

Your specialist for:

UV therapy,  
Tap water iontophoresis &  
Daylight PDT



The strong partner at your side for 45 years - we look forward to meeting you!





## Sustainability & social responsibility

For 45 years, our primary claim has been to provide our customers and users with the best possible tools for successful therapy with innovative products. This applies in particular to the indications psoriasis, actinic keratosis, vitiligo, neurodermatitis, acne and hyperhidrosis.

Highly effective scientific devices, easy to handle, are the result of decades of research and development work by Prof. Dr. Karl Höhle and his development team. We largely owe our company's success and the uniqueness of our products to highly motivated and qualified employees and sustainable partnership with numerous doctors and patients.

This wealth of experience and expertise has to be safeguarded and continued for future generations. We focus on the promotion and further training of our employees in order to ensure moderate growth and continuity in the company as well as constant product development.

Personal, open, solution-oriented communication within the company and with our customers is our top priority.

Get to know our diverse, innovative products and our outstanding service. Our dedicated team will be happy to assist you with help and advice.

Prof. Dr. Karl Höhle  
Founder & Managing Director

Petra Kleinhans  
Managing Director

Jessica Gessner  
Managing Director



## Innovation & Quality - Made in Germany

As a technology provider and economic part of society, our production facility in Zörbig near Leipzig is a clear commitment to Germany as a business location.

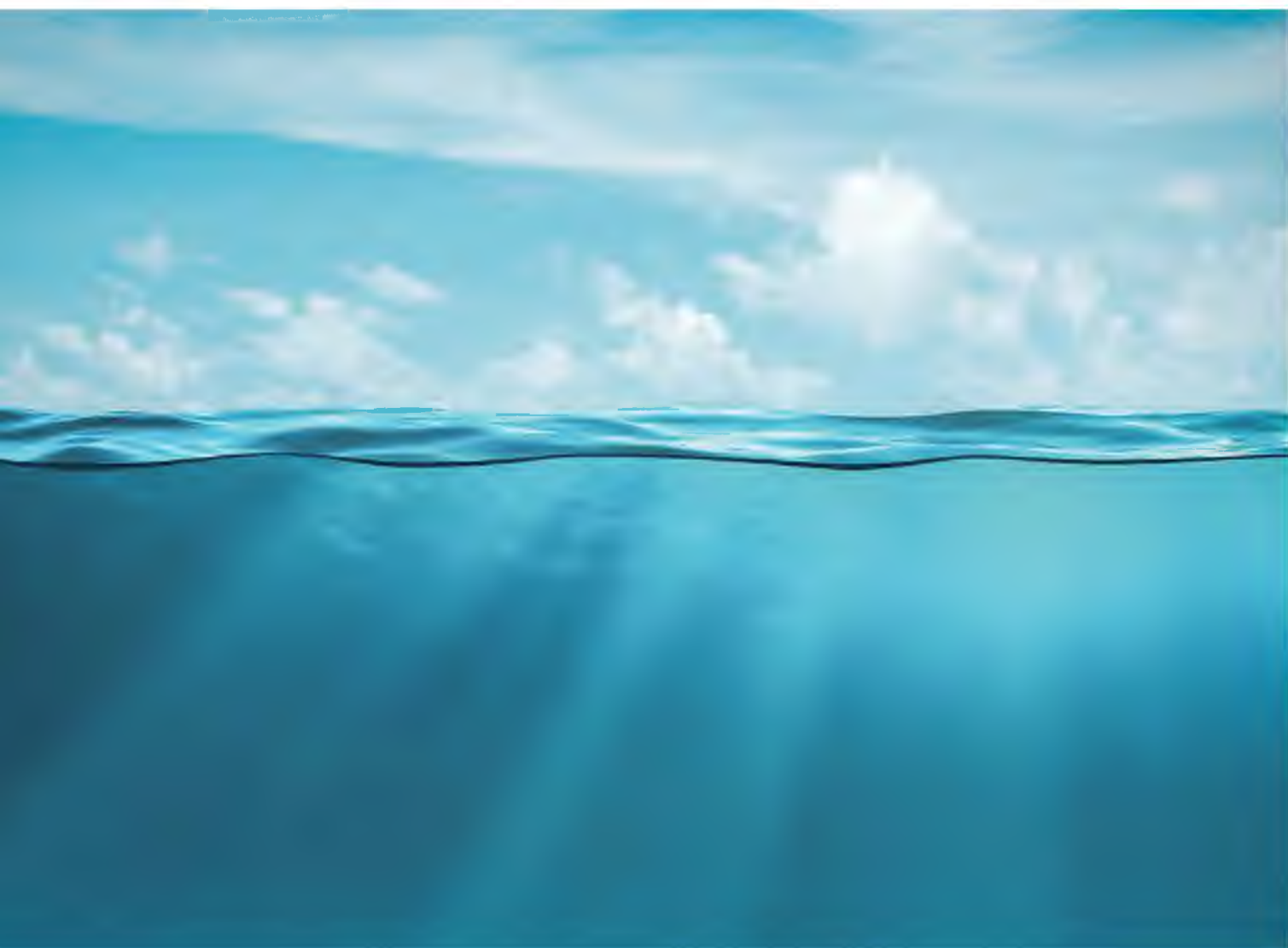
All of Dr. Höhle Medizintechnik GmbH's medical products are manufactured there under strict conditions and quality requirements. In addition to new technologies, the latest findings from medical research are also incorporated into the continuous improvement process.

The close proximity between research, development and production as well as German production standards guarantee the first-class workmanship, functionality and durability of our products. That is why we offer a 4-year national and international warranty on all our medical products.

Regular surveys provide conclusions about the satisfaction of customers and patients, making it possible to incorporate these findings into service and product development quickly and in keeping with requirements.

The use of modern and innovative manufacturing techniques makes it possible for us to uphold ecological principles while offering our customers high-quality products at economical prices.





## Tap water iontophoresis

### Successfully alleviate hyperhidrosis

What is tap water iontophoresis?	6
Mechanism of action & application	8
idromed®5	10

## UV phototherapy

Make use of the advantages of the medically usable parts of sunlight

What is UV phototherapy?	14
Mechanism of action & application	16
Medical radiation lamps	18
BASIC vs. PLUS	20

### Partial body exposure

dermalight®80R	26
dermalight®500R-o tabletop unit	28
dermalight®500R-1 through -4 tripod unit	30

### Total body exposure

coming soon	dermalight®1000Space & SpacePro	34
	dermalight®1000	36
	dermalight®2000	38
coming soon	dermalight®3000R	40

### Diagnostic systems

dermalight®80 Tester MED/MPD	44
dermalight®80R Woodlight	46

## Daylight PDT

The energy of the sun

	<b>What is daylight PDT?</b>	<b>48</b>
	<b>Mechanism of action &amp; application</b>	<b>50</b>
<b>coming soon</b>	<b>dermalight daylight PDT®</b>	<b>52</b>





## **Tap water iontophoresis**

**Successfully alleviate hyperhidrosis**

Tap water iontophoresis has been successfully used for hyperhidrosis for decades. The treatment used as standard for excessive sweating in the feet, hands and armpits is considered the first choice of remedy.

The ionic current generated by tap water iontophoresis stimulates the sweat glands located in the immediate vicinity as well as the cardiac conduction system, with the aim of reducing perspiration to a natural level without damaging the sweat glands.

Thus the possible formation of eczema and fungal diseases (mycoses) resulting from hyperhidrosis can be successfully prevented. Likewise, tap water iontophoresis is an adjuvant and prophylactic measure for dyshidrosiform eczema.

Other indications for tap water iontophoresis are accompanying multiple warts, gram-negative infections of the areas between digits and keratoma sulcatum. Here, iontophoresis is used in particular for prophylaxis and to maintain disease-free intervals. Sudeck's atrophy can also be successfully treated with this application.

The treatment successes are remarkable: the chances of success of iontophoresis for excessive sweating are just over 83%.

Our tap water iontophoresis devices are manufactured according to strict criteria for medical devices. Tap water iontophoresis treatment can be performed with the idromed®5 as long-term therapy with pulsed direct current (PS) or constant direct current (GS), depending on the indication. The devices can be used for application in the dermatologist's office or at home





## Mechanism of action & application of the idromed®5



### Electricity instead of medicine

Tap water iontophoresis treatment can be performed with the idromed®5 as long-term therapy with pulsed direct current (PS) or constant direct current (GS), depending on the indication. During the treatment, pulsed or constant direct current is conducted via special electrodes (direct voltage source) into the affected body parts through the medium of water. This is done via two affected extremities which are connected to the DC voltage source so that an ion current flow can occur. Affected parts of the body, such as the hands or feet, are placed in tubs filled with tap water. In underarm treatment, electricity flows through the wet comfort sponge pockets. The positively charged ions dissolved in the water and in the body flow through the body into the cathode (negative pole electrode), and the negatively charged ions flow into the anode (positive pole electrode). This current flow normalises perspiration without damaging the glands themselves.

### User requirement & contraindications

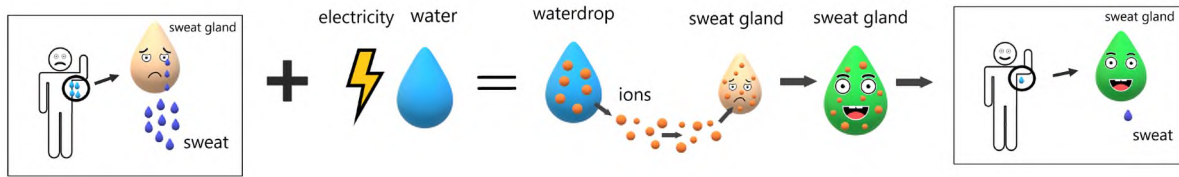
The idromed®5 can be operated by persons aged 12 and up. The treatment may only be administered to children younger than 12 under the supervision of an adult. For the following contraindications, the dermalight® 500R should not be used or should only be used after consultation with the treating physician: cardiac arrhythmias, electronically controlled implants (pacemakers), metal implants in the area of current flow, intrauterine implants containing metal (IUDs), pregnancy, major skin defects, insensitivity to pain stimuli.

### Cost-effective & convenient treatment that can even be used at home

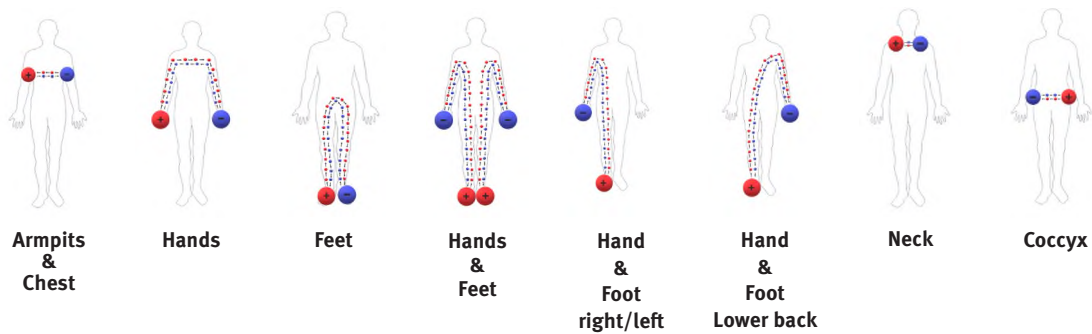
The idromed®5 can be used not only in the doctor's office or in the clinic; its safe and simple operation makes the product ideal for treatment at home. It can be conveniently prescribed by the attending physician and the prescription sent to Dr Hönle Medizintechnik GmbH for processing with the health insurance company. Since the product is an approved aid, the costs can be covered by the respective health insurance company in most cases.



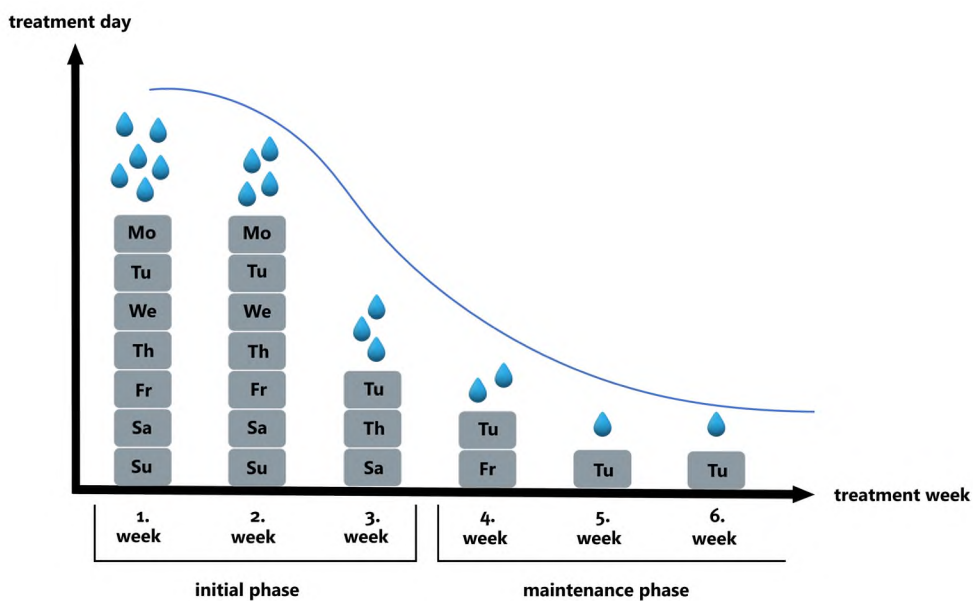
## Mechanism of action



## Current flow during treatment



## Duration and success of treatment



User film



## **idromed®5PS & GS**

**The ORIGINAL for pain- & medication-free sweat reduction from the comfort of your own home**

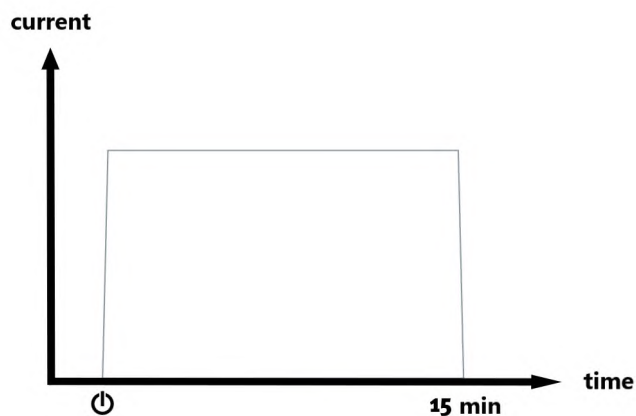
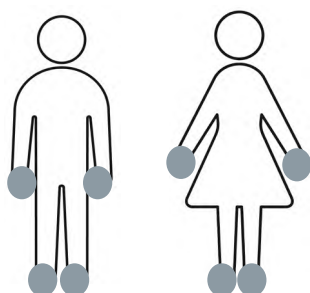
### **The powerful tap water iontophoresis device for excessive sweating**

Constant and pulsed direct current treatments have been used successfully in medicine for many years. The idromed®5 provides the ideal companion for conducting effective treatment in clinics. Its safe and simple operation also makes the device ideal for treatment at home.



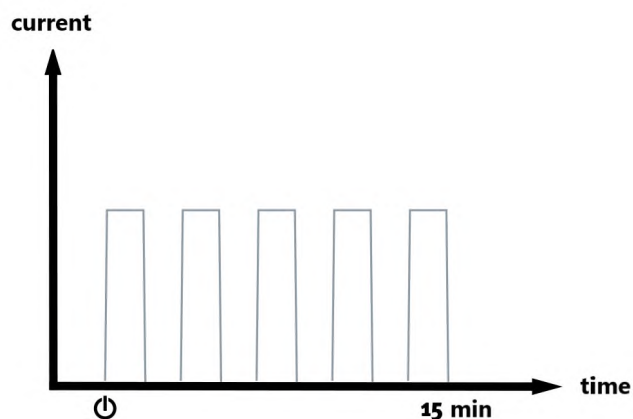
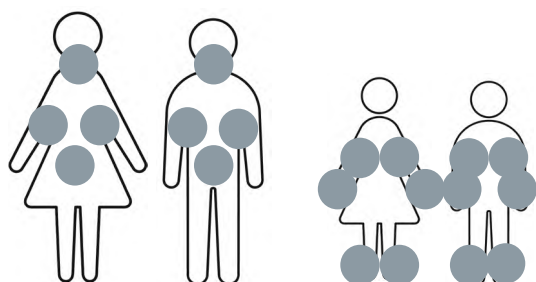
### idromed®5GS (constant direct current)

The idromed®5GS is based on the effect of constant direct current and is to be used for very severe hyperhidrosis on the hands or feet, as well as for thick to very thick calluses.



### idromed®5PS (pulsed direct current)

The idromed®5PS is based on the effect of medium-frequency pulsating direct current and is to be used for patients/users with thin and sensitive skin, such as children or young women, for the treatment of the armpits, buttocks, neck or breast.



## Compact data

### Protection features

- Plastic protective grids protect against direct contact between the skin and the plate electrodes
- Comfort sponge pockets protect against direct contact between the skin and electrodes
- Pre-selection of the treatment dose protects against overdose
- No pasture fence effect due to intelligent safety circuit & over-treatment protection
- Meets all standards of the current state of the art
- Has current test reports issued by an accredited test laboratory

### Effectiveness

- Drug-free therapy
- Environmentally conscious and economical mains operation
- Nickel-free, large-area aluminium electrodes for homogeneous current density and against allergic reactions

### Comfort

- Ideal for use in clinics, practice and at home
- Operation without assistant
- Handy, light and convenient to store
- Displays the remaining treatment time
- Simple and safe handling due to single control knob

### Treatment options

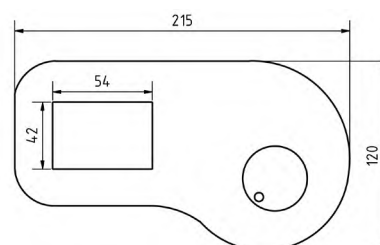
- Hands & feet (basic equipment)
- Armpits, chest, buttocks & neck (basic equipment & comfort sponge pockets)



## Technical data

<b>Unit dimensions (LxWxH)</b>	215 x 120 x 70 mm
<b>Dimensions of case (LxWxH)</b>	290 x 390 x 110 mm
<b>Weight (total)</b>	2,5 kg
<b>Mains connection (wide range)</b>	100V - 240V & 50-60 Hz

Subject to technical changes



Dimensions in millimetres

## Assembly variants

idromed®5 PS	Pulsed direct current
idromed®5 GS	Constant direct current

## Basic equipment

- Basic unit
- Plug-in power supply unit
- 2 x plate electrodes
- 2 x connection cables
- 1 case
- 2 x plastic grids
- 2 x edge protectors
- 1 patient journal
- 1 instruction manual



### User tip

Keeping our patient diary is a major contributing factor to the success of the treatment. Documenting the application makes it easier for the attending physician to assess the treatment and, if necessary, to optimise the course of therapy. In addition, the treatment history shows when the electrodes were changed.

## Additional equipment

- Small plate electrode with comfort sponge pockets
- Large treatment tubs



### NEW!!! idromed®5 - PRO PACKAGE

- 2 x basic units, PS & GS, with plug-in power supply unit
- 2 x large treatment tubs
- 2 x plate electrodes with plastic grids
- 25 x patient journals
- 1 pair of comfort sponge pockets with underarm electrodes







## **UV phototherapy**

**Make use of the advantages of the medically usable parts of sunlight**



UV phototherapy is a treatment with ultraviolet light originating as a modern light therapy around 1900 as part of the treatment for skin tuberculosis. Over the past 40 years, photobiological research has produced a large number of publications highlighting the potential of UV phototherapy for the treatment of skin diseases. UV phototherapy has been established as a proven and therapeutically effective treatment method for many skin diseases such as vitiligo, psoriasis, neurodermatitis and various eczema.

Irradiation with UV light has a calming effect on the immune system. Inflammatory skin diseases such as neurodermatitis can be alleviated in this way. With psoriasis, the radiation has a growth-inhibiting effect and can thus stop the increased formation and flaking of skin cells.

Irradiation is carried out with electronically controlled radiation systems equipped with special medical fluorescent tubes. UVB narrow-band spectrum emitters (305-315 nm) wavelength are rated as particularly effective for psoriasis. UVA (340-400 nm) is particularly effective for neurodermatitis. In addition, there are also some combination treatments such as PUVA photochemotherapy or balneo-phototherapy.

With the correct dosage and duration of treatment, the skin's appearance can be significantly improved, up to complete elimination of symptoms from the skin. Phototherapy can be performed on an outpatient basis and can be combined with other treatments. Our phototherapy systems for UV treatment in the doctor's practice and for home use are manufactured according to strict criteria for medical products. However, due to the need for correct dosage, medical supervision is mandatory.

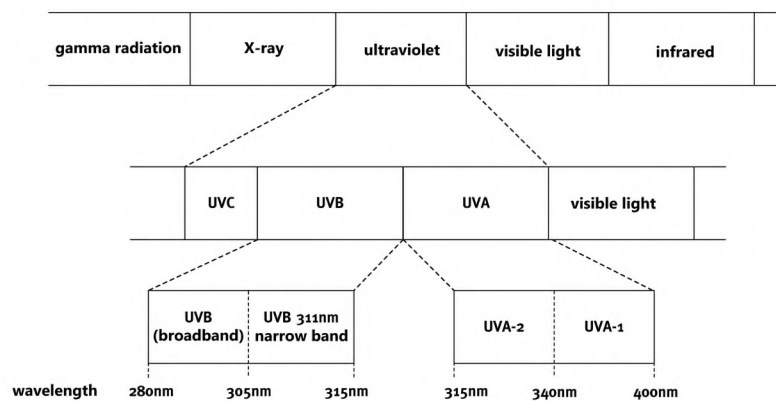
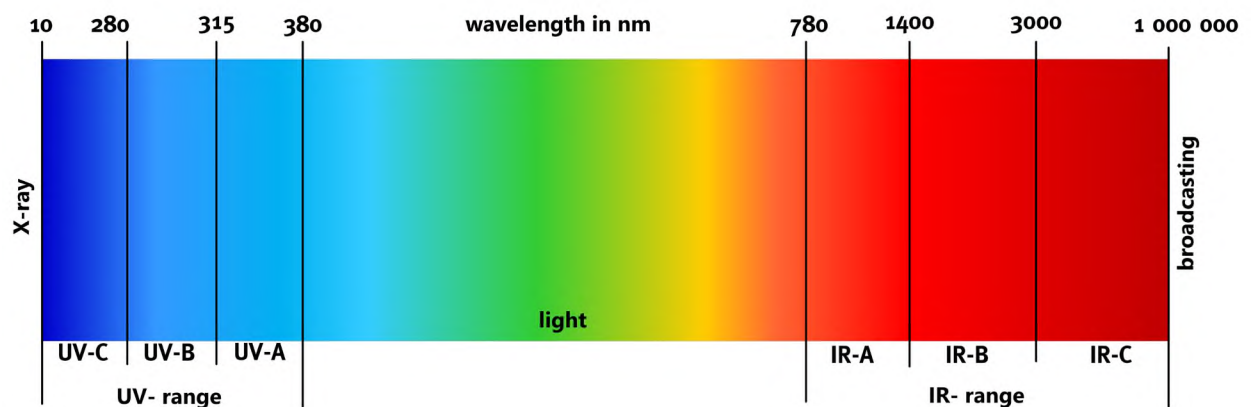




## Mechanism of action & application

### Properties of optical radiation

The spectrum of optical radiation is between 100nm (UV) and 1 million nm (IR)

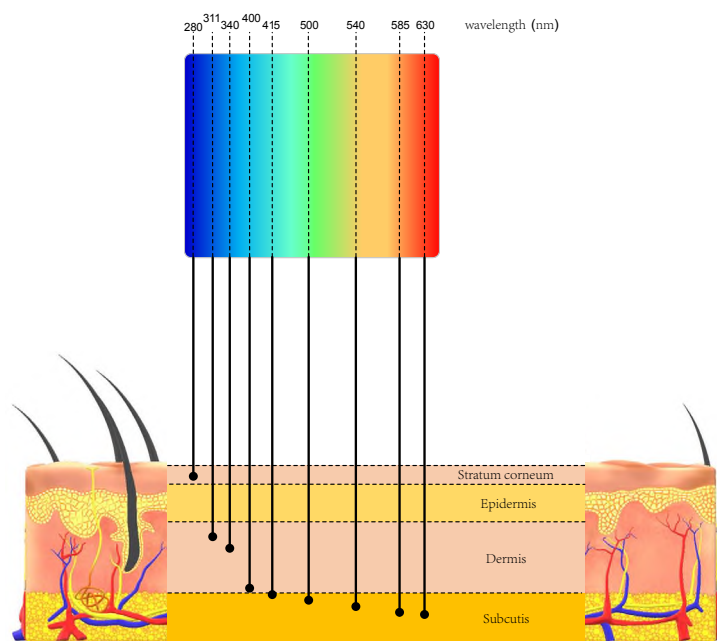


## Optical properties of the skin

The illustration below shows the effect of optical radiation on the skin. In this context, the skin is seen as a non-homogeneous medium consisting of four layers:

- stratum corneum & stratum spinosum = epidermis (50-150µm thick incl. stratum basale)
- Dermis (0.8-1mm)
- Subcutis (1-3mm)

The named layers have a different chromophore distribution, so that the reflection, transmission and scattering properties are different depending on the wavelength. The figure illustrates the respective penetration depth of the wavelength.



## Wavelengths and their indications

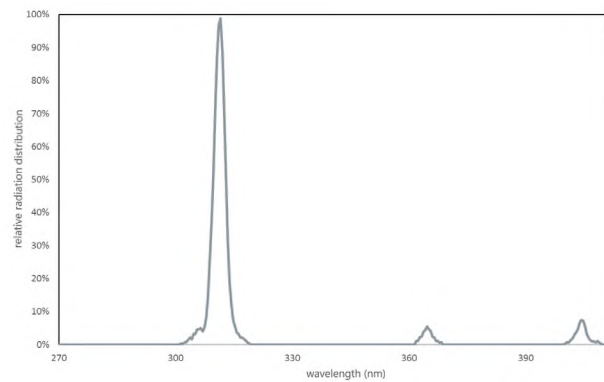
UVB 311nm (narrow band)	<ul style="list-style-type: none"> <li>• Psoriasis</li> <li>• Plaque psoriasis</li> <li>• Vitiligo</li> <li>• Atopic dermatitis</li> <li>• Pruritus</li> <li>• Prurigo</li> <li>• Prophylaxis of polymorphic light dermatosis</li> <li>• Mycosis fungoides</li> </ul>
UVB 311nm _ Combination therapy	Balneo-phototherapy (psoriasis)
UVA	<ul style="list-style-type: none"> <li>• Neurodermatitis</li> <li>• Polymorphous light eruption</li> </ul>
UVA_ Combination therapy	PUVA photochemotherapy (psoriasis & vitiligo)



## Medical radiation lamps

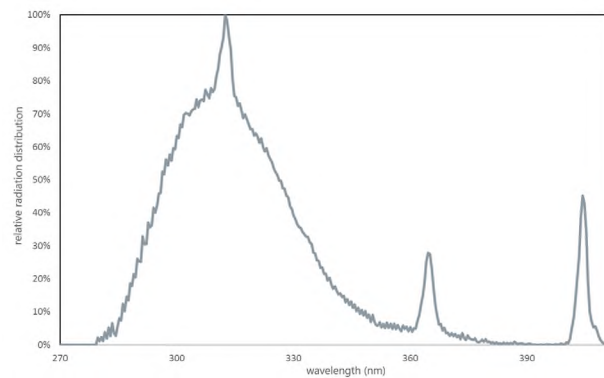
### UVB 311nm (narrow band)

PL-S 8W  
PL-S 9W  
PL-L 36W  
TL 100W  
TL 120W



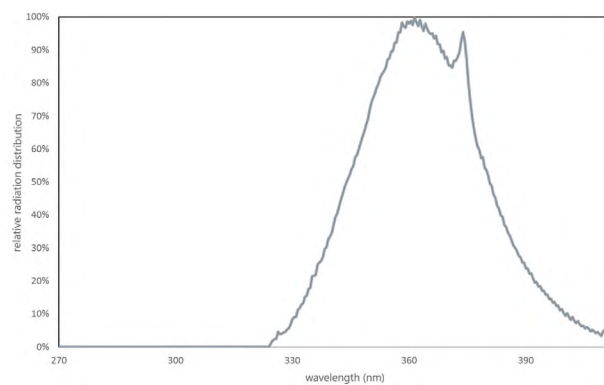
### UVB (broadband)

TL 100W



### UVA

PL-S 9W  
PL-L 36W  
TL UVA 100W  
TL UVA 120W



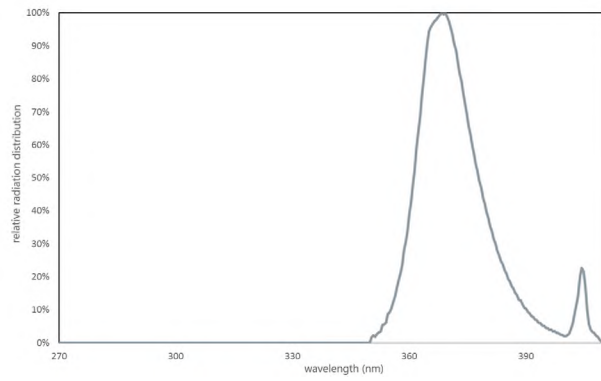


## UVA-1

PL-S 9W UVA-1

PL-L 36W UVA

TL 100W

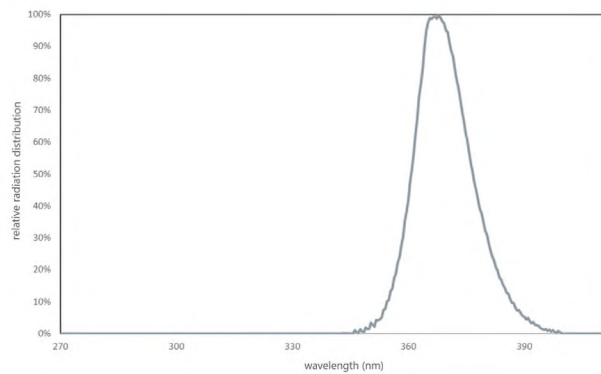


## UVA Woodlight

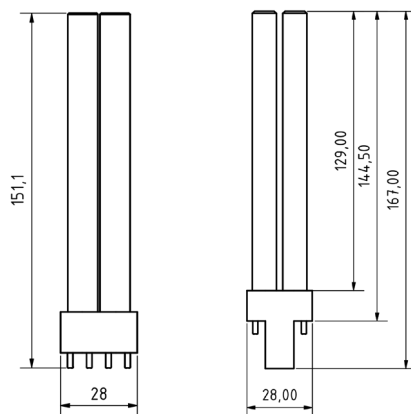
PL-S 9W

PL-L 9W

PL-L 36W

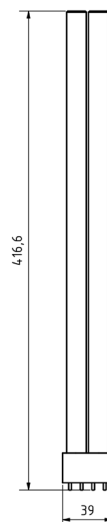


## Philips UV radiation lamps

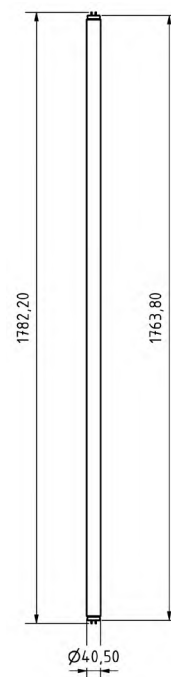


PL-S 8W

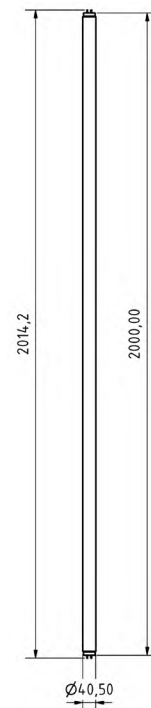
PL-S 9W



PL-L 36W



TL 100W



TL 120W



## dermalight® - BASIC vs. PLUS

The **dermalight® PLUS devices** have, in addition to innovative technical changes, supplementary safety functions in accordance with **DIN EN ISO 60601-2-57**.

## dermalight® - BASIC vs. PLUS

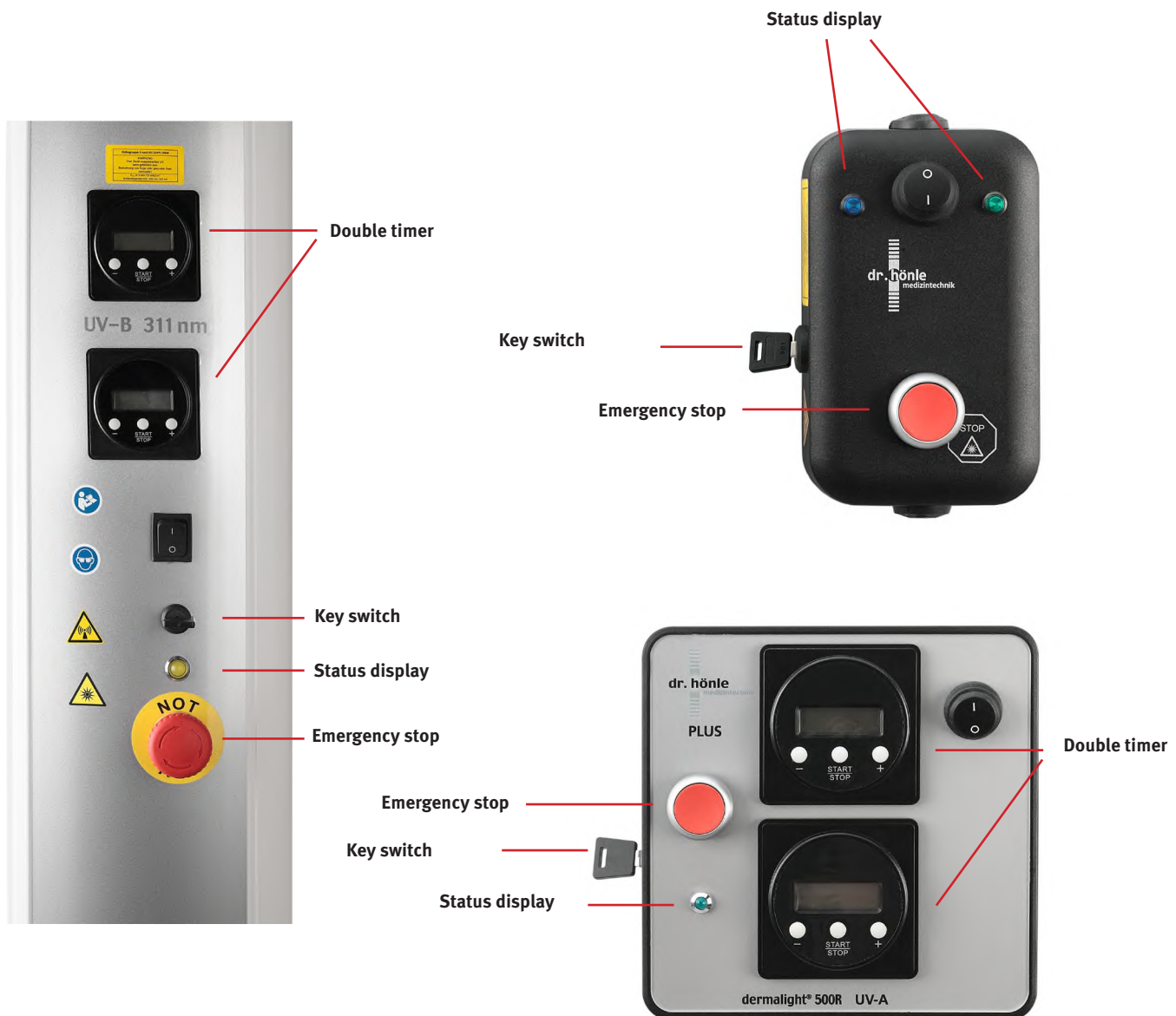
The **dermalight®80R PLUS**, the **dermalight®500R PLUS** and the **dermalight®1000R / Space & SpacePro PLUS** have, in addition to innovative technical changes, supplementary safety functions in accordance with **DIN EN ISO 60601-2-57**.

These serve to provide additional patient safety and include the following essential points:

- Status display
- Key switch
- Emergency stop switch
- Double timer (dermalight®500R, 1000R / Space & SpacePro & 2000R)

The control box can be retrofitted at any time without having to make any further changes to the basic unit:

- The **dermalight®80R is upgraded** by the manufacturer itself, so the unit must be sent in for this purpose.
- The **dermalight®500R is upgraded** by sending a new control box, which can be connected to the basic unit without any problems.
- The **dermalight®1000R / Space & SpacePro & dermalight®2000R cannot** be subsequently upgraded.







## **dermalight® - partial body exposure equipment**

The partial body exposure units of Dr. Höhle Medizintechnik GmbH offer both full flexibility for partial body exposure in the clinic or at home with the modular dermalight®500R and the ability to comfortably radiate even parts of the body that are hard to reach with the dermalight®80R.



## **dermalight®80R**

Once around the world without borders

### **The UV comb for effective home treatment**

The new lightweight and handy dermalight®80R enables extremely short application times due to its high irradiance and is the ideal UV comb for irradiating the scalp and hard-to-reach areas of the body. The removable comb attachment ensures even parting of the hair and the correct distance to the irradiation surface. Easy to use and clean, the dermalight®80R is also the ideal device for home treatment.

# Compact data

## Protection features

- Acrylic glass pane protects against direct contact & soiling of the spotlight
- Removable comb attachment serves as a spacer
- Meets all standards of the current state of the art
- Has current test reports issued by an accredited test laboratory.
- External control box enables convenient, safe and easy control of the unit
- Patient safety goggles protect users from UV radiation

## Effectiveness

- Precise parting of the hair areas with the comb attachment for effective irradiation
- High irradiance, meaning short irradiation times
- Removable, dishwasher-safe comb attachment
- The wide-range plug allows the device to be used anywhere in the world without an additional transformer

## Comfort

- Handy, light and convenient to store

## Areas of application

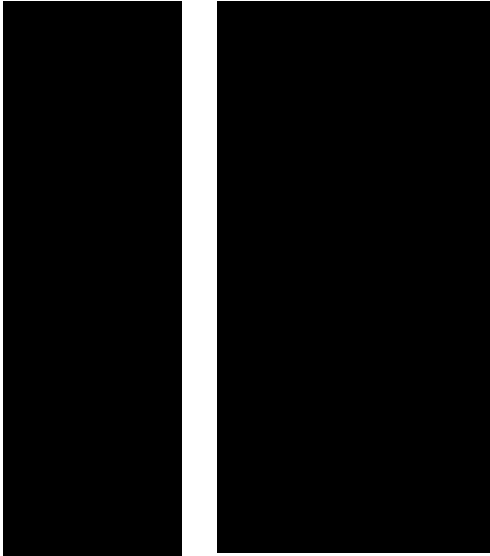
- Scalp and smaller skin areas (hard-to-reach parts of the body)



# Technical data

Control box dimensions (LxWxH)	150 x 80 x 45 mm
Comb dimensions (LxWxH)	300 x 60 x 45 mm
Weight	0.8 kg
Radiation outlet	110 x 40 mm
Irradiance	5.7 mW/ cm²
Power supply	110V - 240V / 50/60 Hz (wide range)
Class according to MPG & labelling	Ila / CE0123
Scope of delivery	<ul style="list-style-type: none"> <li>• 1 dermalight®80R</li> <li>• 1 BASIC or PLUS control box</li> <li>• 1 comb attachment</li> <li>• 1 pair of UV-protective goggles (patient)</li> <li>• 1 short timer</li> <li>• 1 patient journal</li> <li>• 1 instruction manual</li> </ul>

Subject to technical changes



Dimensions in millimetres

# Assembly variants

Mono units	UV compact lamp (UVB 311nm)	1x 8W
------------	-----------------------------	-------



dermalight®80R





## **dermalight®500R-o tabletop unit**

Powerful partial body exposure for at home

### **New dimension in UV therapy, designed for efficient home treatment**

The dermalight®500R-o was specially developed for treatment at home. The compact and powerful design allows different areas of the body such as hands, feet, face or décolleté to be treated. The external control box ensures that the treatment time is set comfortably and precisely. The emitters switch off automatically after the selected treatment time has elapsed. The dermalight®500R-o is optionally available with 2x36W spotlights or 3x36W emitters.

**For foot treatment with a foot size greater than or equal to 36x9cm (length x width), the purchase of a 3-emitter unit is mandatory.**



## Compact data

### Protection features

- Acrylic glass pane protects against direct contact & soiling of the spotlight
- Removable spacer serves as a spacer and protects the unit from being soiled
- Meets all standards of the current state of the art
- Has current test reports issued by an accredited test laboratory
- External control box enables convenient, safe and easy control of the unit
- Patient safety goggles protect users from UV radiation
- Microprocessor control with time limit and safety shutdown

### Effectiveness

- High irradiance, meaning short irradiation times
- Intensive, homogeneous, even irradiation due to optimised reflectors
- Emitters have long service life due to electronic ballasts

### Comfort

- Handy, light and convenient to store
- Angle adjustment through integrated positioning bracket in 12 positions
- Available with 2 or 3 emitters

### Areas of application

- Hands, feet, face, chest, abdomen, back, buttocks, knees and legs



dermalight@500R-o  
3 emitters



dermalight@500R-o  
2 emitters



dermalight@500R-o  
spacer

## Technical data

Unit dimensions (LxWxH)	51x35x7cm (2 emitters) 51x46x7cm (3 emitters)
Control box dimensions (LxWxH)	18x18x12cm
Weight	8kg (2 emitters) 11kg (3 emitters)
Radiation outlet	38.5x22cm (2 emitters) 38.5x33.5cm (3 emitters)
Irradiance	UVA: 16.8 mW/cm <sup>2</sup> (at a distance of 3cm) UVB 311nm: 11 mW/cm <sup>2</sup> (at a distance of 3cm)
Power supply	230V AC, 50Hz
Class according to MPG & labelling	IIa / CE0123
Scope of delivery	<ul style="list-style-type: none"> <li>• 1 dermalight@500R-o (2 or 3 emitters)</li> <li>• 1 BASIC or PLUS control box</li> <li>• 1 pair of UV-protective goggles (patient)</li> <li>• 1 spacer</li> <li>• 1 instruction manual</li> <li>• 1 patient journal</li> </ul>

Subject to technical changes



Dimensions in millimetres

## Assembly variants

Mono units	UV compact lamp (UVB 311nm)	2x 36W
	UV compact lamp (UVB 311nm)	3x 36W
	UV compact lamp (UVA / UVA-1)	2x 36W
	UV compact lamp (UVA / UVA-1)	3x 36W



dermalight@500R-o

dr. hönle  
medizintechnik



## **dermalight®500R-1 through -4 (tripod unit)**

Maximum flexibility for partial body exposure

### **The variable UV therapy for targeted partial body exposure**

The modular dermalight®500R-1 through -4 allows for maximum flexibility in partial body exposure for different body areas such as hands, feet, chest, buttocks, knees, face or legs. Module expansion can be done without a problem and the height-adjustable stand allows hands and feet to be treated simultaneously in a comfortable sitting position as well as other partial body applications. The external control box, positioned in a drawer in the centre of the product, the treatment time to be conveniently and precisely adjusted. The emitters switch off automatically after the selected treatment time has elapsed.

## Compact data

### Protection features

- Acrylic glass pane protects against direct contact & soiling of the spotlight
- Removable spacer serves as a spacer and protects the unit from being soiled
- Meets all standards of the current state of the art
- Has current test reports issued by an accredited test laboratory
- External control box enables convenient, safe and easy control of the unit
- Professional and patient safety goggles protect user & patient from UV radiation
- Microprocessor control with time limit and safety shutdown
- Each module can be controlled individually

### Effectiveness

- High irradiance, meaning short irradiation times
- Intensive, uniformly homogeneous irradiation due to optimised reflectors
- Emitters have long service life due to electronic ballasts

### Comfort

- Handy and convenient to store
- Modular unit design
- Angle adjustment through integrated positioning bracket
- Mobile, space-saving tripod
- Infinitely variable height adjustment by means of a gas pressure spring
- Upper module has a swivel range of 180 degrees

### Areas of application

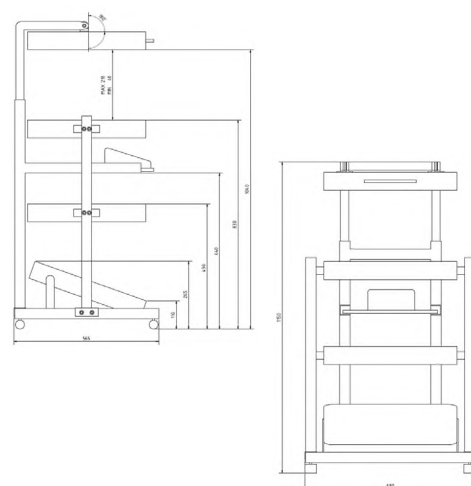
- Hands, feet, face, chest, abdomen, back, buttocks, knees and legs



## Technical Data

<b>Unit dimensions (LxWxH)</b>	68x56,5x115cm (3 emitters incl. stand)
<b>Control box dimensions (LxWxH)</b>	18x18x12cm
<b>Weight</b>	40 - 75kg (depending on version)
<b>Radiation outlet</b>	38.5x33.5cm (3 emitters)
<b>Irradiance</b>	UVA: 16.8 mW/cm <sup>2</sup> (at a distance of 3cm) UVB 311nm: 11 mW/cm <sup>2</sup> (at a distance of 3cm)
<b>Power supply</b>	230V AC, 50Hz
<b>Class according to MPG &amp; labelling</b>	IIa / CE0123
<b>Scope of delivery</b>	<ul style="list-style-type: none"> <li>• dermalight®500R-1 through -4</li> <li>• BASIC or PLUS control box</li> <li>• Spacer (depending on version)</li> <li>• 1 UV safety goggles for each (patient &amp; pro)</li> <li>• 1 instruction manual</li> </ul>

Subject to technical changes



Dimensions in millimetres

## Assembly variants

Mono units	UV compact lamp (UVB 311nm)	3x 36W (1 - 4 modules)
	UV compact lamp (UVA / UVA-1)	3x 36W (1 - 4 modules)

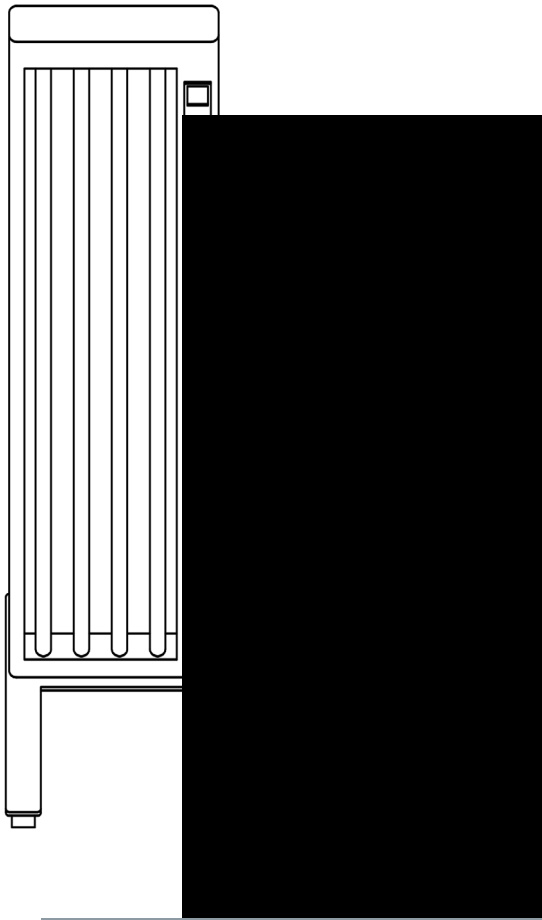


dermalight®500R-1 through -4



## **dermalight® - total body exposure equipment**

The total body exposure devices of Dr. Höhle Medizintechnik GmbH have been thoroughly tested in dermatological clinics & medical practices worldwide for more than 45 years and thus represent ideal medical systems for efficient and homogeneous irradiation of the whole body. In addition to professional use, the dermalight®1000 is also suitable for treatment at home from head to toe.



coming soon

### **dermalight®1000Space & SpacePro**

Homogeneous irradiation from head to toe - also for home use

#### **The smallest and most efficient form of total body exposure**

The dermalight®1000Space & SpacePro - with and without swivelling side panels - enables homogeneous irradiation from head to toe and can be set up in a way that saves a lot of space.

## Compact data

### Protection features

- Acrylic glass pane protects against direct contact & soiling of the spotlight
- Meets all standards of the current state of the art
- Has current test reports issued by an accredited test laboratory
- Patient safety goggles protect users from UV radiation

### Effectiveness

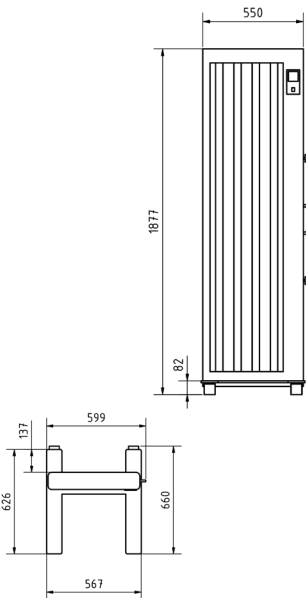
- High-gloss internal reflectors, geometrically shaped to enhance performance
- Optional: Swivelling side parts for simultaneous homogeneous irradiation of the lateral body parts (can be retrofitted at any time)
- low power consumption

### Comfort

- integrated wall mounting
- ergonomic front handles
- Large smooth-running castors with brakes for mobile use
- Compact dimensions

### Areas of application

- Full body



## Technical data

Unit dimensions (LxWxH)	599 x 660 x 1877 mm 900 x 660 x 1877 mm (open incl. side doors)
Weight	34 - 62kg
Power supply	230 V / 50 Hz & 60 Hz
Class according to MPG & labelling	Ila / CE0123

Subject to technical changes

Dimensions in millimetres

## Assembly variants

Mono units	UV lamp (UVB 311nm / UVB)	4x 100W
	UV lamp (UVB 311nm / UVB)	8x 100W
	UV lamp (UVA (PUVA) / UVA-1)	4x 100W
	UV lamp (UVA (PUVA) / UVA-1)	8x 100W





## dermalight®1000

Homogeneous irradiation from head to toe - also for home use

### For flexible UV total body exposure while standing, lying & sitting

The dermalight®1000 enables homogeneous irradiation from head to toe, both in professional use and treatment at home. The mobile, fixed stand allows the unit to be conveniently brought to the treatment site and stored to save space.

The product is available in two different tripod versions:

The **dermalight®1000 U stand** can be swivelled continuously by 90 degrees and thus enables application in standing, lying and sitting positions. The infinitely variable height adjustment guarantees the ideal treatment distance even when lying down.

The optional addition of a louvre makes it possible for the **dermalight®1000 T stand** to apply local therapy, e.g. to the back or neck area. The imprinted measuring rod allows the irradiation area to be precisely defined.

# Compact data

## Protection features

- Acrylic glass pane protects against direct contact & soiling of the spotlight
- Meets all standards of the current state of the art
- Has current test reports issued by an accredited test laboratory
- Patient safety goggles protect users from UV radiation
- Microprocessor control with time limit and safety shutdown

## Effectiveness

- High irradiance, meaning short irradiation times
- Intensive, even irradiation due to optimised reflectors
- Emitters have long service life due to magnetic ballasts
- Operating hours counter (only for dose)

## Comfort

- Handy, light and convenient to store
- Mobile, space-saving tripod
- UV light-proof louvre for partial body exposure (optional & only possible with T-stand)
- Individual emitter equipment possible
- Optional dose or time control

## Areas of application

- Full body
- Optional: Partial body exposure with louvre (T-stand)

# Technical data

Unit dimensions (LxWxH)	92 x 70 x 195 cm (U-stand) 72 x 51 x 195 cm (T-stand)
Weight	36 - 43 kg
Radiation outlet (WxH)	61 x 173.5 cm
Irradiance	5,3 mW/cm² (8 emitters UVB 311nm) 7,5 mW/cm² (12 emitters UVB 311nm) 11,5 mW/cm² (8 emitters UVA) 17,1 mW/cm² (12 emitters UVA)
Power supply	230V AC, 50Hz
Class according to MPG & labelling	IIa / CE0123
Scope of delivery	<ul style="list-style-type: none"><li>• dermalight®1000 (depending on version)</li><li>• 1 pair of UV-protective goggles (patient)</li><li>• 1 instruction manual</li><li>• 1 patient journal</li></ul>

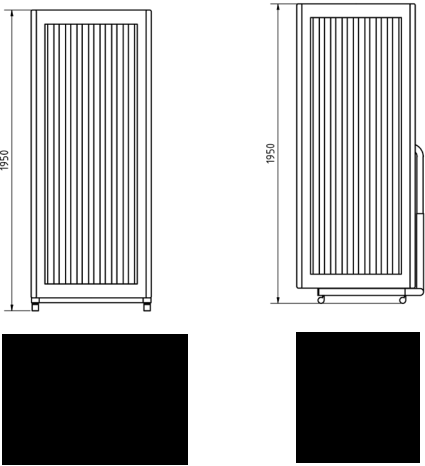
Subject to technical changes



dermalight®1000\_T-stand



dermalight®1000\_U-stand



Dimensions in millimetres

# Assembly variants

Mono units	UV lamp (UVB 311nm / UVB)	8x 100W
	UV lamp (UVB 311nm / UVB)	12x 100W
	UV lamp (UVA (PUVA) / UVA-1)	8x 100W
	UV lamp (UVA (PUVA) / UVA-1)	12x 100W
Combined units	UV lamp (UVB 311nm/UVB) & (UVA (PUVA) /UVA-1)	12x 100W (6:6 or 4:8)



dermalight®1000



## dermalight®2000

A flexible UV booth suitable for everyone

### **The all-rounder in UV therapy - saves space, time and costs all at the same time!**

The dermalight®2000 offers partial and total body exposure in the smallest of spaces due to its mobility as well as its compact and variable design. This light and open design reduces the feeling of constriction for the patient and also allows larger or claustrophobic persons to be treated comfortably. The ergonomic shape ensures homogeneous all-round irradiation with short treatment times. In the partial body area, the modular system is conducive to excellent irradiation results on any skin area. The integrated louvre in one of the modules guarantees efficient partial body exposure. The dermalight®2000 is thus a particularly economical combination device for almost any task in UV phototherapy. Thanks to the variable spotlight equipment and the two separable, powerful spotlight modules, the unit can be individually adapted to the respective areas of application.

## Kompaktdaten

### Protection features

- Acrylic glass pane protects against direct contact & soiling of the spotlight
- Meets all standards of the current state of the art
- Has current test reports issued by an accredited test laboratory
- Patient safety goggles protect users from UV radiation
- Microprocessor control with time limit and safety shutdown

### Effectiveness

- High irradiance, meaning short irradiation times
- Intensive, even irradiation due to optimised reflectors
- Emitters have long service life due to magnetic ballasts
- Operating hours counter (only with dose control)

### Comfort

- Handy, light and convenient to store
- Mobile, space-saving tripod
- Separable & individually controllable modules (optional)
- UV light-proof louvre for partial body exposure
- Individual emitter equipment possible
- Optional dose or time control
- Modules individually controllable (optional)

### Areas of application

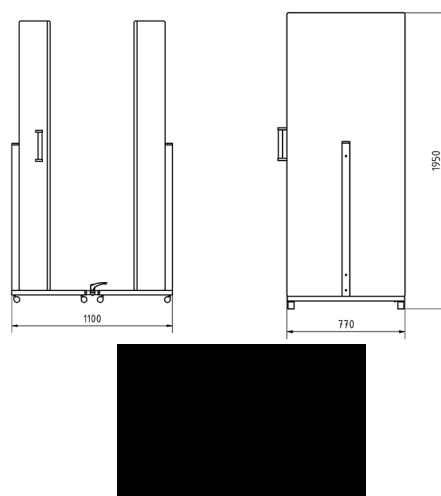
- Full body
- Optional: Partial body exposure with louvre (T-stand)



## Technische Daten

Module dimensions (LxWxH)	57 x 195 cm
Total width dimensions (WxH)	110 x 195 cm
Weight	35 - 45kg per module
Radiation outlet	61x173 cm per module
Irradiance	7.5 mW/cm <sup>2</sup> (24xUVB311nm) 2.5 mW/cm <sup>2</sup> (12x UVA) 12.3 mW/cm <sup>2</sup> (12xUVB311nm)
Power supply	230V AC, 50Hz
Class according to MPG & labelling	Ila / CE0123
Scope of delivery	<ul style="list-style-type: none"> <li>• dermalight@2000 (dep. on version)</li> <li>• 1 pair of UV-protective goggles (patient)</li> <li>• 1 instruction manual</li> <li>• 1 jalousie</li> <li>• 1 patient journal</li> </ul>

Subject to technical changes



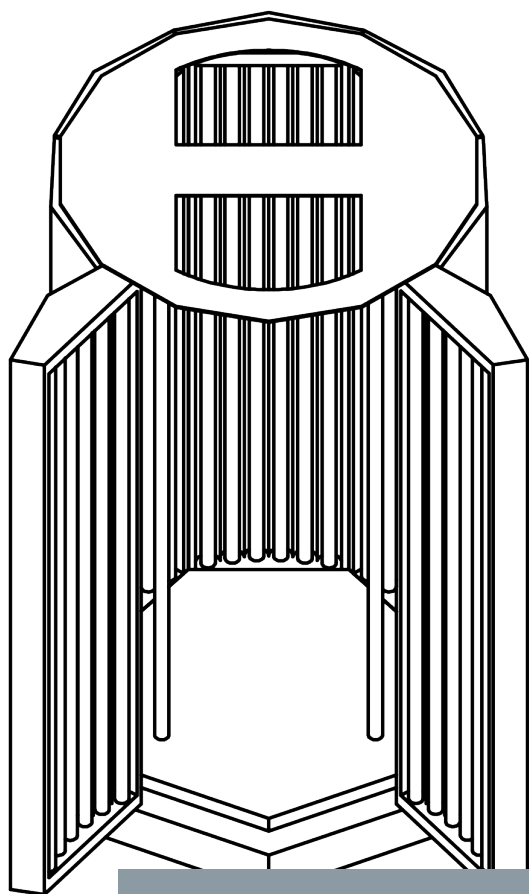
Dimensions in millimetres

## Assembly variants

Mono units	UV lamp (UVB 311nm / UVB)	16x 100W
	UV lamp (UVB 311nm / UVB)	24x 100W
	UV lamp (UVA (PUVA) / UVA-1)	16x 100W
	UV lamp (UVA (PUVA) / UVA-1)	24x 100W
Combined units	UV lamp (UVB 311nm/UVB) & (UVA (PUVA) /UVA-1)	12x 100W (12x each)



dermalight@2000



coming soon

## **dermalight®3000R**

The individual multi-talent of UV cabins

### **An efficient irradiation cabin - individually tailored for everyone**

The UV irradiation cabinet series dermalight®3000R offers an individual, high-performance solution in the field of UV total body exposure for everyone. The cabin geometry ensures that the human body is irradiated homogeneously in the entire irradiation area. Special reflectors installed behind the emitters increase the intensity of the radiation in the modules. This gives the patient a relatively low treatment time. The variable emitter height allows the UV booth to be implemented even in rooms with low ceilings. Devices such as a patient emergency stop switch or patient collapse detection maximise patient safety.

## Compact data

### Protection features

- Acrylic glass pane protects against direct contact & soiling of the spotlight
- Meets all standards of the current state of the art
- Has current test reports issued by an accredited test laboratory
- Patient safety goggles protect users from UV radiation
- Integrated temperature safety cut-off
- Maximum patient safety (emergency stop, patient alarm and viewing window)
- Emitter failure detection (optional)

### Effectiveness

- High irradiance, meaning short irradiation times
- Intensive, even irradiation due to optimised reflectors
- Emitters have long service life due to electronic ballasts
- Homogeneous irradiation (emitters arranged in a circle)
- Continuous, redundant recording of irradiance (sensor technology)
- Adaptive unit cooling with filter mats (dosable)

### Comfort

- Large, two-piece hinged door for convenient access
- Interior lighting
- Ramp for easy access
- Individual emitter equipment possible
- Optional dose or time control
- Large touch screen
- Storage space for clothing, goggles and documents

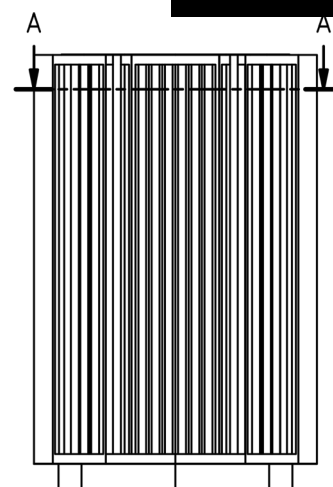
### Areas of application

- Full body

## Technical data

Unit dimensions (LxWxH)	100 x 100 x 220 cm (100W cabin) 140 x 140 x 220 cm (100W cabin) 140 x 140 x 240 cm (120W cabin)
Weight	approx. 400kg
Radiation outlet (WxH)	41 x 200 cm
Power supply	230V (up to 28 emitters) 400V (28 spotlights or more)
Class according to MPG & labelling	IIa / CE0123

Subject to technical changes



Dimensions in millimetres

## Assembly variants

Mono units	UV lamp (UVB 311nm / UVB / UVA (PUVA) / UVA-1)	25x 100W		
	UV lamp (UVB 311nm / UVB / UVA (PUVA) / UVA-1)	28x 100W		
	UV lamp (UVB 311nm / UVB / UVA (PUVA) / UVA-1)	35x 100W	or	35 x 50.1 cm
	UV lamp (UVB 311nm / UVB / UVA (PUVA) / UVA-1)	42x 100W	or	42 x 50.1 cm
Combined units	UV lamp (UVB 311nm / UVB / UVA (PUVA) / UVA-1)	Your choice of equipment		





## **dermalight® - Diagnostic systems**

A reliable diagnosis is the basis for any successful treatment. Dr.Hönle Medizintechnik GmbH offers two different diagnostic systems to help ensure a successful start and course of treatment.



### **dermalight®80 Tester (MED / MPD)**

The dermalight®80 tester is the compact tool for safely determining the minimum UVB erythema dose (MED) or the minimum phototypic UVA dose (MPD), depending on the choice of radiation sources (UVB 311nm or UVA - spectrum).

The exposure unit is divided into ten light therapy test fields. The dosage in the individual test fields results from different shading of the emerging UV radiation. The MED or MPD determined in this way is used to determine the optimal initial dose for UV therapy, depending on the erythema formation.

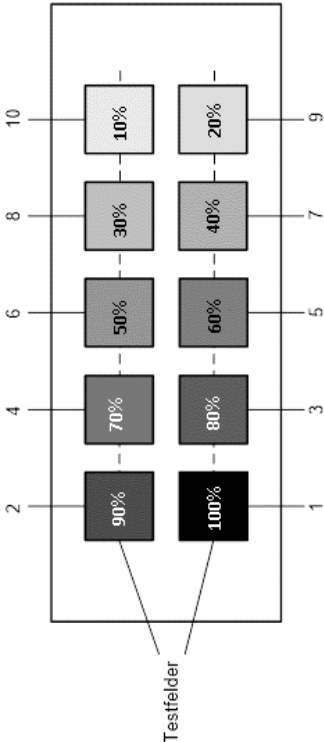
## Compact data

- Protection features**
  - Acrylic glass pane protects against direct contact & soiling of the spotlight
  - Determines the minimum erythema doses separately for UVA and UVB
  - External control box enables convenient, safe and easy control of the unit
  - Patient safety goggles protect users from UV radiation

- Effectiveness**
  - 10 test fields allow precise determination of the erythema threshold

- Comfort**
  - Handy, light and convenient to store

- Areas of application**
  - Diagnostic system for determining the erythema threshold before starting UV therapy



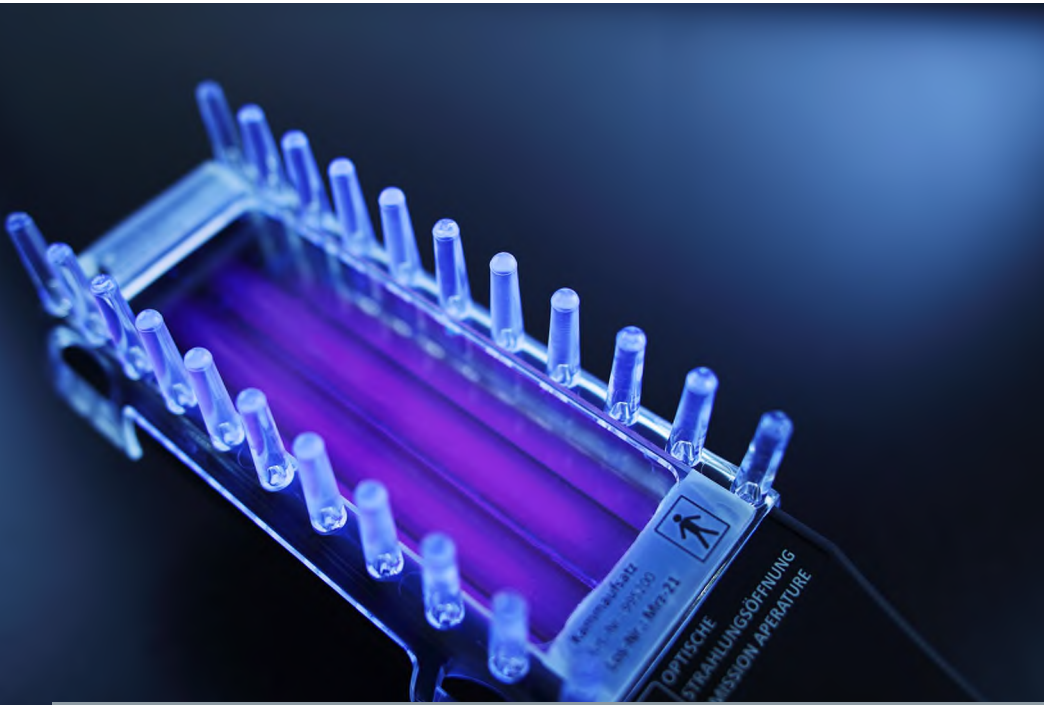
## Technical data

Unit dimensions (LxWxH)	30 x 6 x 4.5 cm
Test field dimensions (LxWxH)	30 x 6 x 4.5 cm
Weight	0.3kg
Power supply	230V AC, 50Hz
Scope of delivery	<ul style="list-style-type: none"> <li>1 dermalight®80 tester</li> <li>1 pair of UV-protective goggles (patient)</li> <li>1 instruction manual</li> </ul>

Subject to technical changes

## Assembly variants

Mono units	UV compact lamp (UVB 311nm)	1x 9W
	UV compact lamp (UVA)	1x 9W



## dermalight®8oR Woodlight

In addition to UVA irradiation, the dermalight®8o UVA Woodlight is used to detect the fluorescence of disease foci and assess pigment changes. The Woodlight should always be used when the diagnosis between a melanoma/melanocyte hyperplasia and a haematoma is clinically inconclusive. The melanoma or melanocyte hyperplasia is black under Woodlight, the haematoma is burgundy under Woodlight.

The dermalight®8o UVA Woodlight is also used for fluorescence diagnostics (FD) for in vivo diagnostics of dysplastic tissues and superficial tumours in conjunction with a locally or systemically applied dye, e.g. PPIX or 5-ALA, which are used in photodynamic therapy.

## Compact data

### Protection features

- Acrylic glass pane protects against direct contact & soiling of the spotlight
- External control box enables convenient, safe and easy control of the unit
- Patient safety goggles protect users from UV radiation

### Effectiveness

- Precise determination of the erythema threshold
- Control independent of skin
- Easy handling for hard-to-reach areas of the body
- Short treatment times due to high intensity
- Large homogeneous irradiation field due to optimised reflectors

### Comfort

- Handy, light and convenient to store
- The removable comb attachment serves as a spacer and is dishwasher safe

### Areas of application

- Diagnostic system for determining the erythema threshold before starting UV therapy

## Fluorescence - table

<b>Erythrasma</b>	Red fluorescence	<b>Ash leaf stain</b>	blue-white fluorescence on normal skin
<b>Microsporia</b>	weak greenish fluorescence	<b>Vitiligo</b>	Blue-white - light-white fluorescence on depigmented areas
<b>Favus</b>	toxic green fluorescence	<b>Scabies</b>	grey-white mites
<b>Trichobacteriosis axillaris</b>	yellow-ochre fluorescence	<b>Pityriasis Versicolor</b>	yellow-ochre fluorescence

## Technical data

<b>Control box dimensions (LxWxH)</b>	150 x 80 x 45 mm
<b>Comb dimensions (LxWxH)</b>	300 x 60 x 45 mm
<b>Light emission (LxW)</b>	110 x 40 mm
<b>Mains connection</b>	110V - 240V / 50/60 Hz (wide range)

Subject to technical changes

## Assembly variants

Mono units	UV compact lamp (UVA Woodlight)	1x 9W
------------	---------------------------------	-------



dermalight®80R Woodlight



A pair of hands is shown cupping a bright sun, with rays of light and lens flares emanating from the center. The background is a soft, hazy landscape with warm, golden tones. A semi-transparent grey box is overlaid on the left side of the image, containing the text.

## Tageslicht-PDT

The energy of the sun for your home

The beginnings of photodynamic therapy date back to the year 1400 BC. In Egypt, psoralens derived from plants were used as photosensitizers activated by the power of the sun to treat skin diseases.

The same interaction of light and drug is now used in modern dermatology in the form of photodynamic therapy (PDT) to treat actinic keratosis, the most common type of precancerous skin condition.





## Mechanism of action & application

The beginnings of photodynamic therapy date back to the year 1400 BC. In Egypt, psoralens derived from plants were used as photosensitizers activated by the power of the sun to treat skin diseases.

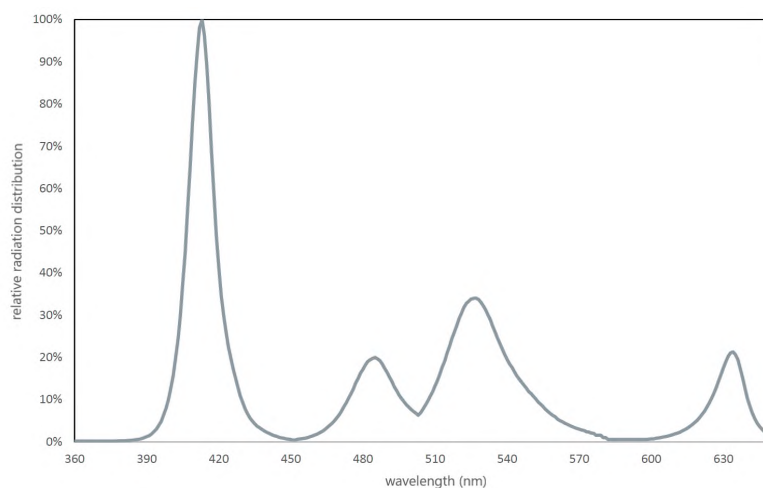
The same interaction of light and drug is now used in modern dermatology in the form of photodynamic therapy (PDT) to treat actinic keratosis, the most common type of precancerous skin condition.

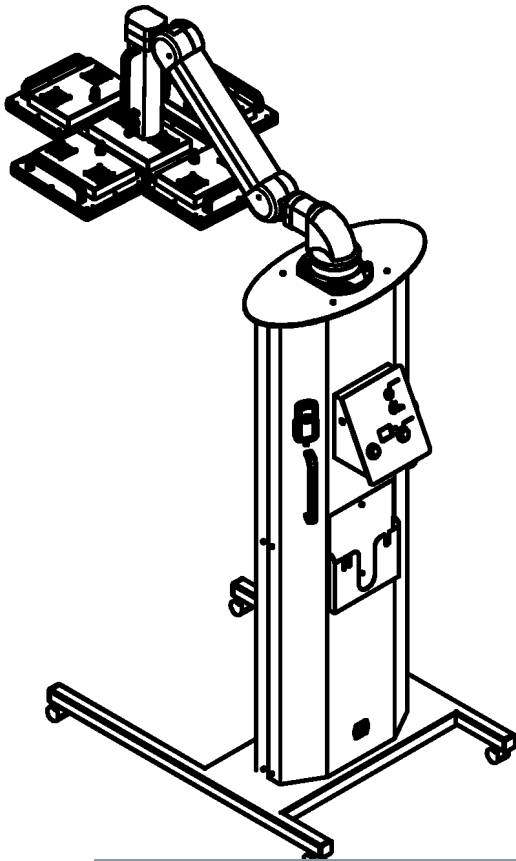
Actinic keratosis forms on areas of the body that are continuously exposed to light, such as the face, neck, chest or extremities. It is estimated that 50% of men and 30% of women in the age group over 45 are affected. Actinic keratosis, which is now recognised as an occupational illness, is particularly common in occupations that are performed outdoors, such as roofing or bricklaying.

Photodynamic therapy requires a light-sensitising drug called a photosensitizer. This is applied in the form of a cream to the affected areas and releases an initially non-phototoxic substance to the skin. During a short incubation period, the photosensitising protoporphyrin IX accumulates almost exclusively in the diseased tumour cells. This selective effect underlies the much more metabolically active tumour cells. Activation with light of a suitable wavelength results in the formation of a reactive oxygen species that destroys the diseased tissue.

PDT with daylight has been used successfully for years and has been shown in clinical studies to be equally effective compared to conventional red light PDT. The advantage of daylight PDT is that the sensation of pain during irradiation is much lower. However, daylight PDT is highly dependent on the time of year and day, as well as weather and temperature. In Europe, daylight is only sufficient to ensure safe and reliable therapy success between March and October. Cloudy, rainy and cold days are also excluded from this time window.

The dermalight daylight-PDT® eliminates these variables and ensures a reproducible, safe and effective course of treatment at all times. The absorption spectrum of the photosensitizer is reproduced via LEDs specially developed for medical phototherapy. Using visible light in the range of 415, 500, 540, 585 and 630 nanometres, uniform activation of the photosensitizer is achieved at every tissue depth. The irradiation is thus free of the ultraviolet and infrared components of sunlight that are not needed for the treatment to succeed. Furthermore, the course of treatment with the dermalight daylight-PDT® is adapted to the approved protocol for the use of artificial daylight in combination with a photosensitizer.





coming soon

### **dermalight daylight PDT®**

The Energy of Sunlight

PDT with daylight has been used successfully for years and has been shown in clinical studies to be equally effective compared to conventional red light PDT. Red light PDT causes more pain than daylight PDT many times over. However, daylight PDT is highly dependent on the time of year and day as well as weather and temperature. The dermalight daylight-PDT® eliminates these variables and ensures a reproducible, safe and effective course of treatment at all times.

The absorption spectrum of the photosensitizer is reproduced via LEDs specially developed for medical phototherapy. Using visible light in the range of 415, 500, 540, 585 and 630 nanometres, uniform activation of the photosensitizer is achieved at every tissue depth. The irradiation is thus free of the ultraviolet and infrared components of sunlight that are not needed for the treatment to succeed.

## Compact data

### Protection features

- LED monitoring system
- Overtemperature protection
- Patient shut-off
- Monitoring system for unit cooling
- Acoustic warning in case of error

### Effectiveness

- Constant cooling of light sources
- Reproducible and uniform activation of the photosensitizer
- Spectrum specially tailored to the photosensitizer
- Long LED service life

### Comfort

- Large swivel range of support arm
- Adjustable height of irradiation head for sitting and lying treatment
- No UV and infrared light and with no additional UV protection necessary

### Areas of application

- Scalp
- flat areas of skin
- Extremities

## Technical Data

Unit dimensions (LxWxH)	120 x 720 x 210cm
Weight	approx. 65kg
Radiation outlet	25 x 18 cm (5x)
Power supply	230V
Class according to MPG & labelling	Ila / CE0123

Subject to technical changes



Dimensions in millimetres

## Assembly variants

Mono unit 1	50 medical LEDs LED spectral ranges: 415nm, 505nm, 540nm, 580nm, 630nm
-------------	---

**Notes**

Handwriting practice lines consisting of 20 horizontal blue lines.

## **Electric G-WEE reg. no.: DE 14312030**

IK 590910502 / prequalified according to §126 1<sup>a</sup> SGB V, for the care areas 6A and 9A

These are medical devices in conformity with EEC Directive 93/42, the Medical Devices Act (MPG), Directive 2011/65/EU (European Environmental Protection Directive RoHS II), which bear the CE mark. Member of Qualitätsverbund Hilfsmittel e.V.

## **Dr. Höhle Medizintechnik GmbH**

Headquarters:  
Dornierstr. 4  
D-82205 Gilching, Germany

Branch office:  
Thura Mark 8+10  
D-06780 Zörbig, Germany

Phone: 0 81 05 / 7 30 29-0  
Fax: 0 81 05 / 7 30 29-50  
E-mail: [medizin@drhoehle.de](mailto:medizin@drhoehle.de)  
Internet: [www.drhoehle.de](http://www.drhoehle.de)

