

THE SCIENCE BEHIND INLIGHT®

Light absorption produces heat

The concept behind the use of light to treat skin tissue is that light that is absorbed by tissue generates heat. By using specific colors (or wavelengths) of light to treat specific parts of the skin we can target and therefore treat a distinct part of the skin and spare surrounding tissue.

Light can pass completely through non-absorbing tissue and effect subsequent tissue that absorbs its energy and thereby produces heat.

INLIGHT is a unique aesthetic solution with optimal efficacy, safety and ease of use. Square Pulse Technology (SPT) and Vacuum Assisted Light (VAL) give users the ability to control the pulse shape while the vacuum-assist technology stretches the skin, pulling the hair follicle closer to the energy source.

It provides reproducible results as well as gentler, more comfortable treatments. Universal handpiece with six Cut-Off Filters, enables treatment of a myriad of conditions with a single, versatile and cost effective handpiece.

Scientific Publications

Dermatol. Surg. 2006; 32: 234-240. | *Dermatol Surg* 2010; 36: 829-840. | *The British Association of Plastic Surgeons* 2004; 57: 453-455. | *Dermatol Surg* 2008; 34: 672-680. | *Arch Dermatol* 2001; vol 137. | *Lasers in Surgery and Medicine* 2004; 35: 68-76. | *J. Plast. Reconstr. Surg.* 2007; 31: 123-128. | *Dermatologic clinics* 1997; 15: 397-407. | Anderson RR, Parrish JA. (1981) *The optics of human skin. Journal of Investigative Dermatology* 77(1):13-9 | Fodor L, Peled IJ, Rissin Y, Ramon Y, Shoshani O, Eldor L, Gaiman A, Ullmann Y. (2004) *Using intense pulsed light for cosmetic purposes: our experience. Plastic and Reconstructive Surgery* 113(6): 1789-95 | Christian Raulin, Syrus Karsai *Laser and IPL Technology in Dermatology and Aesthetic Medicine* 2011



Source	Xenon Lamp
Spectrum of Emission	550-1200nm; 550-950nm; 650-950nm; 410-1200nm; 695-1200nm; 755-1200nm;
Energy per pulse	25J/cm2 (max)
Pulse Duration	from 1 to 60ms
Delay Between Pulses	from 5 to 60ms
Number of pulses	from 1 to 5
Repetition Rate	Up to 3Hz
Treatment Area	50mm X 10mm (5cm ²)
Emission Control	footswitch and handpiece switch
Expected lifetime	50.000 shots
Vacuum Suction Mode	66.6KPa (Max) Continuous/pulsed

distributed by



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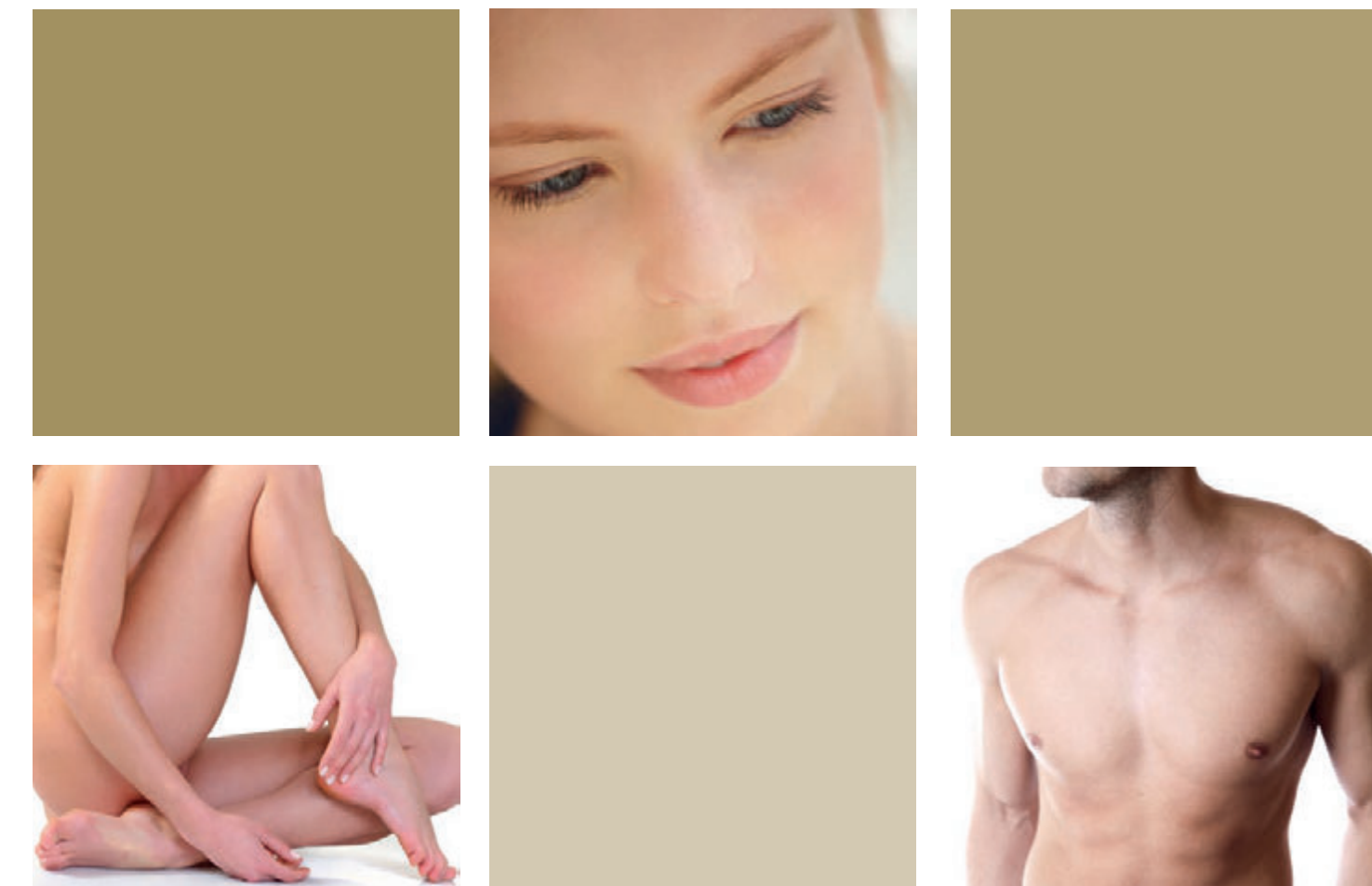


INLIGHT is 100% MADE IN ITALY technology

Biotec Italia guarantees the genuineness of a truly Italian product and the superior quality of its products for the infinite attention paid to every single detail of the manufacturing process.

Biotec Italia Guarantee:

- INLIGHT is made entirely in Italy.
- INLIGHT is made using only Italian semi-finished products.
- INLIGHT is made out of top quality materials.
- INLIGHT is made adopting Italian technological expertise and know how.
- INLIGHT is made using Biotec Italia's own technological designs.



Device Overview

Aesthetic procedures that previously required different lasers can all be offered with the INLIGHT. The standard handpiece utilizes a crystal filter to modify the lamp's emitted broadband light spectrum and Vacuum Assisted Technology, making INLIGHT versatile and extremely effective and enabling treatments of permanent hair reduction, photo facial, pigmented lesions and acne.

Treatment indications:

- Unwanted Hair - in all skin and hair colors (except for white hair) on all body parts
- Ingrown hair, folliculitis, razor bumps - as well as the associated skin darkening and pimples
- Freckles and Skin Darkening
- Acne
- Sun Damage
- Age spots
- Freckles
- Enlarged pores

Vacuum Assisted Light benefits:

- Faster treatment time.
- No topical anesthetic cream or cooling gels needed.
- Virtually painless with no downtime.
- Safer than traditional laser hair removal systems.
- Great for large treatment areas. Especially the stomach, arms, back, shoulders and neck for men.



INLIGHT® handpiece



Device Components

- 1 Intense Pulsed Light generator
- 2 Closed-cycle water cooling system
- 3 Handpiece platinum cavity
- 4 Sapphire crystal filter
- 5 Integrated contact cooling
- 6 Vacuum Assisted Technology

1. Intense Pulsed Light generator

Superior by design, the new INLIGHT system offers several innovative and advanced technology enhancements. The powerful INLIGHT is capable of providing more power than conventional Intense Pulsed Light systems, with true energy fluence up to 100J. The Intense Pulsed Light generator is simple and efficient to operate; controls are within easy reach and important user information is clearly displayed on the LCD, including energy delivered and treatment setting.

2. Closed-cycle water cooling system

INLIGHT system utilizes high-powered xenon lamp that require water and air cooling for reliable operation. Very importantly, too, the closed-cycle cooling system enables optimal xenon lamp preservation and safe treatment application. Other Intense Pulsed Light systems available on the market utilize forced air to achieve xenon lamp cooling; such systems have proven to lead to lamp overheating and poor operational performance.

3. Handpiece platinum cavity

The ergonomic INLIGHT handpiece integrates flashlamp, platinum coated reflective chamber, cut-off filter, sapphire prism, electrical assembly, closed water-cooled chamber and water tip cooler. The flashlamp (handpiece) generates polychromatic spectrum (non-coherent) light while low-range infrared radiation are filtered to allow a specified range of wavelengths. This filtered light is delivered from the handpiece into the skin, where it releases only the wavelengths absorbed by the target. The strength and duration of the pulse is also tightly controlled to ensure the target is selectively heated to, whilst leaving the surrounding tissue unharmed.

4. Sapphire crystal filter

INLIGHT provides a range of different available wavelengths. Through selection of sapphire crystal filter is like having a suite of lasers to effectively treat a number of skins conditions: this special cut-off filter is used to block out wavelengths of light below the filter number selected and allow only those wavelengths of light above the filter number to pass through. This makes the INLIGHT system very versatile and gentle offering gradual results with minimal risk of side effects and patient downtime.

5. Integrated contact cooling

Cooled sapphire tips, with temperature control. More cooling capacity with 2 modules of 50,5 Watts each. Excellent safety and comfort during the treatment.

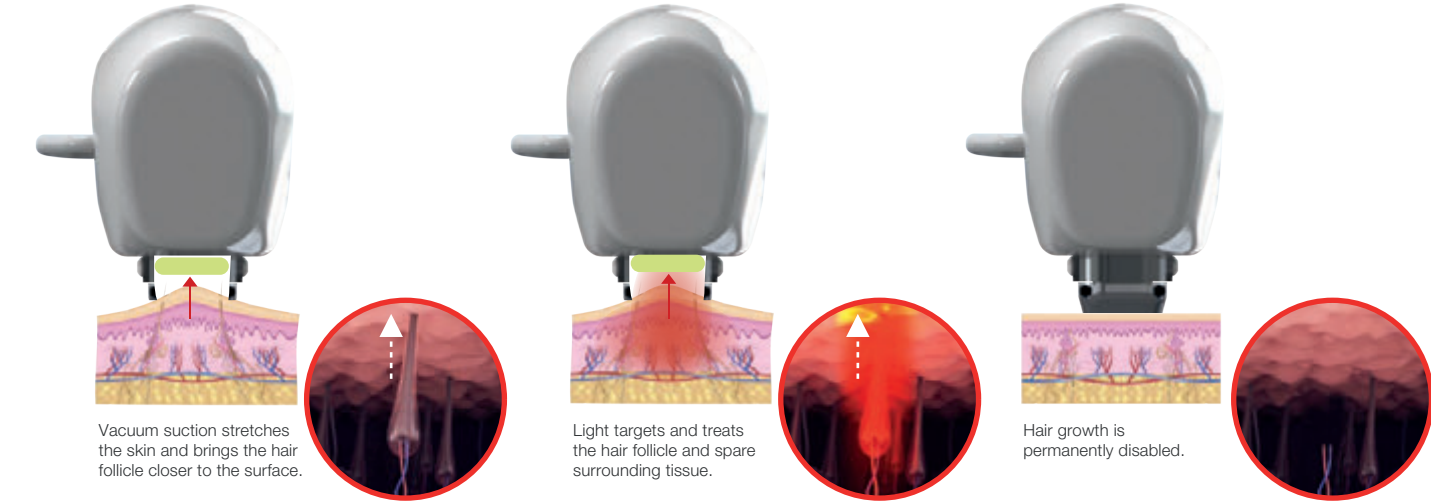
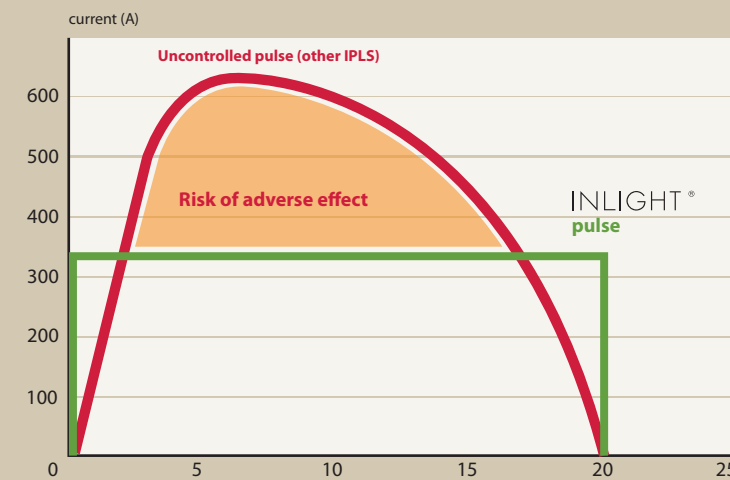
6. Vacuum Assisted Technology

INLIGHT handpiece uses a 10x5mm treatment window integrated with vacuum technology. Vacuum suction stretches the skin and brings the hair follicle closer to the surface, gently compresses tissue and surrounding vessels and temporarily displaces blood. The intent is to damage the hair follicle at a lower fluence reducing heat build up, making the treatment virtually painless with no downtime.

Square Pulse Technology

Square Pulse Technology ensures that the pulse of energy immediately reaches the desired level, stays at that level for the duration of the pulse and immediately shuts down at the end of that pulse. This minimizes the risk of adverse effects.

Pulse type	INLIGHT	Most Other System
Short, Low Energy	Yes	Yes
Short, High Energy	Yes	No
Long, Low Energy	Yes	Yes
Long, High Energy	Yes	No



Indications for face and body

Epilation

Procedure mechanics: Gentle suction slightly stretches the treatment area which allows the light to interact more efficiently with the desired target, the melanin in the hair follicle. Less energy is lost to pigment in the skin and blood flow in surrounding tissue. Nerve endings are stimulated by the vacuum, "fooling" nerve endings into perceiving less pain. The vacuum pulls the hair follicles closer to the sapphire surface. This allows for deeper penetration, with a reduced need for light energy (about 50%). INLIGHT is effective for hair removal in any area of the body with unwanted hair, including the back, chest, face, legs and bikini area. Ultimately treatments result safer and more comfortable.

Pigmentation

Procedure mechanics: the chromophore is represented by the melanin. For this procedure lower spectrum wavelengths are selected to target the melanin which selectively heats the brown spots resulting in damage to the lesion whilst causing minimal damage to the surrounding skin. Following treatment, the damaged lesions turn darker and may crust. Over the following weeks they will gradually flake away from the skin leaving little trace of the original mark.

Ageing

Procedure mechanics: intermittent flashes of light work in a similar way to non-ablative lasers by causing heat damage to dermal tissues without disruption or removal of the outer epidermal layers of the skin. It is thought that the heat in the dermal layers causes collagen to be produced which helps reduce the appearance of lines and wrinkles.

Acne

Procedure mechanics: INLIGHT acne treatment uses light to treat acne and acne scars. The treatment consists of green and red intense light that is emitted in a series of short pulses. The light emitted destroys the bacteria that live in the skin and cause acne, while the directly targets the overactive sebaceous glands that cause outbreaks of pustules. This heating effect generated deep into the skin helps to prevent over-production of excess sebum.

