plasma low temperature sterilizer



SAFE SIMPLE & QUICK STERILIZATION





The last method of low temperature sterilization for us to explore is the method of hydrogen peroxide plasma sterilization. The Plasma sterilizer use hydrogen peroxide (H2O2) as a sterilant to sterilize precise medical devices and instruments which may be changed their properties and appearances under high temperature and pressure.

Hydrogen peroxide is a non – toxic, powerful oxidizing agent that decomposes in to water and oxygen. The benefit of hydrogen peroxide is environment friendly. It does not leave harmful residues after plasma phase to the environment and human bodies. Also it has great advantages in sterilizing performance that can destroy a wide range of pathogens.

What is PLASMA?

Plasma is considered the fourth state of matter. The three other states are solid, liquid, and gas. Plasma is a cloud of protons, neutrons and electrons where all the electrons have come loose from their respective molecules and atoms, giving the plasma the ability to act as a whole rather than as a bunch of atoms.

The plasma produces a chemical reaction in which all microorganisms are deactivated. The high heat turns the molecules of the hydrogen peroxide into free radicals, which are highly unstable. In their "search" for returning to a stable state, they latch on to the microorganisms in the load thus effectively destroying the components of their cells, such as enzymes, nucleic acids, and DNA.







SAFE: Low temperature plasma steriliser is user friendly, as the main sterilant H2O2 is very safe, remaining nontoxic residue like oxygen and H2O partical.



SIMPLE: Eiligplaz is very simple to install and operate. Only electric power supply is needed at the installation place. No additional facilities required like air compressor, drain piping, exhaust vent line and water source etc. Operator can use the sterilizer with Ergonomic touch screen and monitor the entire sterilization cycle in real time.



QUICK CYCLE TIME: Increases the turnover rate of the high priced delicate medical devices and instruments in the hospital. This quick turnover rate lightens the hospital's financial burden, as they do not need to equip a number of redundant medical devices.



ECHO FRIENDLY: Compared to other low temperature sterilization method, it is non-toxic, safe and environment friendly sterilization method that decomposes into water and oxygen.



ERGONOMIC AND INTUITIVE TOUCH SCREEN

Eiligeia: offer new generation 10" color touch screen with high resolution and user-friendly operation. The screens offer optimal ergonomics, with a clear overview from all angles in the control area. The user interface and menu are intuitive, the text is remarkably distinct and the graphics are vivid.

The clear and intuitive interface of the new touch-screen panels is only one of many examples of how we ensure that **EiligPia** is easier to operate and more ergonomic.

SOFTWARE CONTROLLED DEXTEROUS DOOR LOCKING

allows operator to release door using the touch screen panel only when it is safe to do so with safety features.

PLASMA CHAMBER

RF generator produce Plasma in chamber on time with specific figuency

PRINTING

EiligPlaz units comes with an integrated thermal printer.

USB

The integrated front USB port allows cycle data to be stored digitally making record keeping simple and efficient.

e'SERVER

e'Server lets you transfer each cycle information and history data directly from CSSD room to a PC in the Clinic via Ethernet.

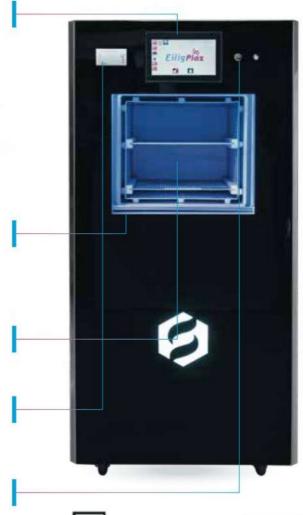
e'REMOTE Wifi

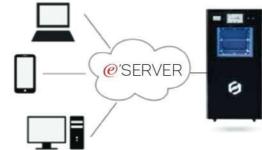
e'Remote lets you view and monitor the same screen shown on the HMI and control the Cycle process via Wifi. No matter where you are, remote control is easily accomplished.

The Wi-Fi module lets users transmit cycle data and current cycle status to a computer, tablet or smartphone, thus providing completely secure remote monitoring.

STERILANT INJECTION SYSTEM

Sterilant containts Hydrogen Peroxide (57~59%) in vial, easy to fix in specific sterilant window at left hand side body of **EiligPiax**. Each vial having enough sterilant for any one cycle. Every cycle needs new sterilant vial.

















CYCLE PROGRAMS

CYCLE NAME	NON LUMEN CYCLE	LUMEN	FLEXIBLE CYCLE
Temperature	50°C	50°C	50°C
Total Cycle time	30 min	70 min	50 min
Material Type	Metal instruments and devices,	To sterilize lumen and	To sterilize flexible
	most general reusable, moist	non-lumen instruments,	endoscopes, single and
	sensitive medical devices, rigid	as well as rigid and semi-	dual channel.
	optics and micro-surgery kits.	rigid endoscopes, single	
		and dual channel.	

NON LUMEN LOADS

Non Lumen loads are sterilized with the Non Lumen Cycle

ELECTROCAUTERY INSTRUMENTS

DOPPLERS

LASER PROBE

OPTHALMIC LENSES

VIDEO CAMERAS

TO DEFIBRILLATOR PADDLES

HARMONIC CABLE





LUMEN LOADS

Lumen loads are sterilized with the Lumen Cycle

LARYNGOSCOPE

* ARTHROSCOPES

LAPAROSCOPES

TROCAR CANNULA

TROCAR SHEATHS

* RESECTOSCOPE





FLEXIBLE LOADS

Flexible loads are sterilized with the Flexible Cycle

BRONCHOSCOPE

* HYSTEROSCOPE

CHOLEDOCHOSCOPE

URETEROSCOPE

CYCSTOSCOPE







Plasma Low Temperature Sterilizer with Hydrogen peroxide.

Technical Specifications:

	Eiligplaz 135/100 Ltr.	Eiligplaz 60 Ltr.	Eiligplaz 35 Ltr.
	Engris		- IIII
Chamber Volume	135 / 100 Ltr.	60 Ltr.	35 Ltr.
Number of Shelves	2	2	2
Chamber size (mm)	750 (L) x 448 (W) x 400(H) / 700 (L) x 430(W) x 360 (H)	610 (L) x 350 (W) x 320 (H)	300 (L) x 300 (W) x 410 (H)
Useable Camber Volume	110 Ltr / 85 Ltr	53 Ltr	30 Ltr
Overall dimensions (mm)	1100 (L) x 850 (W) x 1700 (H) / 1000 (L) x 800 (W) x 1600 (H)	920 (L) x 670 (W) x 1450 (H)	725 (L) x 683(W) x 1400 (H)
Weight	300 kg /260 kg	230 kg	230 kg
Door locking mechanism	Convenient and safe automatic vertical sliding door/ horizontal hinged door.		
Chamber Material	Aluminum / SS 304		
Electrical	220 V AC, 4 KW.		
Control display panel	10" colour touch screen	4.5" colour touch screen	4.5" colour touch screen
Cycle temperature Cycle Time		50 <u>+</u> 5 ⁰ C	
Non Lumen	30 ± 3 min	28 ± 3 min	25 ± 3 min
• Flexible	45 ± 3 min	40 ± 3 min	35 ± 3 min
• Lumen	70 ± 3 min	60 ± 3 min	50 ± 3 min
Printer	Built-in Thermal Printer		
H ₂ O ₂ concentration	55% ±5		
Electric Connection	220V AC – 4 Kw, Single phase		
Mobility	Castor wheels		
Operational environment	Temperature: 18°C - 35°C Humidity: 10% - 85% RH (non condensing)		
Installation space	Surface: Flat Minimum distance from wall: 1 Feet & Minimum service access: 3 Feet on all sides.		

• The RF power generator is required to generate the low-temperature gas plasma in the System.

Plasma only be turned on when the sterilization chamber door is closed and the chamber is under vacuum.



"A reliable partner in Sterilization!!!