

®  **XLASE** PLUS

The World's Most **Advanced** and **Versatile**
Laser and **CPL light** platform that does it all...





🌀 Welcome to Xlase Plus

The World's Most Advanced and Versatile Laser and light platform that does it all...

The simple and affordable way to a wide variety of cosmetic and aesthetic procedures with less risks and superior outcomes.

Laser technology has been used for an increasing number of cosmetic treatments. Examples include hair reduction, skin rejuvenation, wrinkle reduction, treatment of acne, removal of pigmented blemishes, treatment of vascular lesions and fungal nail infections.

The new Xlase Plus is a versatile platform that offers treatments for multiple applications without investing in multiple laser systems.

Its modular design provides multiple distinct cosmetic solutions all built into one compact unit. With Xlase Plus the different technologies may be purchased and incorporated in the unit at different times, offering versatility and ease to our customers.

Xlase Plus grants ultimate flexibility to treat a wide variety of patient-requested procedures. The system's modular applicators are designed to offer effective and reliable results with minimal patient discomfort and downtime. No single device will do more than Xlase Plus. The device includes the CPL (Calibrated Pulsed Light) hair removal system, the popular YAG laser, the 810nm Diode laser applicator, the Q-switched YAG laser and the Erbium YAG laser.

- **Numerous aesthetic/medical applications**
- **High output energy for greater efficacy**
- **Expandable and upgradable**
- **High patient and clinical staff satisfaction**
- **Easily transportable from room to room**

🌀 Device Overview

PCCD Precision Constant Current Driver

The Xlase Plus Driver maintains precision current (Constant Current Mode) on laser diode and flash lamp pumped solid state lasers. It uses sophisticated electronics that provides stable current emission with maximum laser and circuits protection. The emission of constant current produces a true square pulse, with pulse durations lasting from few microseconds to hundreds milliseconds, with constant output. The pulse produced is uniform, therefore the current density in the diode or flash lamp is constant, which in turn causes the spectral output to remain constant throughout the entire pulse. This uniform pulse creates a much more efficient heating process so lower fluencies can be used to achieve the same clinical result. Square-shaped laser pulses avoid the slow rise, and even longer drop-off in pulse power associated with standard laser technologies, and ensure ultimate performance and patient comfort during all treatments.

MWC Miniature Water Chiller System

Xlase Plus system utilizes high-powered xenon lamp and diode laser that require reliable and precise temperature control for optimal laser beam quality. A laser chiller is the main component and the most important device used in managing laser temperature to ensure high quality performance and long life of the laser system. Xlase Plus laser chiller is a self-contained device, able to serve the purpose of removing heat from laser components. MWC water cooling system utilizes the Peltier effect (thermoelectric cooling) to maintain the fluid temperature cool, ensuring the best laser performance. Fluid temperature control is done by a microprocessor, which allows it to maintain high temperature accuracy of +/- 1°C for outgoing fluid temperature. Moreover, the closed-cycle cooling system enables an optimal preservation of the diode and the xenon lamp and a safe treatment application. Other laser systems available on the market utilize basic water heat sink to achieve laser and xenon lamp cooling; such systems have proven to lead to lamp overheating and poor operational performances.

Diode Applicator

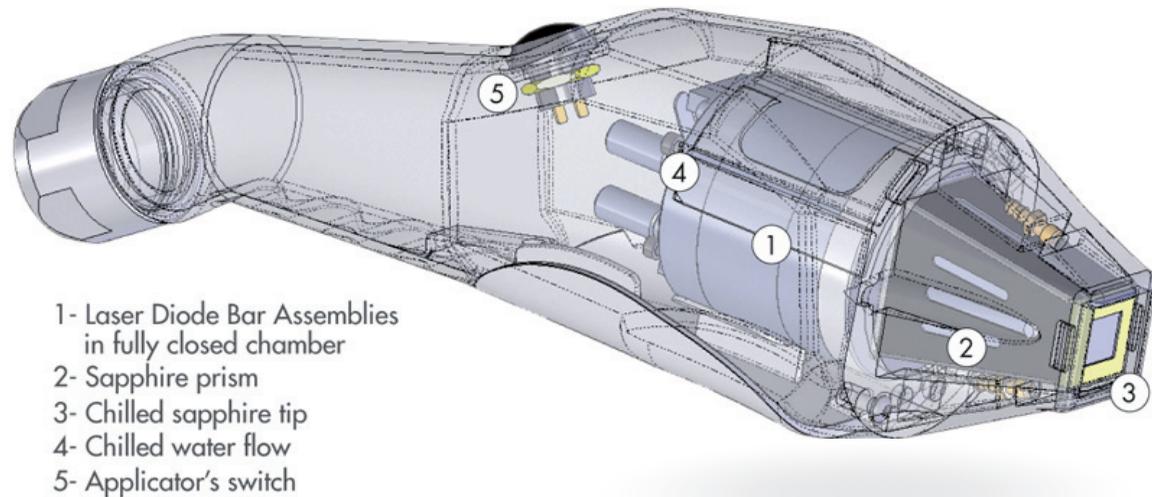
The Xlase Plus Diode handpiece provides permanent hair reduction using cutting-edge high-power diode technology. It guarantees a rapid, non-invasive procedure, with no downtime, able to treat all skin types (I-VI), as well as tanned skin and pseudofolliculitis barbae. It utilizes a 1cm² sapphire tip that actively cools before, during and after treatment.

Compared to other laser systems, the Xlase Plus diode system has minimal running cost, due to the high stability of the diode technology which is a highly efficient laser source, ensuring constant and effective performance even in the most demanding clinical setting.

The Xlase Plus Diode features a large spot size using a water cooling sapphire tip and the most uniform beam profile available today, to provide fast treatment of unwanted hair, even in large areas such as a back, in as little as five minutes. Sapphire tip with contact cooling, helps to protect the epidermis and to keep the skin cool throughout treatment, while the uniform beam profile allows the most effective coagulation of hair follicles, reducing the need for multiple, overlapping passes.

INDICATIONS

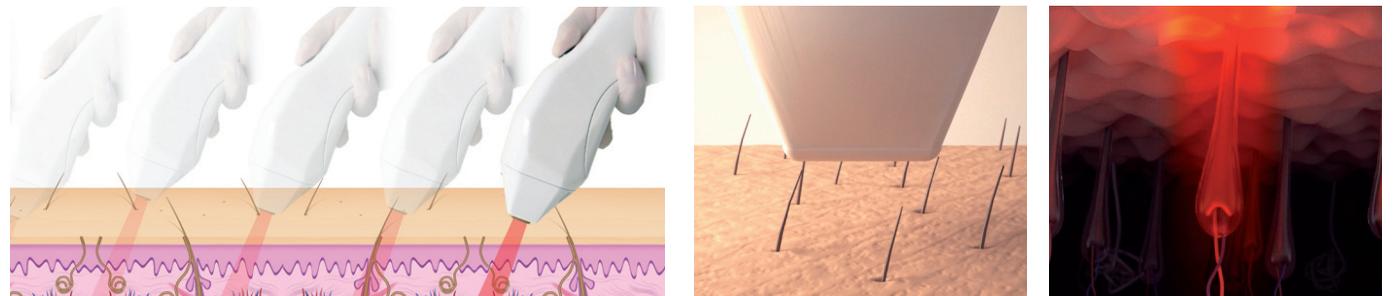
- Hair Removal
- Skin Rejuvenation
- Microvascular lesions



The MotionSpeed procedure

It represents a breakthrough in patient comfort, speed of procedures and incomparable clinical results. It combines simultaneous cooling with fast laser pulses that rise to the target's therapeutic temperature, without the risk of injury and with much less pain compared to conventional IPL and laser devices.

In the traditional photoepilation technology, where high cooling is required before, during and after each pulse, the applicator must be held steady in the same area during the energy delivery. The sweeping technique of MotionSpeed procedure enables continuous energy emission in a large treatment area, increasing patient's comfort, treatment speed and hair removal efficacy.

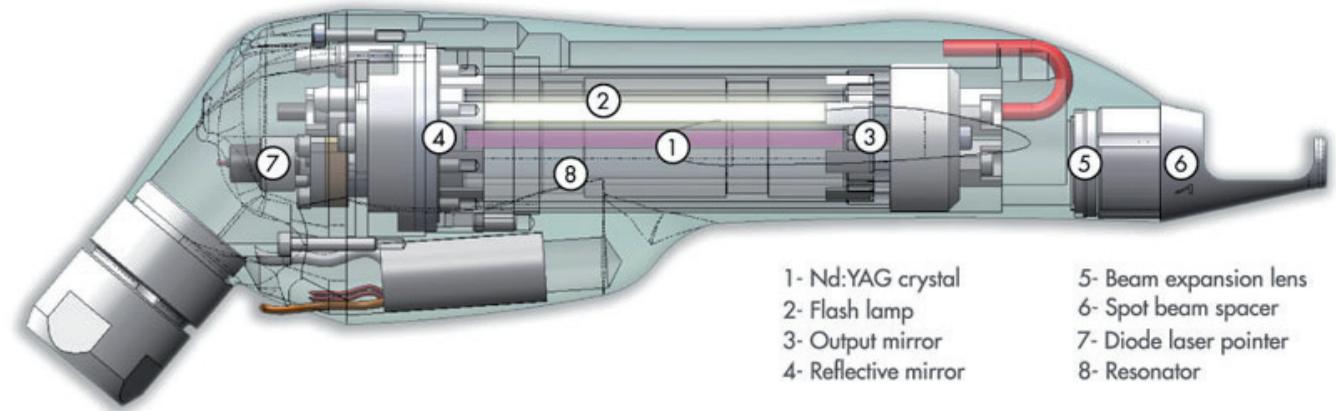


Nd:YAG Applicator

The Nd:YAG applicator emits light with a wavelength of 1064nm; the light penetration into tissue reaches its maximum depth while its low absorption guarantees preservation of the surrounding tissues on all skin types.

It combines a long and short pulse in a compact and technologically advanced applicator that offers a broad range of popular treatments for leg veins, vascular lesions, photorejuvenation, hair removal and onychomycosis.

Nd:YAG zoom applicator allows a wide variety of treatments from hair removal to fine vascular treatments. The selected treatment source is delivered from the handpiece into the skin, where it releases only the wavelengths absorbed by the target. The pulse intensity and duration are tightly controlled to ensure a selective target heating, while leaving the surrounding tissue unharmed.



Features of the Nd:YAG applicator

The Nd:Yag 1064/532nm applicator features the microsecond pulses parameters which are an excellent choice for diffuse redness, rosacea and scars, as well as being an excellent skin rejuvenation treatment. This unique procedure targets the micro-vascularity with microsecond high-peak-power pulses, reducing erythema while stimulating collagen production.

The 532 nm wavelength is ideal for superficial vascular target including small telangiectasias, cherry angiomas, diffuse redness and port wine stains. It has a higher hemoglobin absorption coefficient, with the result that the selectivity between hemoglobin and melanin is superior when compared to other wavelengths. This enhanced selectivity guarantees a greater range between the fluence for effective treatments and the fluence which may lead to epidermal damage.

While lasers with wavelengths in the range from 520 to 600nm are excellent at treating superficial vascular conditions, these wavelengths scatter in the skin and do not penetrate sufficiently deep to treat deeper vascular conditions. This makes conditions such as leg veins, venous lakes and port-wine stains a challenge for these visible lasers.

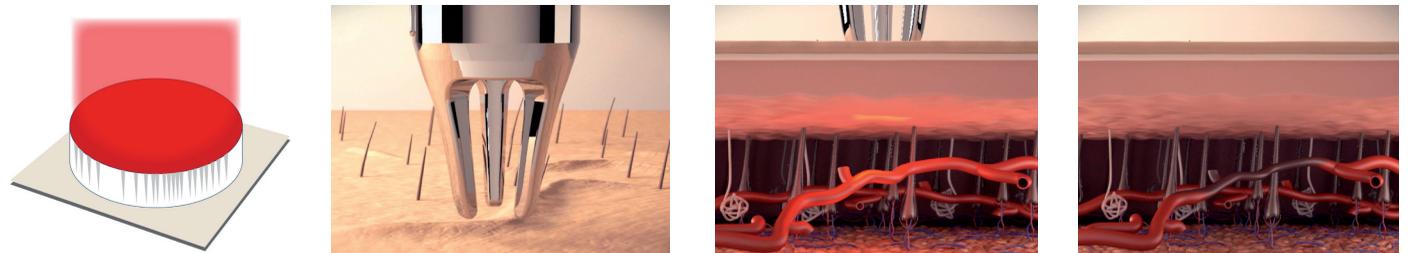
The Nd:Yag 1064 nm applicator is ideal for treating the deeper vascular conditions. The 1064 nm wavelength provides deeper penetration than 532 nm or pulsed dye lasers, and the Nd:Yag 1064 nm applicator delivers sufficient energy to allow independent control without compromise of fluence, pulse duration, spot size, or repetition rate. The Nd:Yag 1064 nm applicator is considered among the best laser for leg veins treatment and includes a wide range of spot size for improved ease of use and control.

INDICATIONS

- Vascular lesions
- Skin Rejuvenation
- Hair removal
- Onychomycosis

Beam profile

The precise targeted flat-top beam profile causes less energy scattering and enables deep penetration to targeted chromophores. Uniform energy distribution results in even treatment to prevent central heat buildup.



Q-switched Nd:YAG Applicator

The Q-switched Nd:YAG applicator is the ideal choice for the treatment of pigmented lesions, such as sun-damaged skin and age spots, and for the removal of unwanted tattoos. **Nd:YAG 1064nm:** ideal for treating dark tattoos, dermal pigmented lesions, and for skin resurfacing. **Nd:YAG/KTP 1064/532nm:** optimal for bright colored tattoos and solar lentigines, it is also used for vascular lesions, including facial and leg veins, telangiectasias, and angiomas. It combines high peak power and short pulse duration resulting from the innovative OptoH Q-switched crystal with unique resonator technology to get stable high energy laser output. The giant laser pulse has only 6-10ns pulse width which produces the mega-watts level high peak power, even at larger spot sizes.

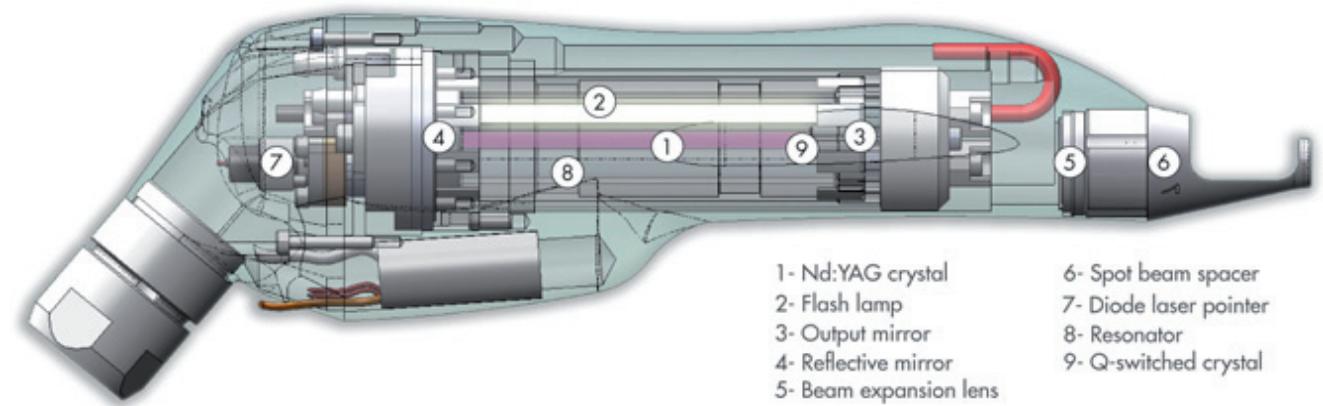
The Q-switching technology transmits extremely short energy pulses that cause tattoo pigments to break into smaller particles that are then removed by the body's own immune system. Most tattoo procedures take only a few minutes, but several treatments are typically necessary to completely remove a tattoo. Three-week intervals between sessions are required to allow pigment residue to be cleared by the body.

Q-Switched tattoo removal

- Most effective wavelength on a wide range of tattoo types and colors
- Optimized wavelength to treat more challenging pigments and colors
- Tattoo removal that minimizes the impact on surrounding skin
- Adjustable spot size for optimized procedures
- Useful on a wide range of skin types

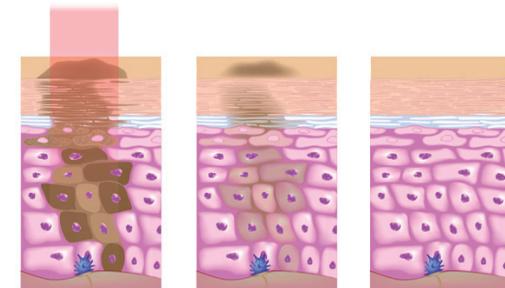
INDICATIONS

- Tattoos removal
- Skin peeling
- Pigmented lesions
- Vascular lesions



Pigmented lesions

Pigmented lesions are remarkably common and the overwhelming majority are benign. It is widely recognized in the medical community that Q-Switched lasers are the ideal tools for effectively removing benign pigmented lesions. The multi-wavelength, Q-Switched laser applicator with frequency-doubled KTP are uniquely able to produce very short pulses of intense light that are selectively absorbed by treatment-specific pigments in a lesion. The Q-switched applicator at 1064 nanometer emits light with a wider wavelength and therefore has relatively deeper dermal penetration and thus has quicker effect. Hence, 1064 nm is used for dermal pigmentation and 532 nm is used for epidermal pigmentation.



Skin peeling procedure

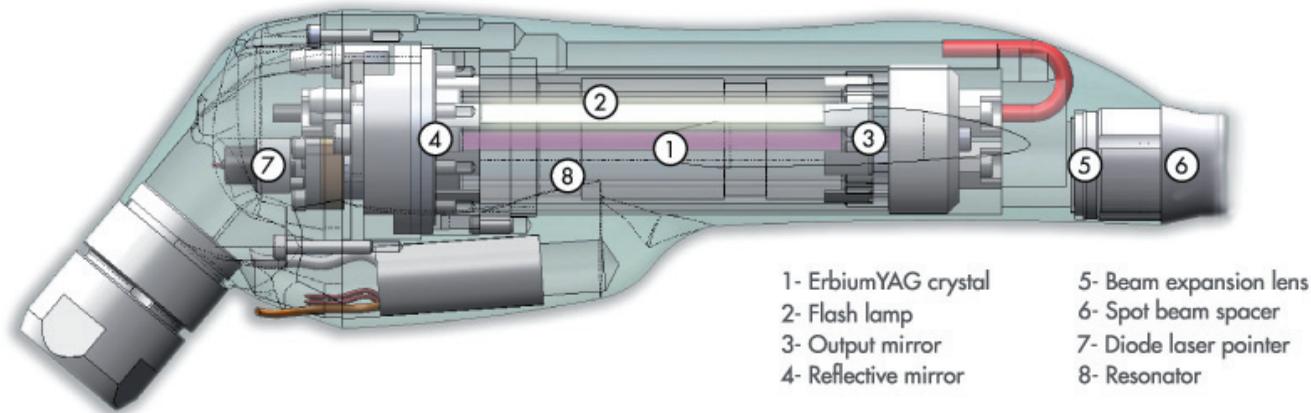
The Q-switched applicator is also designed for the newest application of non-ablative skin rejuvenation. It can provide a safe and effective alternative for treatment of enlarged pores and fine lines. A solution consisting of vegetal carbon particles is applied to the treatment area. The carbon provides a target for the laser beam to effectively heat and exfoliate the skin.

The procedure can take up to 30 minutes, depending on the extent of the treatment. Unlike other laser resurfacing procedures the peeling procedure is virtually painless and requires NO downtime. This treatment offers a greater margin of safety than any other laser facial rejuvenation with predictable and consistent results.



Er:YAG Applicator

The Erbium YAG applicator is able to remove microscopic layers of skin, producing outstanding results with minimal risk and adverse reactions. The laser can remove both superficial and medium depth lines, including some scars, depending on the controlled depth of the ablation and the amount of treatments performed. The Erbium YAG Fractional procedure produces thousands of deep, tiny columns in the skin. It works on old epidermal pigmented cells without affecting the surrounding tissue, thus reducing healing time (about 24 hours) and promoting the skin's natural regenerating process. It is a safe, non-invasive procedure that results in a fresh, healthy and young skin.



- 1- ErbiumYAG crystal
- 2- Flash lamp
- 3- Output mirror
- 4- Reflective mirror
- 5- Beam expansion lens
- 6- Spot beam spacer
- 7- Diode laser pointer
- 8- Resonator

INDICATIONS

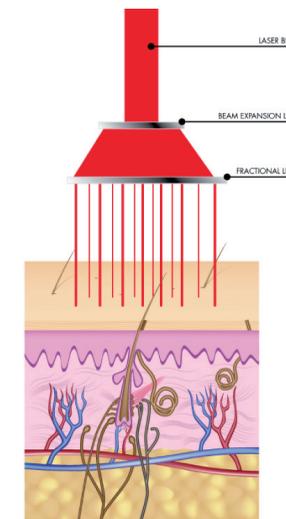
- Skin rejuvenation
- Skin peeling
- Pigmented lesions
- Acne scarring
- Stretch marks

Benefits:

- removes or reduces lines
- improves the texture and tone of facial skin, by making it younger and more elastic
- achieves a face lift effect and postpones the need for potential surgical lifting
- enables treatment of neck, cleavage and upper arms
- removes epidermal blemishes on face, neck and upper arms
- removes or reduces acne scars
- reduces enlarged pores
- improves stretch marks on all parts of the body

The Erbium Yag applicator is regarded as a golden standard for ablative and minimally ablative procedures. It performs skin ablation - micron layer by micron layer of cells which ensures maximum precision with maximum comfort and speedy recovery of the patient.

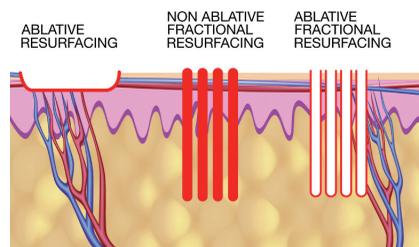
Laser beam vaporizes cells per layers by making a cut, the depth of which depends on which lesion we are removing from the skin. Practically, it is a **STRICTLY CONTROLLED VAPORIZATION**.



Erbium YAG fractionated procedure is a safe, minimally invasive procedure which uses the bridge technique (between the epidermis and dermis coagulation zones there are intact skin zones) to perform selective controlled coagulation, by making microscopic cuts deep into the dermis which enables surface layer of the skin to restore itself in 24-72 hours and coagulated zones lead to collagen remodelling with fantastic results in line elimination and skin tightening.

Until now, there were skin conditions that medicine could not solve such as stretch marks, hypertrophic and keloid scars because the disrupted architectonics of full skin thickness could not be repaired by methods available.

The Erbium Yag fractionated treatment shows excellent results in treating these aesthetic problems because it leads to remodelling of collagen and establishing of regular architectonics which is vital for elimination of stretch marks and scars. The Erbium Yag fractionated treatment is also an optimal solution for acne scars because excellent result is obtained with presence of minimum scabs and minimal skin irritation.

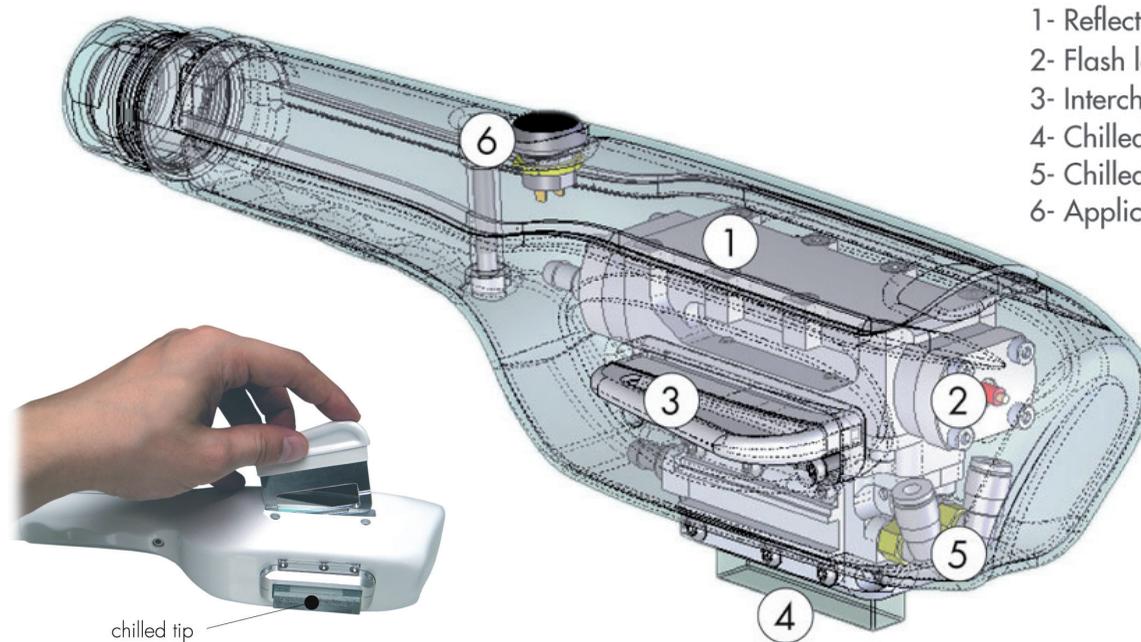


Er:YAG fractionated treatment advantages in relation to other procedures:

- safer and less invasive procedure
- greater efficiency than with other ablative lasers CO₂ and others
- out-patient treatment, without the use of anesthetics
- minimal recovery time and returning to daily routine in the shortest possible time in 24-48 hours with the possibility to use make up in 24 h

CPL (Calibrated Pulsed Light) Applicator

Superior by design, the new Xlase Plus Calibrated Pulsed Light (CPL) applicator offers several innovative and advanced technology enhancements. Compared to the other IPL systems available on the market, the CPL system has proven to be among the most powerful. It is simple and efficient to operate. The unique platinum coated reflective cavity generates maximum energy density with true energy fluence up to 30J/cm² at a very high speed, giving up to 3 shots per second. The CPL applicator provides a range of different available wavelengths. Through the selection of sapphire crystal filters, the operator can choose the right wavelengths to effectively treat a wide number of skins conditions. These special cut-off filters are 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 Xlase Plus system very versatile and gentle, offering gradual results with minimal risk of side effects and patient downtime. An integral part of the CPL applicator is the chill tip. This contact cooling handpiece protects the skin by actively cooling it before, during, and after the light transmission. It also actively draws off heat from the skin surface. The chill tip also has a slight anesthetic effect which helps to minimize the discomfort during the treatment.



- 1- Reflective cavity
- 2- Flash lamp in flux tube
- 3- Interchangeable filter
- 4- Chilled prism
- 5- Chilled waterflow tubes
- 6- Applicator's switch

INDICATIONS

- Hair removal
- Acne
- Skin rejuvenation
- Vascular lesion

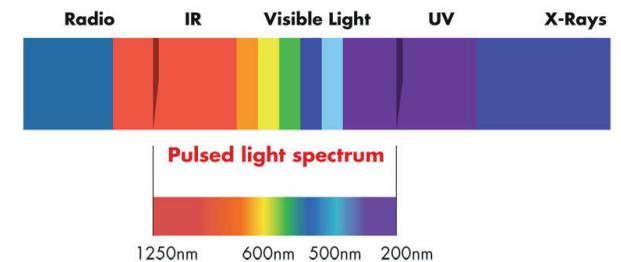
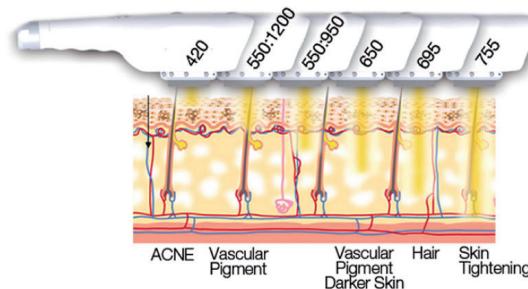
Features of the CPL applicator

Excellent and quick treatment results. Safe to use with no side effect, burn, discomfort to patient. Suitable for most skin types including dark ones. Fast treatments on large areas: 5 cm² with up to 3 pulses per second. Based on Xenon flash lamp emission with chilled water-cooling system and square pulse technology. Ergonomically designed hand piece with five optical filters to treat Hair Removal, Skin Rejuvenation, Vessel Removal (Vascular lesions) & Acne treatment.

CPL technology uses broad spectrum while lasers emit a single wavelength. The CPL applicator is powered using a xenon flashlamp that produces a flat spectrum of light from 400nm to 1200nm.

Different filters are used to filter out lower and higher wavelengths to effectively treat a broad spectrum of vascular and pigmented lesions including photoaging skin treatments and hair removal.

- Treatments are gentle offering gradual results with minimal patient downtime and risk of side effects.



 also available in the table top version



DIODE

Laser Type
Class
Wavelength
Pulse Duration
Repetition Rate
Fluence
Spot Size
Emission Control
Skin cooling
Expected lifetime

High-power diode
IV
810nm
< 60ms using continuous pulses
From 1 to 10Hz
Up to 60J/cm²
9x9mm standard
Footswitch and handpiece switch
Water cold sapphire
20.000.000 shots

indications/intended use
- Hair Removal
- Skin Rejuvenation
- Microvascular Lesions



Nd:YAG

Laser Type
Class
Wavelength
Pulse Duration
Energy
Repetition Rate
Spot Size
Emission Control
Aiming Beam
Expected Lifetime

Nd:YAG
IV
1064nm
From 0,25 to 40ms
Up to 24J
From 1 to 6Hz
2.5 - 4 - 5 - 7 - 10mm
Footswitch
Diode laser, 1mW @ 635nm - class II
500.000 shots

indications/intended use
- Vascular lesions
- Skin rejuvenation
- Hair removal
- Onychomycosis
- Non Ablative



Q-SWITCHED

Laser Type
Class
Wavelength
Pulse Duration
Energy
Repetition Rate
Spot Size
Emission Control
Aiming Beam
Expected lifetime

Cr:YAG
IV
1064nm (532nm with KTP lens)
9ns
Up to 2,5J
From 1 to 6Hz
2,5 - 4 - 5 - 7mm
Footswitch
Diode laser, 1mW @ 635nm - class II
500.000 shots

indications/intended use
- Tattoos removal
- Skin peeling
- Pigmented Lesions
- Vascular Lesions



Er:YAG (Erbium)

Laser type
Class
Wavelength
Pulse Duration
Energy
Repetition Rate
Spot Size
Emission Control
Number of stack
Expected lifetime

Er:YAG
IV
2940nm
0,5 - 1 - 1,5 - 2ms
Up to 2J
From 1 to 6Hz
6 mm (ablative/fractional)
Footswitch
From 1 to 6
500.000 pulses

indications/intended use
- Wrinkles
- Acne scarring
- Age spots
- Deep pigment
- Redness
- Large pores



CPL

Source
Spectrum of Emission

Pulse Duration
Energy
Delay Between Pulses
Number of Pulses
Repetition Rate
Treatment Area
Emission Control
Expected lifetime

Xenon Lamp
550-1200nm; 550-950nm;
650-950nm; 410-1200nm;
695-1200nm; 755-1200nm;
From 1 to 40ms
Up to 25J/cm²
From 5 to 60ms
From 1 to 5
Up to 3Hz
50mm X 10mm (5cm²)
Footswitch and handpiece switch
50.000 shots

indications/intended use
- Hair Removal
- Acne
- Skin Rejuvenation
- Vascular Lesions

General specifications

System cooling
Skin Cooling
Interface
Dimensions
Weight

Water, Air, Thermoelectric
Tip integrated
Touchscreen Color LCD display 7"
530 x 650 x 350 mm
46 Kg

NOTE:
Tolerance should be intended ±20% if not indicated

