



**Totaalleverancier
van lasers en medische
technologieën**



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MULTILITE®

**INDOOR DAYLIGHT PDT
MULTICOLOR LED LAMP FOR PHOTODYNAMIC THERAPY**



SPECIFIC. POWERFUL. TRICOLORED.

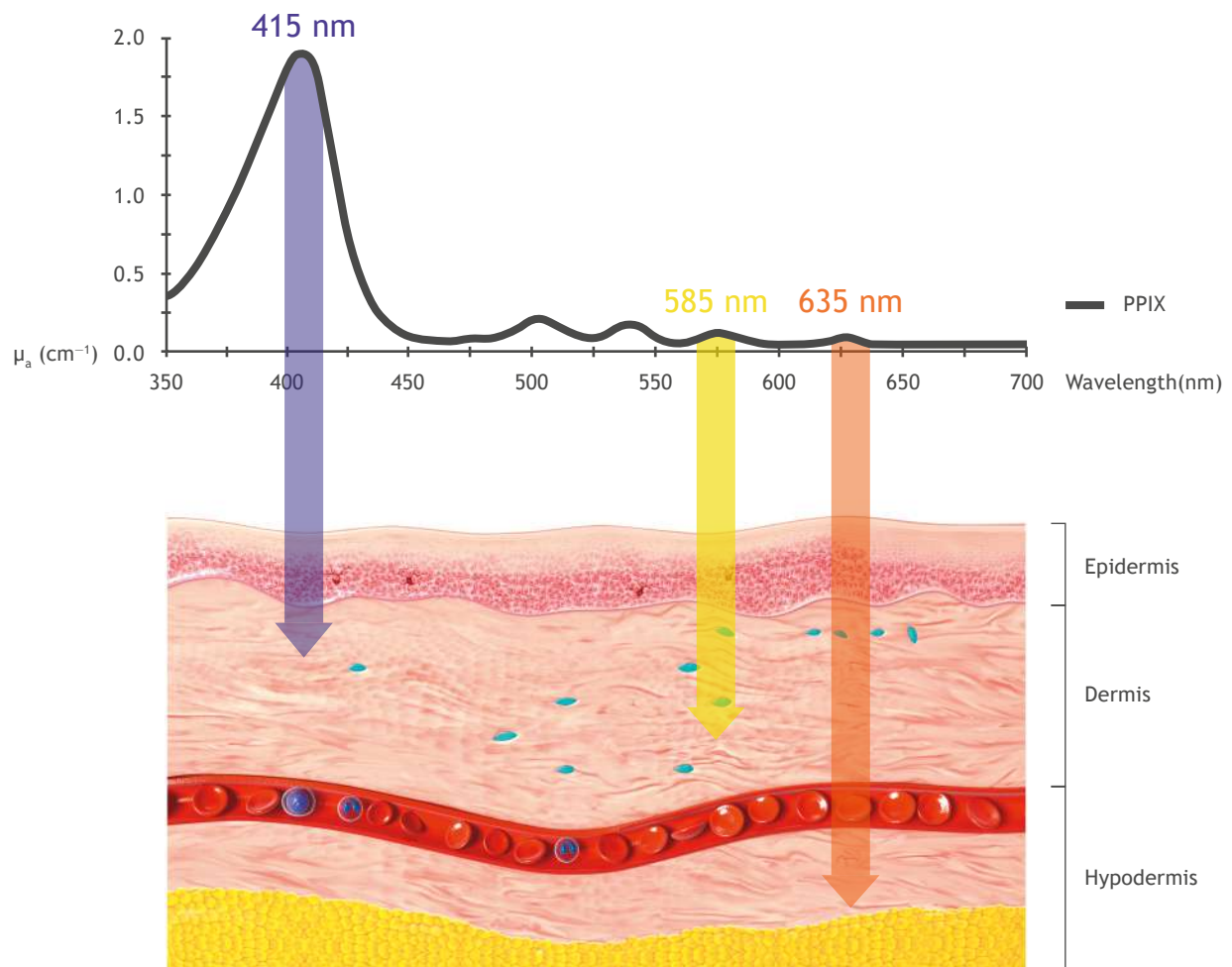
TECHNOLOGY

The MultiLite® emits only the light spectrum of natural sunlight that is relevant for PDT. A high dose of light is applied, corresponding to two hours of exposure to equatorial sunlight. In our latitudes, it is difficult to obtain comparable doses with natural light.

Another advantage over exposure to natural sunlight is the modulation of penetration depth. The treatment starts with blue light (415 nm, low penetration depth), followed by yellow light (585 nm, medium penetration depth) and finally red light (635 nm, high penetration depth).

This results to a layer-by-layer activation of the accumulated PpIX. When using LEDs for the daylight PDT lamp, it is essential to use light of the wavelength 415 nm (see graphic below).

The white-light LEDs used for room illumination are not suitable because, due to their technology, they only start to emit light at a wavelength of approximately 450 nm.



CLINICAL USE

THE MULTILITE® HAS TWO BUILT-IN PROTOCOLS FOR INDOOR DAYLIGHT PDT

- **35-MINUTE IDL PROTOCOL:**

Exposure is sequential starting with blue light followed by yellow and red light.

The goal is to use the wavelengths along their depth effect in the tissue. (Incubation time: 60 minutes, exposure time: 35 minutes).

- **80-MINUTE IDL PROTOCOL:**

The procedure differs from the 35-minute protocol only in that all wavelengths are introduced at minimum intensity. (Incubation time: 30 minutes, exposure time: 80 minutes).

The light dose of 48 J/cm² and the distribution among the individual colors are identical. The protocol is selected according to the criteria of time available in the practice and the patient's sensitivity to pain.

We had 15 of our users take the time to summarize their treatment results. Of these 15 dermatologists, 1,277 patients were treated with field cancerization. Thereby on average about 7 PDTs were performed per month.

Most treatments were performed using the 35-minute protocol. The choice of protocol often depends on the practice procedure (= separate room for PDT).

The healing rates of both protocols are very good and comparable. PDT with the 35-minute IDL protocol is rated as slightly more painful than the PDT with the 80-minute IDL protocol. The pain sensation during PDT with the 80-minute IDL protocol is comparable to the pain sensation during natural daylight PDT.

Side effects (redness, etc.) rarely occur and are usually temporary.

CONCLUSION:

With the MultiLite®, you can perform a minimum-pain indoor daylight PDT which, in contrast to daylight PDT is controlled and standardized.

	35-minute IDL PDT protocol	80-minute IDL PDT
Number of patients	1.066	211
Healing rate in %	84	84
Pain *	3	2

* 0 = no pain, 10 = maximum pain

MULTILITE® = 3 COLORS AND 6 ADVANTAGES

1 EASY TO USE

Pre-installed treatment protocols –
tested by leading dermatologists

2 LARGE SURFACE TREATMENT

Treatment area is three times the size of
conventional PDT systems



3 NO UV LIGHT USAGE

Only the relevant spectrum of sunlight is applied:

- Blue (415 nm)
- Yellow (585 nm)
- Red (635 nm)

4 SHORT TREATMENT TIME

Dose of daylight PDT can be applied in 35 minutes

5 ADDITIONAL TREATMENT OPTIONS

Ekcema with yellow light

Acne with blue light

6 ONE DEVICE ONLY

Protocol for conventional (red light) PDT included



BRING THE SUN INTO YOUR PRACTICE!



The new beam source MultiLite® is an essential component for artificial (indoor) daylight PDT. Larger areas with field cancerization can be treated in a controlled and effective manner – stand-alone or in combination with a laser-assisted drug delivery.

This is the most innovative version of PDT provides a safe and standardized therapy – all year long.

Professor dr. med. habil. Uwe Paasch
Leipzig university clinic

TECHNICAL INFORMATIONEN

SPECIFICATIONS

Light source	LED – Light Emitting Diode
Wavelength	415 nm, 585 nm, 635 nm
Max. Dose per wavelength	415 / 585 / 635 nm: 98 / 48 / 120 J/cm ²
Max. power density per wavelength	415 / 585 / 635 nm: 41 / 20 / 50 mW/cm ²
Treatment area	500 cm ²
Dimensions (H x L x W)	159 cm x 60 cm x 60 cm
Weight	27 kg
Indications	Photodynamic Therapy Atopic dermatitis Eczema Acne

SAFE. PROFITABLE. DURABLE.

- Tested by clinical experts
- No consumables or disposables
- Long LED life
- Low space requirements

Manufacturer according to medical device directive 93/42/EEC: Medmix Co.,Ltd



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