

# FIRE-XEL

## Dynamic 3-Way Mode

Fractional CO<sub>2</sub> Laser + CO<sub>2</sub> Laser + Skin Analysis

## A New Species of Fractional CO<sub>2</sub> Laser



### Special Features

A.I. skin analyzing system

3 - Way Mode

Premium Quality

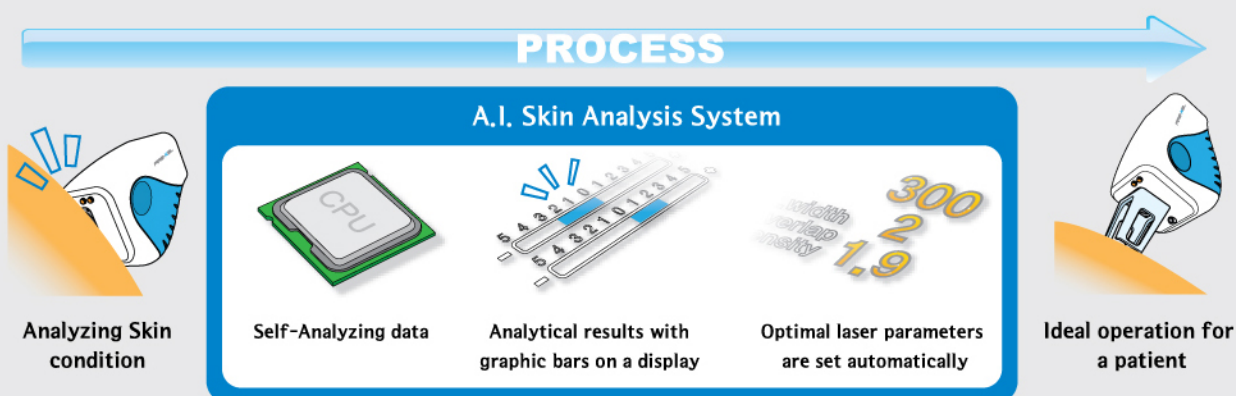
Various selectivity-Over 3,000 scanning modes

Human-friendly design



# Fractional CO<sub>2</sub> Laser + CO<sub>2</sub> Laser + Skin Analysis

**FIRE-XEL**, fractional CO<sub>2</sub> laser, equips a self skin analyzing **A.I.** system at first in the world. Users are able to measure and analyze patient's skin condition and lead the best effects of skin rejuvenation for your patients with this **advanced 3rd generation laser device**.



## A.I. skin analyzing system

A.I. skin analyzing system of **BISON MEDICAL** is a self setting system to select the most effective and safe mode for a patient with its self-analyzing data based on measuring results of the patient's skin and self-stored various basic clinical data. So this system gives a convenience to the practitioners and a satisfactory result to your patients.

## 3 - Way Mode

FIRE-XEL combines 3 major functions, **ultra pulse CO<sub>2</sub> laser** and **skin analysis** as well as **fractional CO<sub>2</sub> laser**, for the most precise treatment. There was no such a multi functional laser device before FIRE-XEL in the world.

## Premium Quality

Unlike existing other devices, FIRE-XEL mounts a globally recognized **high quality Galvano motor** for the fast, precise and safe treatment. With this motor, FIRE-XEL solves the frequent motor trouble that is the most troublesome problem of other scanner devices.

## Various selectivity-Over 3,000 scanning modes

Practitioners are able to select the most proper shape, size, and density of laser among more than **3,000 modes** according to your patient's symptoms and region. And it's very easy to find a proper scanning mode with its simple and convenient touch-screen.

## Human-friendly design

Unlike other devices', using an **Air jet**, FIRE-XEL eliminates smoke and provides cooling effect at the process of treatment to minimize the risk of PIH. Practitioners can carry out various operations with its 7-joint Arm. And also a **stylish design** of BISON MEDICAL is well suited for every space and it will make your hospital more trustworthy.



# Multi Mode Fractional CO2 Laser

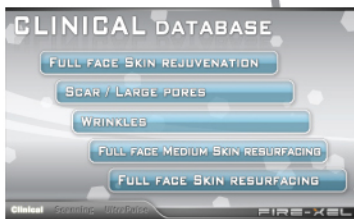


## Scanning Mode

Various selectivity from over 3,000 modes

Practitioners are able to select the most proper area, shape, density and direction of laser among more than 3,000 modes on a display panel easy and quickly.

**FIRE-XEL**



## Clinical Mode

From the skin analyzing to the optimal setting

Analyzing the patient's skin conditions (sebum & moisture) according to the types of treatment, the optimal laser parameters are set automatically.



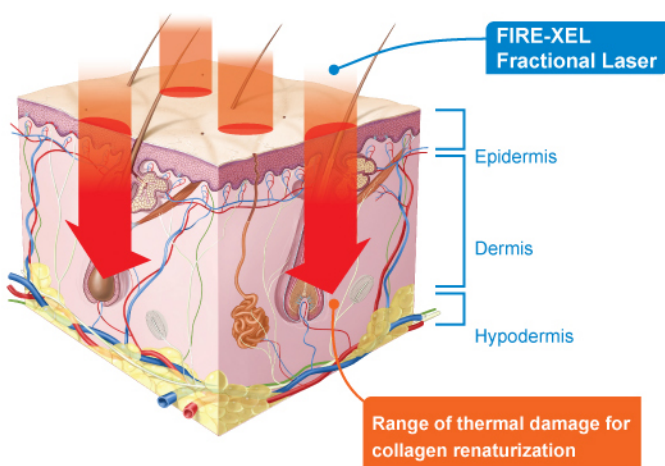
## Ultra Pulse Mode

Utilized in a variety of treatment

Practitioners can utilize this ultra pulse mode for more complicated treatment, and the effects of other modes can be maximized by using this mode together.

**FIRE-XEL**'s core function is an activation of collagen synthesis. Acne scars and wrinkles can be treated by this function as well as skin tightening and vitality. With only an advanced laser device like FIRE-XEL, most of skin problems such as pigmentation, wrinkles, whitening and tightening can be solved in a short period.

Normally patients undergo 1 to 3 treatments at intervals of 3 to 4 weeks and every treatment is finished within 15 minutes.



## Indications

### Fractional Laser

- Improves skin tone, glow and texture
- Reduces fine lines and wrinkles
- Softens deeper frown lines
- Tightens loose eyelid skin
- Tightens skin around the neck and jowls
- Tightens large pores
- Reduces stretch marks
- Erase scars, especially acne scars
- Skin resurfacing

### CO2 Laser

- Freckle
- Dark spots
- Lentigo
- Sun damaged skin
- Mole / Wart
- Condylomas

## Shapes



Rectangle



Circle



Diamond



Hexagon



Round Rectangle

## Directions



Sequence



Convergence



Divergence

SPRAY RANDOM

Spray

Random

## Indications

### Fractional Laser

Improves skin tone, glow and texture  
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Tightens large pores  
Reduces stretch marks  
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### CO<sub>2</sub> Laser

Freckle  
Dark spots  
Lentigo  
Sun damaged skin  
Mole / Wart  
Condylomas



## Specifications

### General

Dimensions (w × h × d)	320 × 1100 × 420 mm
Weight	38 kg
Weight including accessories	45.3 kg
Main voltage	220~240 VAC, 50~60 Hz
Maximum power, in operation	400 VA
Safety class	Class IV laser
Fuses	2 × Little AC 250V 10A

### Laser Module

Laser type	fractional CO <sub>2</sub> laser, Scanner type
Wavelength	10.57 ~ 10.63 $\mu\text{m}$ , invisible infrared
Beam mode quality	TEM <sub>00</sub> , 95% purity
Beam quality (at 1/e <sup>2</sup> )	M <sup>2</sup> ≤ 1.2
Laser power output, continuous	30 Watts at arm's tail
Spot size	120 $\mu\text{m}$
Delivery system	7-joint, fixed mirror articulated arm
Aiming beam	3.5mW, 650nm red diode laser
Cooling system	Water

### Scanner system

Scanning area	X: 3 ~ 20 mm, Y: 3 ~ 20mm
Scanning shape	Rectangle, Circle, Diamond, Hexagon, Round rectangle, Sequence, Converge, Diverge, Random, Spray
Scanning direction	
Dot pitch (Density)	0.5 ~ 1.9 mm
Pulse width	200 ~ 1000 $\mu\text{s}$
Overlap	1 ~ 9 times
Energy in one dot	4.8 ~ 144 mJ

### UltraPulse system

Pulse width	200 ~ 1000 $\mu\text{s}$
Repeat time	10 ~ 1000 ms
Continuous wave power	0.5 ~ 15 Watts

### Clinical system

This system analyzes skin moisture and oil condition, it automatically sets laser parameters based on the clinical data
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### Environmental Condition

Temperature	+10 ~ +40 °C
Relative humidity	30 ~ 75%
Atmospheric pressure	700 ~ 1060 hPa

**BISON**  
MEDICAL EQUIPMENT MANUFACTURER

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