`Edge ONE[™]

Jeisys

Jeisys Medical Inc.

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Edge ONE[™] Specification

Technical Specification		
CO2 Laser		
10,600nm		
Surgical / Fractional Mode		
1~30W, Edge Pulse		
1 ~ 300mJ		
0 ~ 42.4%		
From 2 X 2mm To 15 X 15mm		
Square, Circle, Triangle		
Standard, Refresh, Random, Scatter, Gaussian		
Moving, Auto		
0.08 ~ 10ms		

System Specification

Screen Size	Color LCD touch screen
Electrical Power	AC220~240V, 60Hz, 1KVA
Weight	40kg
Dimension	364.7 mm(H) × 456.8 mm(W) × 795.5 mm(L)



FEATURE - I. High Peak Power - Edge Pulse

- Edge Pulse (High power & Short pulse duration)
 - : conveys High peak power in very shot time of *minimum 80usec.*



FEATURE - I. High Peak Power - Edge Pulse

Edge Pulse (High power & Short pulse duration)



FEATURE - II. A Variety Of Spot Sizes

 Possible to adjust the spot size and shape of scan to the size and shape of the legion



FEATURE - III. A Variety Of Scan Shape



Clinical Data – Lentigo

Parameter Settings	
Mode	Surgical
Power	Ultra Pulse
Pulse duration	300µs
Frequency	60Hz

Tip!

> For skin legion, defocus it and winnow the epidermis only.



Before treatment



3 month After 1 treatment

Clinical Data – Viral Wart

Parameter Settings	
Mode	Surgical
Power	Ultra Pulse
Pulse duration	300µs
Frequency	80Hz

Tip!

- > What occurs on the area under pressure is a corn.
- > Being viral, it can be spread by contact.
- After checking the edge by focusing, remove tissue gradually as performing a treatment along one side.
- After cutting off the tissue, check the bleeding on the area of incision by defocusing. At this time of controlling the bleeding, defocus it just to give a little heat.



Before treatment

Immediately After 1 treatment

3 month After 1 treatment

Clinical Data – Soft Fibroma

Parameter Settings

Mode	Surgical
Power	Ultra Pulse
Pulse duration	300 <i>µ</i> s
Frequency	50Hz

Tip!

- > Flat wart is caused by virus while a small wart is a loose skin.
- > Occurs well on the neck or armpit.
- > If it is too large, give a shot of an anesthetic, and if small, anesthetic ointment will do.
- > As it takes longer by lowering Hz, treat with a bigger pace in removing a mole.
- > In case of a large size, it is also possible to perform a treatment as you expose one side just as for a wart.





Before treatment

Immediately After 1 treatment

Clinical Data – Milium

Parameter Settings

Mode	Surgical
Power	Ultra Pulse
Pulse Duration	300µs
Frequency	30Hz







> Co2 fractional treatment will leave a clear border between areas of the treatment and non-treatment, so it is better to perform a weak treatment on the whole face with Co2 or Er:YAG Laser.



Clinical Data – Burn Scar

Parameter Settings

Mode	Fractional
Power	30W
Pulse Energy	100mJ
Total Fluence	21.047kJ
Density	200spots/cm2
Тір Туре	120
Scan Type	4mm(Circle)
Operation Mode	Static



Before treatment



> Scar caused by a burn has few pores and it is not a normal tissue, so anesthetic ointment won't work well and cause a big pain during the treatment.

> Perform 1-pass operation with strong energy, preferably giving antibiotic injection after the treatment.





16 days After 1 treatment

Aesthetic Gynecology Applications

Laser Vaginal Rejuvenation

Vaginal Relaxation Syndrome (VRS)





Loose vaginal channel

(Before treatment)

Tight vaginal channel

(After treatment)

Comparative analysis

	Surgery for Vaginal tightening	Filler injection	Laser Vaginal tightening
Method of the treatment	Cut out partial mucous membrane from one side of vaginal wall and draw in vaginal sphincter for suture.	Inject filler in vaginal wall to narrow the passage of vagina temporarily.	Apply laser to vaginal wall and lead to instant shrinkage and formation of collagen.
Anesthesia	Required	Required	Not required
Treatment time	40 ~ 60 min	60 min	10~15 min
Hospitalization	1~2 weeks	Not needed	Not needed
Pain level	Severe	Average	None
Duration of the treatment	6 weeks	2~3 weeks	None
Side effect (disadvantage)	Infection / perforation of bladder or blood vessels	lack of effective duration	-

VAGINAL REJUVENATION



Laser Absorption Chart

- Use the wavelength with epidermal ablation and heat to the dermis
- Wavelength range with high water absorption rate is typically Co2 and Er:YAG





- Er:YAG(2940nm) is 100% ablative(minimal heat)
- CO₂ provides ablation and thermal energy

About the Laser Vaginal Tightening

Minimally invasive treatment method



Laser beam is applied along the vaginal channel until full tissue coverage is achieved



Thermally processed vaginal wall

Treatment Protocol

• Insert a equipment

Clean the tissue with gauze sponge to remove extra mucus on the treatment area.



• Insert a speculum



• V-scope into the speculum

The speculum and V-scope positions the handpiece perpendicular to the tissue.

Treatment Protocol

Treatment method

early position



second position







Overlap pulses on the same area or multiple passes

Mechanism : Shrinkage + Collagen remodeling

First Step : Immediate shrinkage

• Part of the strong energy is used to vaporize the epidermis while the remaining energy is delivered to the peripheral tissue as thermal energy.



- Thermal energy, if added over a certain temperature,
 - ✓ breaks the hydrogen bond within a molecule leading to an instant tissue tightening.
- As chain is folded, it becomes a more stable form of arrangement with a shorter collagen fiber.

Mechanism : Shrinkage + Collagen remodeling

- Second Step : Collagen Remodeling
 - Heated fibroblasts can stimulate collagen production.
 - Formation of new collagen increases the volume of the dermis and thickens the epidermis.



(Before treatment)

(After treatment)

Edge ONE Therapy advantages

- New, unique optical technology
- Ergonomically designed vaginal probe
- Out patient treatment
- No cutting, No bleeding
- Virtually painless, no anesthesia needed
- No special pre or post-op preparation
- Quick and easy procedure, 10-15 min.



Expected Effect of Laser Vaginal Tightening

- Increase the elasticity of vaginal muscle
- decrease the internal and external vaginal diameters
- Relieves gynecological diseases
- Relieves the incontinence of urine
- Tightening of vaginal wall

Clinical Data I

• Treatment Zone



Clinical Data I

• Treatment Parameter

Watt	30 watt
Pulse Energy	90 mJ
Total Fluence	13J/cm ²
Density	1.6%
Stacking Time	3
Spot size	8 x 8 mm
Beam Shape	Circle
Treatment Zone	Internal Vagina

Clinical Data II



Patient: OOO(F) Treatment Parameter: 30Watt 90mJ(73 dots) Stacking Time 3







VAGINAL REJUVENATION



Control



After 1 month



Immediately after treatment



After 5 month

VAGINAL REJUVENATION





Control

After 5 month

Watt	30 watt
Pulse Energy	100 mJ
Beam Size	800 µm

Thank you