCBs of the LED assembly modules can have sharp edges and corners. Care must therefore be taken during handling and installation to avoid injury.
- For optimal load of used constant current driver the modules can only be connected in series. The quantity of LED modules is limited by the sum of forward voltage and the capacity of used constant current driver. Safety regulations acc. to EN 60598 has to be observed if the sum of forward voltage exceed the permitted touchable value.
- Operating LED modules in the presence of certain chemical substances or in chemically enriched (aggressive) environments can impair module functionality or even cause total module failure.
- The photobiological safety of the LED modules must be classified into risk groups in accordance with IEC / TR 62778: risk group 1 (except HB, 6500 K, > 500 mA: risk group 2)

Vedere condizioni di vendita scaricabili dal sito www.fuocofreddo.it

See sales conditions downloadable from the website www.fuocofreddo.it

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Accessori

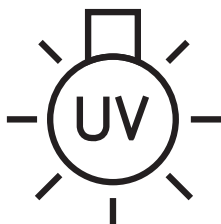
- Alimentatori dimmerabili
- Schede elettroniche di controllo
- Sensori di presenza / attivazione e sicurezza
- Timer programmabili

PRECAUZIONI PER PULIZIA, CONSERVAZIONE E SMALITIMENTO

- Installare l'apparecchio in un luogo asciutto e protetto da eventuali urti, anche accidentali
- Installare l'apparecchio in luoghi con temperature comprese tra 0°C e +50°C.
- Non utilizzare materiale infiammabile vicino al prodotto.
- Tenere il prodotto lontano da fonti di calore.
- Non toccare il prodotto con le mani bagnate
- Pulire l'apparecchio solo con un panno in microfibra.
- Ai fini dello smaltimento il dispositivo deve essere trattato come rifiuto RAEE, la cui gestione è normata dal D.LGS. 49/2014.

ISTRUZIONI PER LA SICUREZZA

- Per utilizzare l'apparecchio è necessario indossare i seguenti DPI (Occhiali di protezione UVC cod. 913904CX e Guanti di protezione cod. 9392030X).
- Non utilizzare l'apparecchio in presenza di persone non protette dai DPI obbligatori indicati.
- Non guardare i LED UVC direttamente. La lunghezza d'onda UVC non risulta visibile all'occhio umano.
- Oltre all'utilizzo di tutti i dispositivi di protezione individuale (DPI), per un uso sicuro dell'apparecchio, si deve prendere nota di tutte le prescrizioni relative alla prevenzione degli infortuni riportate nei vari punti di questo manuale.
- Ogni persona che viene incaricata dell'uso e della manutenzione dell'apparecchio, deve aver prima letto il presente documento.
- Durante tutte le fasi dell'utilizzo dell'apparecchio, si raccomanda la massima cautela in modo da evitare danni a persone, a cose o all'apparecchio stesso.
- Utilizzate l'apparecchio solo ed esclusivamente per l'utilizzo previsto e nelle modalità qui descritte (sanificazione superfici).
- Non manomettere il dispositivo.
- Tenere l'apparecchio fuori dalla portata dei bambini
- Le piante e gli animali da interno non tollerano gli UVC e devono essere schermati o rimossi.
- Opere d'arte costose dovrebbero essere coperte



! ATTENZIONE !

I dispositivi emettono luce ultravioletta ad alta intensità che può danneggiare gli occhi e la pelle, seguire quindi scrupolosamente le istruzioni di sicurezza riportate dal presente documento.

Evitare l'esposizione diretta di occhi e pelle con la luce emessa dai LED UV-C.
Tenere fuori dalla portata dei bambini.



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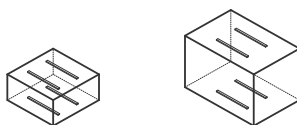
Useful for sanitizing:

- Work environments: offices, refreshment areas
- School environments: classrooms, laboratories, canteens
- Work areas: desks, waiting rooms, clinics
- Sanitizing of boxes, boxes or cabinets

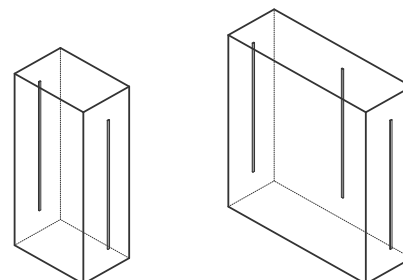
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 Livello di sanificazione - 90%*



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 Tempo di trattamento - 30min.*
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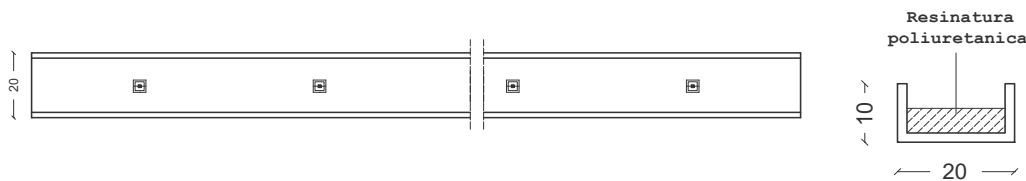
* dati indicativi
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Description

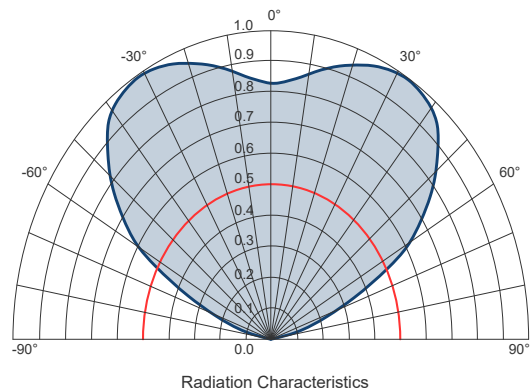
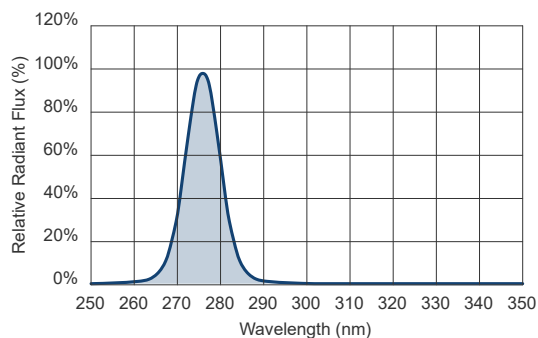
UV-C LED profile, resin coated with polyurethane resin, 500mm, 1000mm and 1500mm long, specially developed for the sanitization and sterilization of work surfaces, containers and furnishings. Anodized aluminum profile, high-performance aluminum LED module (IMS) that guarantees excellent heat dissipation. The very small size makes it perfect for recessed or ceiling-mounted use, inside containers or boxes for sanitizing multiple objects. The UV-C LED module is equipped with UV-A LEDs useful for signaling the operation of the product to the operator and protecting it from accidental exposure to UV-C rays. The profile is powered by an external remote driver and is supplied complete with brackets and hooks for its correct fixing.

Features

- Modular profile
- Small size (L x20x10mm)
- High efficiency



template	typical power	radiant flow	size	PCB	peak wavelength	emission angle
PRO beta 500	3,78W	60mW	520 x 10 x 20 (mm)	IMS	275nm	120°
	5,40W	126mW				
	9,30W	204mW				
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Accessories

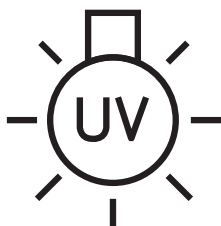
- Dimmable power supplies
- Electronic control cards
- Presence / activation and safety sensors
- Programmable timers

PRECAUTIONS FOR CLEANING, STORAGE AND DISPOSAL

- Install the device in a dry place protected from any impact, even accidental
- Install the device in places with temperatures between 0 ° C and + 50 ° C.
- Do not use flammable material near the product.
- Keep the product away from heat sources.
- Do not touch the product with wet hands
- Clean the appliance only with a microfiber cloth.
- For disposal purposes, the device must be treated as WEEE waste, the management of which is regulated by Legislative Decree. 49/2014.

SAFETY INSTRUCTIONS

- To use the device, the following PPE must be worn (UVC protective goggles code 913904CX and protective gloves code 9392030X).
- Do not use the device in the presence of people not protected by the mandatory PPE indicated.
- Do not look at the UVC LEDs directly. The UVC wavelength is not visible to the human eye.
- In addition to the use of all personal protective equipment (PPE), for safe use of the device, you must take note of all the requirements relating to the prevention of accidents listed in the various points of this manual.
- Each person who is in charge of the use and maintenance of the appliance must first have read this document.
- During all phases of using the appliance, we recommend the utmost caution in order to avoid damage to people, property or the appliance itself.
- Use the device only and exclusively for its intended use and in the manner described here (surface sanitization).
- Do not tamper with the device.
- Keep the appliance out of the reach of children
- Indoor plants and animals do not tolerate UVCs and must be shielded or removed.
- Expensive works of art should be covered



! ATTENTION !

The devices emit high intensity ultraviolet light which can damage the eyes and skin, therefore strictly follow the safety instructions contained in this document.

Avoid direct exposure of eyes and skin with the light emitted by UV-C LEDs.
Keep out of reach of children.