

**GSD**<sup>®</sup>  
Global Skin Dermatologist

# *Renas II*

Non-ablative erbium fractional 1550nm Laser

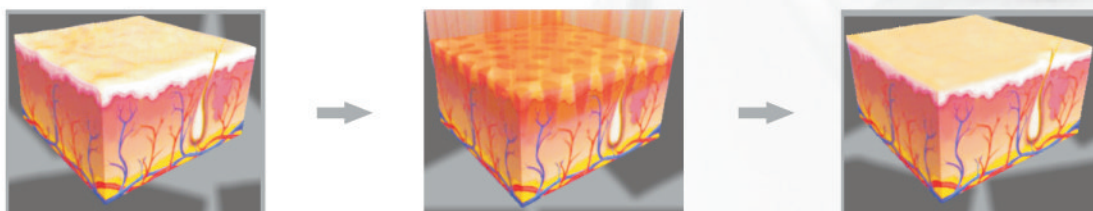


## Brief Introduction

Renas, based on advanced non-ablative 1550nm erbium-glass fractional laser technology, acts on skin by microscopic laser beams under the operation mode of static stamp or dynamic rolling. Its imported laser emitter with minor lesions assures approximately non-invasive therapy, and proves accurate, safe and high-effective skin resurfacing and scars treatment with minimal downtime. Renas utilizes intelligent optical tracking system and randomized scanning technology, ensuring optimal effect for patients.

## Working Principle

The laser is emitted by fractional scan working mode and forms a Microscopic Thermal Zone by multiple arrays of laser beams. And each laser beam consisted of single or several high-energy laser pulses can penetrate to the dermis to heat C-H-O compounds, especially the moisture-rich collagen tissue, thus stimulate the collagen growth and promote tissue repairing, collagen reconstruction and shrinkage, reaching scar reduction, wrinkle reduction, skin tightening and resurfacing.



## Intelligent Optical Tracking System

Renas handpiece utilizes intelligent optical tracking system, ensuring consistent, predictable and uniform treatments, with significantly less time than traditional stamping mode. This system automatically adjusts to move speed, while the hand motion distributing pulse evenly, providing better patients experiences.





## Random Distribution of Spots

Renas works by delivering multiple arrays of randomized microscopic laser beams to the skin. These beams produce deep, collimated micro necrotic columns that can penetrate as far down as the reticular dermis, while sparing surrounding viable tissues. The outcome produces more natural, more uniform skin regeneration with minimal downtime and dramatic clinical improvements. The high speed of Dynamic Mode continuously delivers randomized beams and sufficiently covers large areas very swiftly. This is good for full face treatment such as skin rejuvenation or broad narrow scars.

## Features



### Tip Advantages

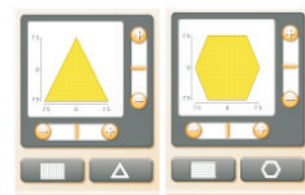
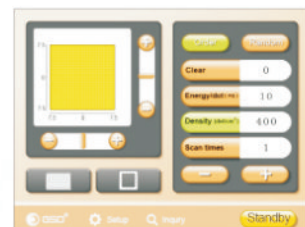
- ◆ Intelligent chip automatically recognize tips and tip lifespan.
- ◆ Big spot size with maximum 15x15mm. The treatment can be efficient for large treated area.

◆ Simple to use: Intelligent touchscreen interface and precise dosimetry allows doctor to easily select the optimal treatment setting.

◆ Various scanning modes: Now there are four scanning modes: rectangle, ellipse, triangle and polygon. Scan area can be adjusted freely. It reaches a better effect for different treated areas and patterns.

◆ Two operation modes: static stamp and dynamic rolling. Proper operation mode can be selected according to different treatment area and cases, making the treatment more convenient.

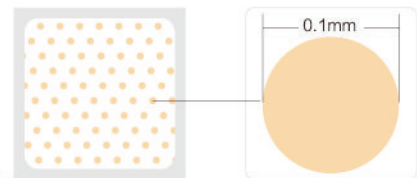
◆ Density and single spot distribution now is much more evenly than before.





## Minor Beam Diameter

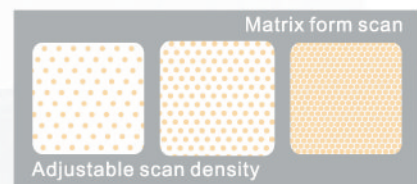
◆ Minimum diameter of spot size can be 0.1mm, so the wound is small and surrounding normal tissue is damaged minimally. Tiny wound heals soon, which greatly reduces the risk of side effect and complication setting in. It is recognized as one of the safest and most efficient resurfacing laser system available today.



## Adjustable Energy and Density

◆ Matrix form scan assures uniform energy distribution per unit area so avoid pigmentation veins caused by inequable energy during the treatment.

◆ High pulse energy with maximum 100mj. Adjustable scan density assures accurate treatment for pathological tissues.



## Application

### ◆ Skin resurfacing

Aging wrinkle, rough and flabby skin, large pores, uneven skin tone.

### ◆ Scars reduction

Surgical scar, burn scar, traumatic scar, acne scar

### ◆ Striae distensae

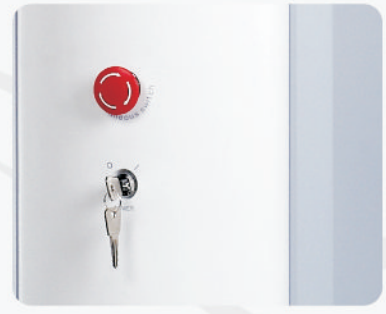
Striae distensae

## Comparison of technologies

Technology	Non-ablative fractional laser	Ablative fractional laser	IPL
Application	Skin resurfacing Scars reduction Vergeture	Skin resurfacing Scars reduction	Hair removal Skin rejuvenation Acne Superficial vascular Superficial pigmentation
Effect	Good	Good	Good(HR\SR\AC) ordinary
Energy	High	High	Low
Anesthesia	Depending	Necessary	Depending
Penetration depth	Epidermis and dermis	Epidermis and dermis	Epidermis and Superficial dermis
Damage to epidermis	Minor	Serious	Minor
Recovery time	Short	Long	Short
Comfort	Less painful	Painful	Comfortable
Consumables	Few	Some	Some

## Technical Specifications

Laser type	Erbium glass fiber laser
Working mode	Fractional scan
Wavelength	1550nm ± 5nm
Output power	30W
Pulse energy	5mj~100mj adjustable
Spot diameter	0.1mm(minimum)
Density	10~400 spots/cm <sup>2</sup> adjustable
Hand piece transmission area	15 × 15mm, 8 × 8mm, 4 × 13mm
Operation mode	Static stamp/ dynamic rolling
User interface	Touch screen liquid crystal display
Aiming Beam	635nm
Guidelines light wave rate	≤5mW
Dimensions	30cm × 64cm × 161cm
Net weight	38kg



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