

sun2MobiDes

**EXECUTIVE SUMMARY**  
FUNCTION & OPERATIONS

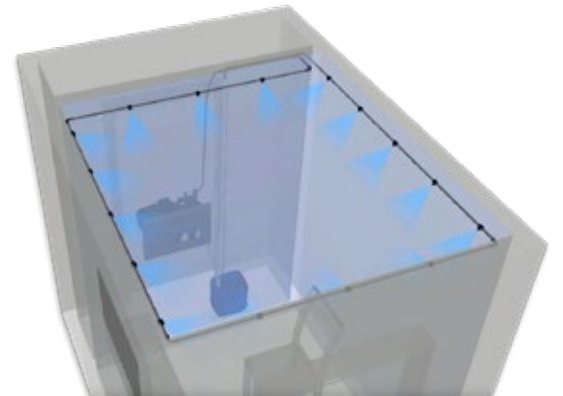


# DISINFECTION CHAMBER

sun2MobiDes



Container appearance may vary, depending on availability. Operating features remain identical.



## Full body disinfection by spray

When many persons gather in one place, together with sick and virus carrying persons, it can lead to spread of infections and other transmittable diseases. However, it must be noted that objects can, and often do carry germs and bacteria as well. Therefore, disinfection is an important hygiene measure that is used to kill or inactivate viruses, pathogens, germs or bacteria. Taking into consideration the current worldwide corona virus (Covid-19) pandemic, it becomes clear that full body disinfection measures are indispensable in medical practices and clinics, even in the businesses, education or any other place where people gather. The sun2MobiDes mobile disinfection container can be delivered and placed at short notice and almost anywhere. The sun2safe solar generation and energy storage system secures uninterrupted power supply for continuous operation and thereby service.

## Description

### Disinfection Chamber sun2MobiDes

- Full disinfection with fogging nozzle system
- Room system with two integrated hygiene locks
- Pump unit
- Spray nozzles for optimal distribution
- sun2safe solar generation and energy storage system
- Complete solution, ready for immediate use

### Measures

- ca. 6,00 × 2,40m (W×L), optional 3,00 × 2,40m (W×L)

### Technical requirements

- Power connection at 230 V, flat surface



The disinfectant is sprayed from the fogging nozzles



The fine spray mist is optimally distributed over the entire body



An examination lock for taking samples can be integrated

**Optional:**  
Examination lock

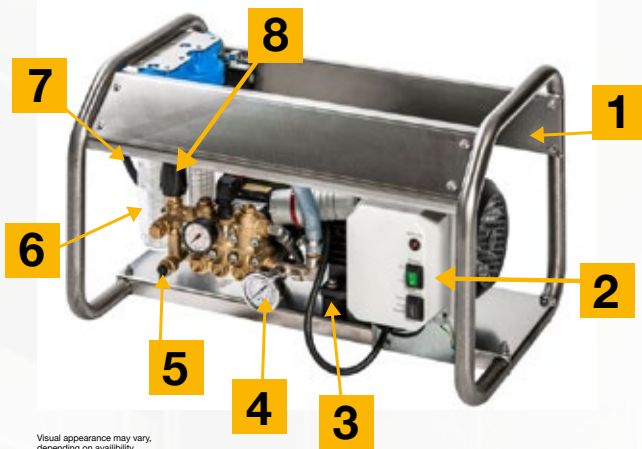
# DESIGN AND FEATURES

sun2MobiDes

The scope of delivery includes a pumping unit including filter. The pumping unit is connected to a suitable water supply and distributes the water with the appropriate pressure to the downstream systems. Further systems such as a suitable dosing unit or water treatment systems can be connected upstream of the pumping unit.

- Automatic door opening and circulation control
- Access control by thermal imager for fever detection (refusal of entry)
- Wheelchair accessible (wide door with access ramp)
- Automatic start by sensor without pushing a button – time control
- Display of disinfection start and duration on the control screen and timer
- Charge pressure display of the disinfection tank in the app
- Control of user data and status in the app

## Design of the pumping unit



Visual appearance may vary, depending on availability. The operating features remain identical.

The pumping unit has three adjustable operating modes:

- Manual
- Automatic
- Rinsing

The pumping unit is equipped with a pressure regulator, a pressure monitoring, a pressure gauge and a pump support.

### Position

1  
2  
3  
4  
5  
6  
7  
8

### Description

- VA - Tubular frame
- Control unit
- Rubber buffer
- Low pressure gauge, high pressure
- Thermo valve 50°C
- Filter unit
- High pressure hose HD110 - 1000 mm 12 l with port (other lengths upon request)
- Pressure valve

## Pumping unit

### Flow rate

- 1 ltr/min - 7 ltr/min

### Nr. of nozzels max (5 l/h)

- 12 - 96

### Max. building size

- 700 m<sup>2</sup>

### Max. system pressure

- 50 bar

### Engine power

- 2,2 kW

### Power consumption

- 9,2 A

### Voltage

- 230 V

### Weight

- 49 kg

### Dimensions in mm (LxWxH)

- 710 × 450 × 450

### Quantity of oil required

- 0,35 l

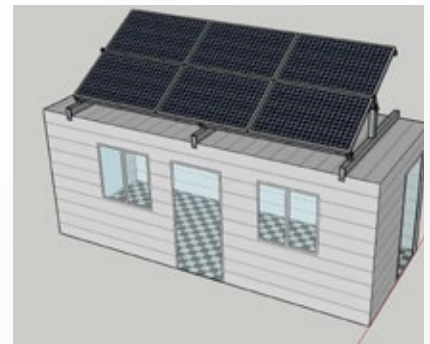
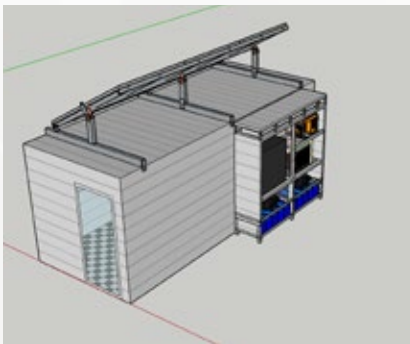
# RENEWABLE ENERGY SUPPLY BY sun2safe

## – ENERGY TO THE POINT OF NEED

sun2safe

For a stable and clean energy, Peter Kenkel GmbH has entrusted the power supply for the disinfection chamber to The meeco Group and its sun2safe product. The sun2safe is an all-in-one intelligent energy management system, offering optimized power availability, generated from the sun through solar panels mounted on the container.

With its additional capacity to store the solar energy, the sun2safe is not only beneficial for its handiness but also for the savings due to reduced energy costs. Equipped with an independent and sustainable energy supply, this all in one solution of sun2MobiDes, can be placed nearly everywhere, including remote areas without connection to the grid.



### Input



PV



Grid



Generator

### Energy management



Storage

### Consumer



Telecom repeater



Private



Public/Commercial

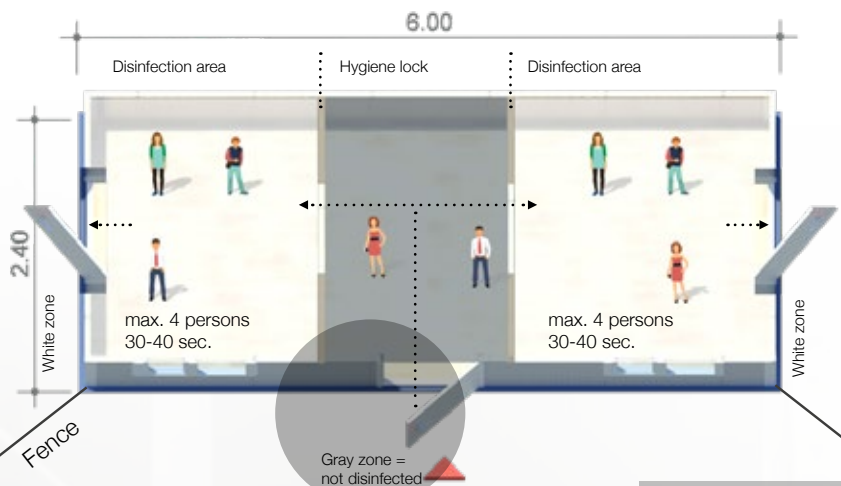


Industry

- Efficient energy generation: Maximum Power Point Tracking (MPPT) technology for maximum solar energy capture
- Providing energy to the point of consumption without interruptions
- Ensuring predictable energy input, as well as immediate and long-term cost savings
- Flexible and mobile: self sustainable energy generation, independence from the local grid

# DISINFECTION CONTAINER

sun2MobiDes



## Option 1

**Mobile Chamber with two disinfection areas for 4 persons:** The chamber system has two integrated disinfection areas for four people each. Up to 8 persons can receive a full body disinfection in parallel, whereby the disinfection in both areas is done independently. The gray zone is the non-disinfected area. Firstly, the persons gather in the gray zone and from there they pass over to the hygiene sluice in the disinfection area. The disinfection is executed through spraying at the push of a button in only 30-40 seconds, after which the disinfected persons leave the room via the exit in the disinfection area.



Visual appearance may vary, depending on availability. The operating features remain identical.



## Possible alternatives

### Option 2 – Contactless examination:

A subdivision between the disinfection area and the examination sluice (here saliva samples or similar can be taken from persons through a glass wall with a glove system)

#### Procedure

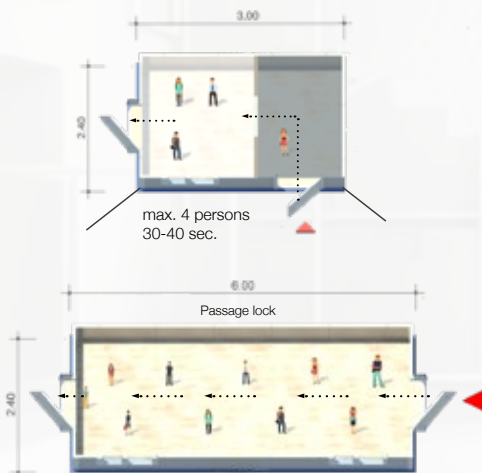
- Entry through the gray zone
- Right Disinfection area - for sample collection with a glove system
- Left Disinfection area – Full body disinfection from 30-40 seconds (max. 4 persons)
- Exit through the white zone on the left

### Option 3:

- A disinfection range of 30-40 seconds (max. 4 persons)
- Procedure like in option 1

### Option 4:

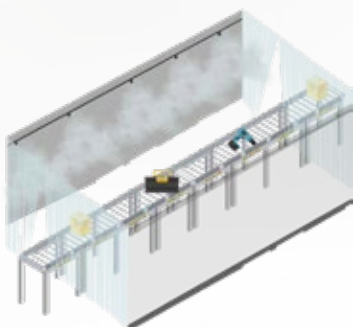
- Disinfection airlock – continuous disinfection
- Transit time 30-40 seconds while the person slowly walks through the airlock



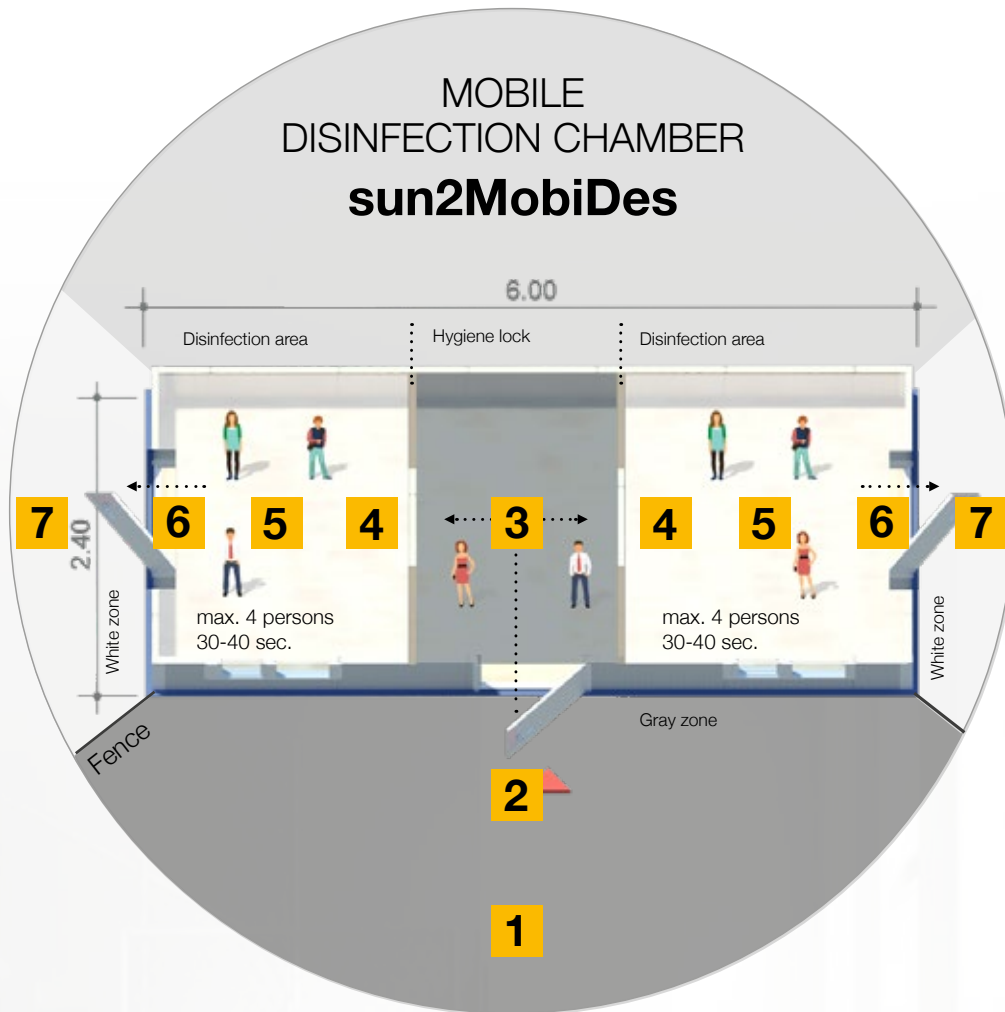
## Option 5 – The alternative for objects

Not only human beings are subject to disinfection. Due to the high risk of infection for people through shipping, objects dispatched internationally and nationally also require disinfection measures.

- Disinfection airlock for parcels and shipments
- A conveyor belt transports all objects to be disinfected through the airlock



# OPERATING INSTRUCTIONS



- 1 Full body disinfection in 60 seconds**
- 2 Persons gather in front of the entrance**  
Entry to the disinfection container  
(if required protective glasses can be worn)
- 3 System starts at the push of a button**  
(red signal appears at the traffic light system)
- 4 Entry to the disinfection area within 10 sec.**  
Position/Foot marks (floor marks)
- 5 Start of disinfection by spray**  
< 60 seconds incl. post processing time
- 6 Traffic light system switches to green**
- 7 Exit from the disinfection area**  
Entry into the white area (disinfected)

