

# PLASMA BIONICS

## V10 AIR PLASMA STERILIZER

Redefining Veterinary Instrument Sterilization

### DATA SHEET



[plasmabionics.com](http://plasmabionics.com)



## TECHNICAL SPECIFICATIONS

Exterior dimensions	28.75 in x 19.25 in x 18.75 in (73 cm x 49 cm x 48 cm)
Installation space requirement	30.75in x 21.25 in x 20.75 in (2 inches on all sides)
Sterilization chamber dimensions <sup>1</sup>	18 in x 16 in x 7 in (46 cm x 41 cm x 18 cm)
Sterilization chamber volume <sup>1</sup>	33 L (8.7 gal)
Sterilization tray dimensions <sup>1</sup>	16 in x 10 in x 4 in (41 cm x 25 cm x 10 cm)
Sterilization tray volume <sup>1</sup>	10.5 L (2.8 gal)
Weight	110 lbs (49.9 kg)
Operating temperature	5-40 °C (41-104 °F)
Storage temperature	-25-60 °C (-13-140 °F)
Electrical requirements	110-120 VAC, 50/60Hz, 6.5 A max (250 V 8 A rated fuse)
Operating relative humidity	0%-95%
Operating altitude	Up to 2,000 m (6,562 ft), 545-775 Torr (72.4-103.4 kPa)

<sup>1</sup> Instruments being sterilized must fit within the area of the sterilization tray.

## STERILIZATION CYCLE SPECIFICATIONS

Type of sterilization cycle	Single cycle sterilizes most general surgical and laparoscopic instruments*
Sterilization process	Air Plasma Sterilization™ process, terminal sterilization using overkill method to provide SAL of 10 <sup>-6</sup>
Total sterilization cycle time	Approximately 4 hours
Preconditioning time	15-20 min <sup>†</sup>
Sterilizing time	3 hours
Ventilating time	45 minutes
Sterilant	Reactive oxygen and nitrogen species, primarily ozone, nitrogen dioxide, and hydroxyl radicals
Sterilant production	Sterilant gases produced from preconditioned air along the surface of the plasma sheet
Sterilant delivery	Sterilant gases produced inside sterilization chamber
Sterilant removal	Sterilant gases are converted back into air by pumping through Carulite® 200 granular catalyst
Critical process parameters	Air temperature, pressure, and humidity are monitored during preconditioning, voltage feedback from plasma production is monitored throughout the sterilizing step
Sterility assurance	Biological indicators (≥10 <sup>6</sup> spores of <i>Geobacillus stearothermophilus</i> ) <a href="https://biologicalindicators.mesalabs.com/exposure/">https://biologicalindicators.mesalabs.com/exposure/</a>

\*See lumen claims below and separate material compatibility lists

<sup>†</sup>Preconditioning time may vary based on environmental conditions (i.e. relative humidity, temperature, altitude)

## CONSUMABLES\*

Consumable	Usable life (sterilization cycles)	Disposal	Shelf life	Storage
Plasma Sheet	15	No restrictions	Indefinite <sup>1</sup>	Away from heat and moisture
Desiccant Canister	50-75	No restrictions	Indefinite <sup>1</sup>	Away from heat and moisture
Catalyst Canister	200	No restrictions	Indefinite <sup>1</sup>	Away from heat and moisture
Chemical Indicator Strips and Labels	1	No restrictions	Indefinite <sup>1</sup>	Away from heat, moisture, and oxidative gases

\*Please refer to the Recommended Pouches and Wraps document for compatible sterilization pouches and wraps.

<sup>1</sup>Indefinite shelf life in original packaging

## NETWORKING AND DATA RECORDING

Data recording	Electronic data storage up to 10,000 cycles, USB data retrieval for record keeping
Network connectivity	No network connectivity feature on model V10

## ORDERING INFORMATION

Product Code	Product Description
V101	V10 Air Plasma Sterilizer
S201	Plasma Sheets (4 pack)
D501	Desiccant Cannister
C601	Catalyst Cannister
CS401	Chemical Indicator Strips (250 per box)
CL801	Chemical Indicator Labels (500 per roll)
P701	Electrical Connector Protection Kit (100 per box)

## LUMEN CLAIMS

Diameter	Length
1 mm	≤100 mm
2 mm	≤200 mm
3 mm	≤300 mm
4 mm	≤400 mm
≥6 mm	≤600 mm



