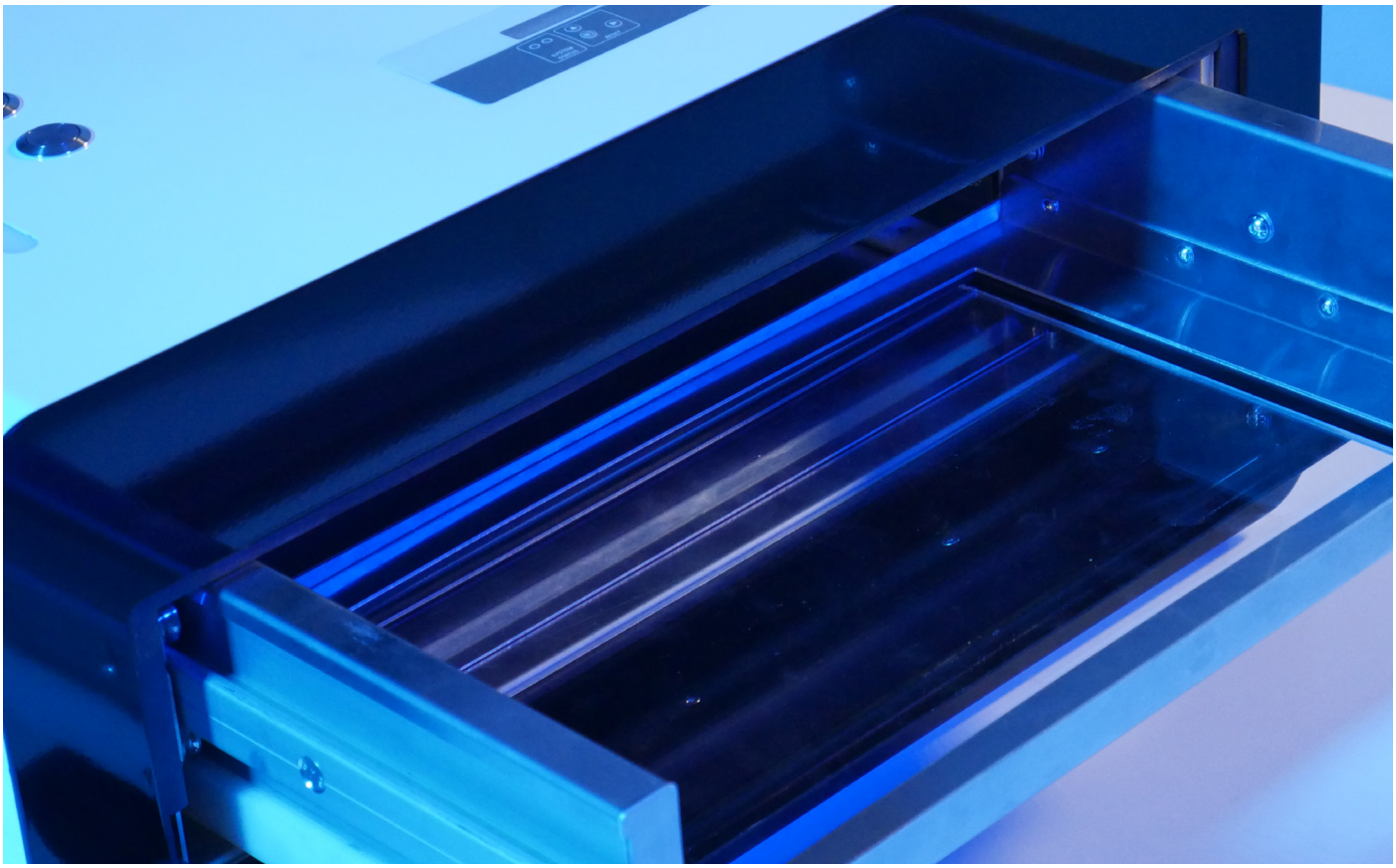
eos® Transfer Tray P7810 with UV-C desinfection

DATA SHEET



Version 1.6 TR/RF

Legal notice

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Description

The eos® Transfer Tray P7810 is an extremely flexible electronically controlled transfer tray, for hygienic hand-over processes of objects designed according to the latest technology. The flexibility of the transfer tray is also reflected in the application possibilities. The following examples can be mentioned. Companies - for internal exchange of documents and items, pharmacies - for handover of medicines and authorities - for exchange of documents.

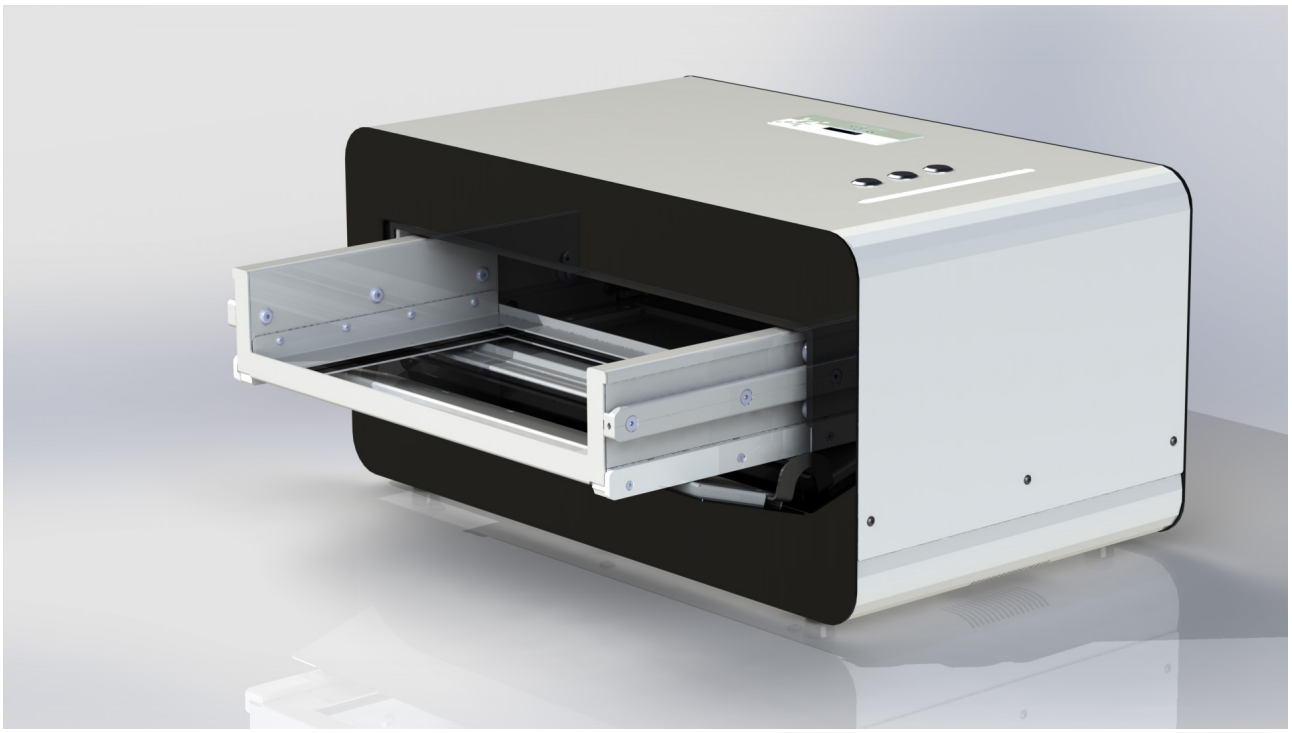
The eos® Transfer Tray P7810 has been designed for indoor use only. The transfer- and cleaning process takes only seconds, thus enabling an efficient and hygienic workflow.

You can provide more service to your customers when you use the transfer tray because the risk of infection during the transfer process is greatly reduced.

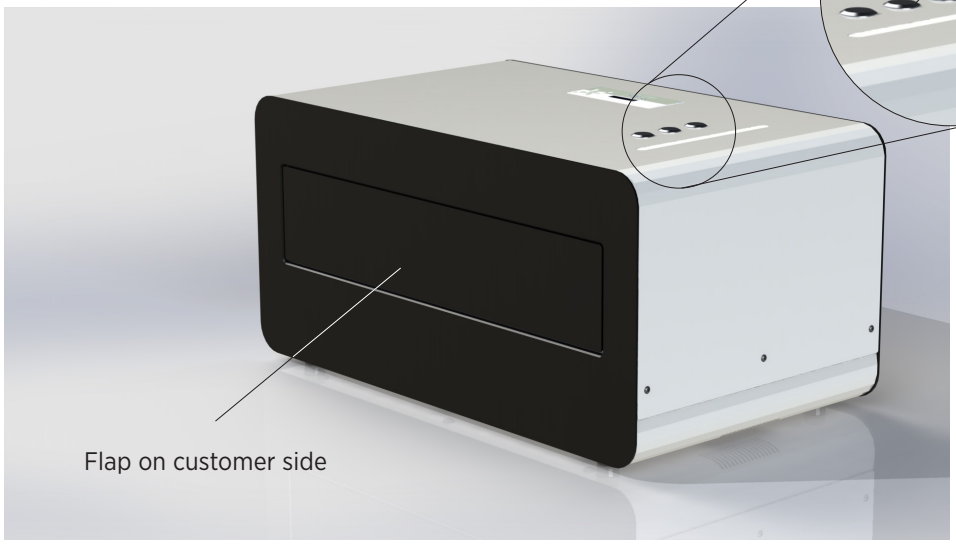
The eos® Transfer Tray P7810 is available in RAL-color 9005 deep black for the front and back and in RAL-color 9016 traffic white for the housing. RAL-colors 5001-9001 are available at an extra charge.

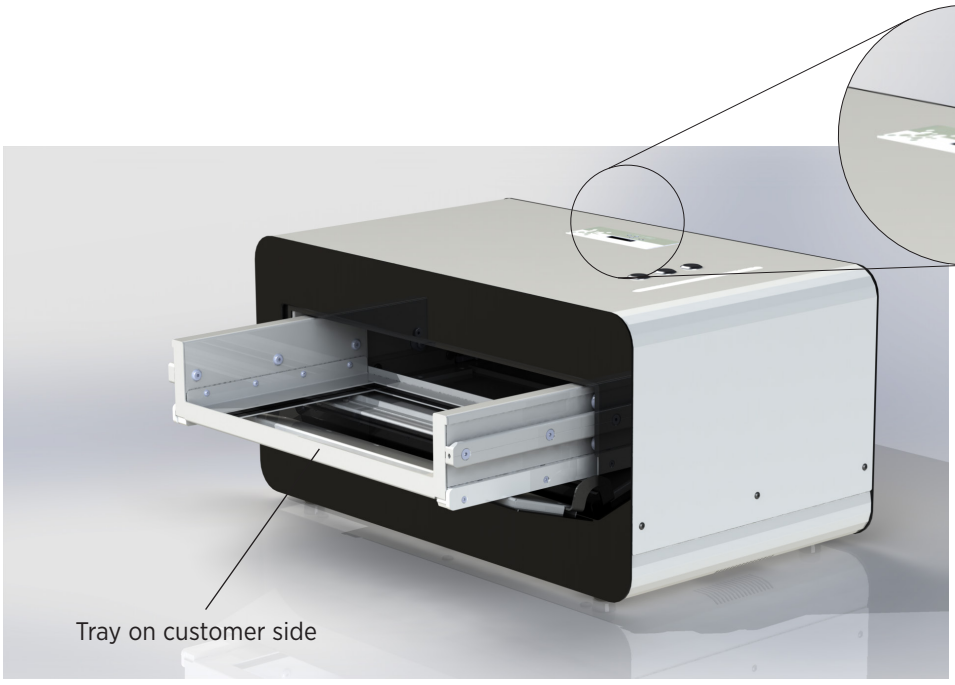
The patent and utility models for the eos® Transfer Tray P7810 have been filed and are in progress.

The transfer tray is controlled via three buttons and requires no training. An LED visually indicates the cleaning process.



Overview

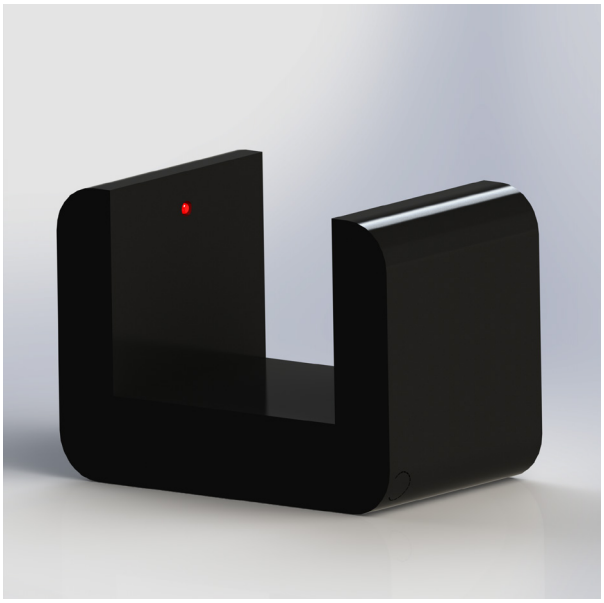

Buttons for operating the transfer tray
LED-stripe shows the cleaning process
Flap on customer side


Operating hours display of the UV lamps
Tray on customer side

Expansion options

GESTURE CONTROL

The gesture control allows touch-free operation of the transfer tray using simple gestures. Simple wiping movements through the U-shaped gesture control unit in the corresponding direction causes a corresponding movement of the tray of the transfer tray.

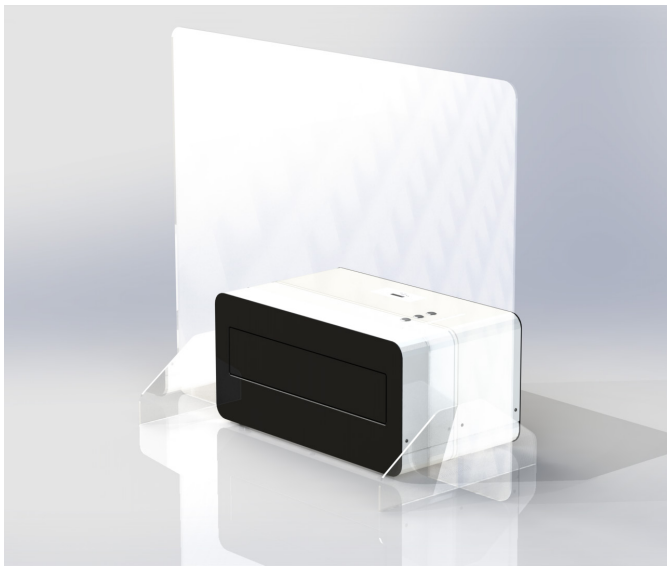


TECHNICAL DATA

Ambient temperature:	Room tempreture
Width approx.:	73 mm
Hight approx.:	55 mm
Depth approx.:	44 mm
Cable length:	1,5 m

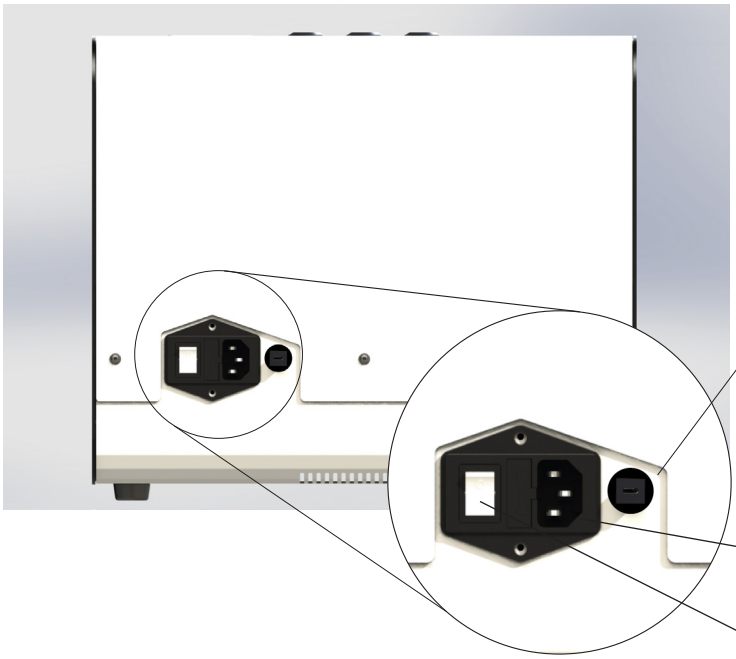
PLEXIGLAS HYGIENIC PROTECTION (VIRAS)

The transfer tray can be combined with a Plexiglas hygienic protection. This creates a very efficient virus and bacteria protection.



Connections

The transfer tray has a power connection and a connection for the gesture control unit.



The gesture control unit is connected to the Mini USB 2.0 Type B connection via cable

Power connection

On/Off switch

Technical data

Power connection: 230V AC/50Hz +/- 10%

*Power consumption - without lamps and no electric motor active = 120W
- with lamps and electric motor active = 134W
- standby mode = 8W

Ambient temperature: Room temperature

OUTER DIMENSION: Width approx.: 560 mm
Hight approx.: 280 mm
Depth approx.: 330 mm

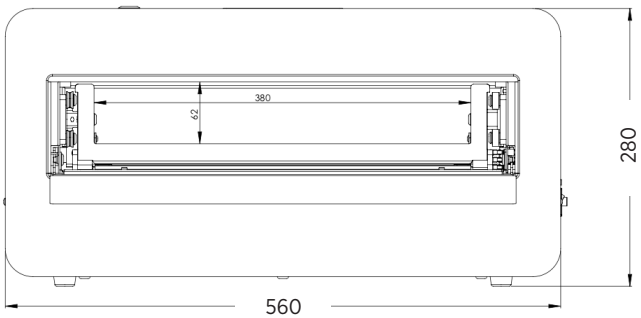
DIMENSIONS OF THE TRAY: Width approx.: 376 mm
Hight approx.: 67,5 mm
Depth approx.: 227 mm

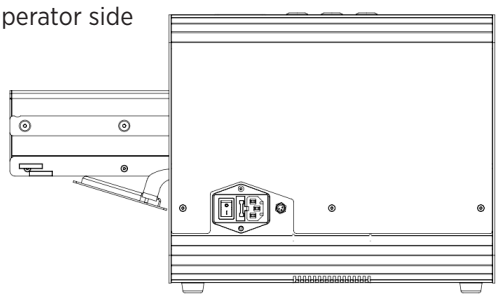
Weight approx.: 15 kg

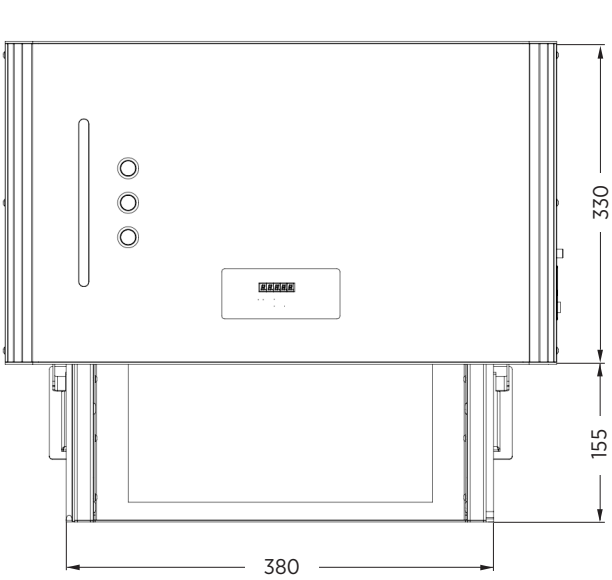
Irradiation intensity: ~8,0 mW/cm^2

*The data given may vary depending on the intensity of use of the transfer tray.
**In order to ensure the functionality and efficiency of the UV lamps, it is necessary to replace them after 10000 hours of operation, as the efficiency of the UV lamps decreases over time and thus cannot be guaranteed.

Dimensions

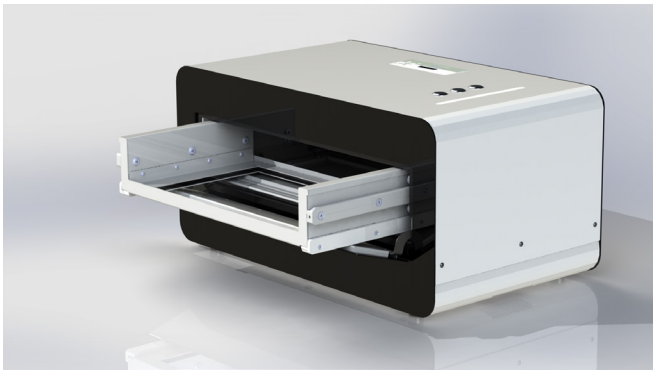

380
62
280
560


Operator side
Customer side

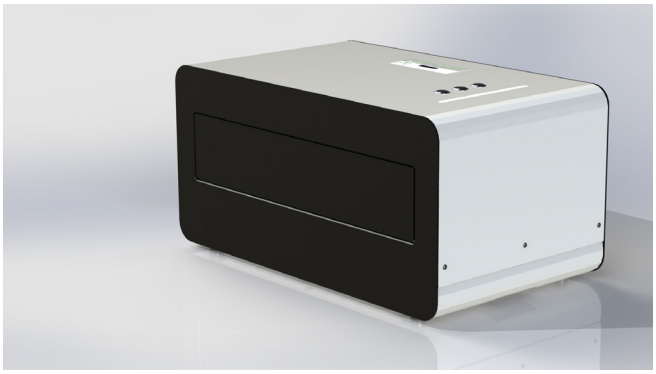

Customer side
330
Operator side
155
380

Principle function

The transfer tray is easy to operate. The transfer process takes less than 10 seconds.



STEP 1:
The tray is moved to the customer to enable him to hand over a prescription, for example.



STEP 2:
The operator starts the cleaning process.

STEP 3:
The tray of the transfer tray automatically moves to the operator with the cleaned object (e.g., customer‘s prescription). The operator can remove the object without hesitation.

Special features

Security concept:

The transfer tray uses highly efficient UV lamps to eliminate at least viruses and bacteria. The UV light used during the cleaning process is also harmful to the human body. To avoid direct vision and contact with the UV light, a flap and shutter system has been implemented, which covers the UV lamps while the tray is outside the body of the transfer tray.

The tray of the transfer tray stops immediately if something blocks its travel path in order to avoid injuries.

An automatic shut off of the UV lamps provides additional protection against the UV light. As soon as one of the flaps on either side of the transfer tray is opened, the UV lamps switch off automatically.

Hygienic Design:

The eos® Transfer Tray P7810 was designed with „Hygienic Design“ in mind, to reduce dirt pick-up of the frame and facilitate cleaning.

Background information

What is UV radiation?

Ultraviolet radiation consists of electromagnetic waves of a wavelength from 100 to 380 nm or a frequency greater than 789 THz. The energy of a single light quantum is around 3,26 eV. Ultraviolet radiation is not visible..

It counts as belonging to the group of optical wavelengths, which is why the term „UV Light“ is often encountered, which, strictly speaking, is not correct. Just like the light of other wavelengths, or infra-red radiation, UV radiation can be interrupted, refelcted, bent and absorbed - even so, the reflection properties with regard to the material of the reflector cannot be compared with light from the visible spectrum.By means of luminescence excitation (eg in analytical instruments/Wood light), ultraviolet radiation can be made indirectly visible. (Source: Peschl Ultraviolet GmbH)

What is UV-A, UV-B and UV-C?

Ultravilet radiation is sub-divided into seeral regions. These regions have different biological effects and are used in differebt technical applications. The diagram below shows where the different types of UV are to be found in the electromagnetic spectrum. The total UV spectrum is defined by those wavelengths between 400 - 10 nm. At the same time, the energy of the light quanta is inversely proportional to the wavelength. (the shorter the wavelength, the greater the energy.)

Why does ultra-violet disinfect?

All micro-organisms contain amongst other things nucleic acids (DNA and RNA), which contain the genetic information of the cell. Beacause the nucleic acids absorb the impinging UV radiation energy, a photochemical process is initiated, which damages the reproduction capability of micro-organisms and kills germs. This takes place by means of a commonly present, „dimeric bond“ of the Thymin module, and happens in a fraction of a second. (Source: Peschl Ultraviolet GmbH)

Type of UV	Wavelength	Biological Effect	Technical Areas of Application
UVA	315-380nm	instant, light tanning; ages the skin and creates wrinkling; practically erythemic (sunburn) effect	Tanning, photochemical reactions, luminescence, curing of print ink drying of lacquers and varnishes, light therapy forensics, lighting effects ...
UVB	280-315nm	long term tanning; forms a protective layer on the skin; penetrates more deeply into the skin and skin layers; high risk of skin cancer;has a very strong erythemic effect (leading to sunburn)	Light therapy / initial tanning;photo-chemical reactions; luminescence; print ink curing; lacquer drying...
UVC	280-100nm	very short wave radiation, does not appe-ar on the earth's surface as it is absorbed by the topmost layers of the earth's atmo-sphere; has a very powerful decontami-nation action; is highly erythemic (Strong sunburn)	Physical disinfection technology; pho-tochemical reactions; luminescence..
VUV (Vacuum UV or Deep-UV)	200-150nm	very short wave; produces ozone by dissociation of of the air's oxygen O^2 into O^3 (Ozone); it can be measured only in vacuum; In a nitrogen atmoshere (<15 ppm oxygen content) it is measurable to 150 nm	Surface disnfection; photooxidation; surface activation; ozone production..

(Source: Peschl Ultraviolet GmbH)

Interesting facts

The eos® Transfer Tray P7810 is the result of the cooperation between the companies SITEC GmbH and Peschl Ultraviolet GmbH. Both companies joined forces to create a product that is useful not only in times of „Corona“.

SITEC GmbH

Specialized in security systems for e.g. banks, embassies, government offices and more, SITEC is responsible for design, construction and production of the UV transfer tray. Highest quality is produced with the latest manufacturing technology.

Peschl Ultraviolet GmbH

Highly experienced in the field of industrial ultraviolet solutions and UV disinfection. Peschl Ultraviolet GmbH is responsible for the UV technology and everything that goes with it.

Supplementary products

In addition to the eos® Transfer Tray P7810, the companies SITEC GmbH and Peschl Ultraviolet GmbH offer more very useful products when it comes to non-contact transfer processes, disinfection without chemicals and protection against viruses and bacteria.

SITEC / LockTec GmbH

Name: Locker system „Servicebox“

Purpose: Unattended handover of goods

Information: Also available for luggage storage (Locksafe 5.1) and with temperature-controlled lockers (COOL LOCKERS) (www.locktec.de)

Name: Counter elements

Purpose: Protected handover of documents and money

Information: Also available in other variants (www.sitec.de)

Name: Intercom system Delta 2.0

Purpose: For communication from secured areas that do not allow normal communication.

Information: Usually in use with other products (e.g. counter elements or transfer trays) (www.sitec.de)

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